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# Money, Time, Space, and the City

I am looking to understand the forces that frame the urban process and the urban experience under capitalism. I focus on the themes of money, space, and time because thinking about them helps clear away some of the clutter of detail and lay bare the frames of reference within which urbanization proceeds. That way we can get a better handle on the meaning of the urban experience, find ways to interpret it, and think through viable alternatives. The themes I explore are, on the surface, very abstract. But the abstractions are not of my making. They are embedded in a social process that creates abstract forces that have concrete and personal effects in daily life. The "rationality" of money and the power of the rate of interest, the partitioning of time by the clock and of space according to the cadastral register, are all abstractly conceived features of social life. Yet each in its own way seems to have more power over us than we have over them.

I argue that the very existence of money as a mediator of commodity exchange radically transforms and fixes the meanings of space and time in social life and defines limits and imposes necessities upon the shape and form of urbanization. The particular use of money as capital hardens these connections at the same time as the dynamics of accumulation (accelerating growth, technological revolutions, crises, etc.) render them less and less coherent. This lack of coherence renders the urban process under capitalism a peculiarly open affair, in the sense that confusion, conflict, and struggle are a normal condition and that fixed outcomes cannot be determined in advance. What this seeming openness conceals, however, is an underlying process that precludes liberation from the more repressive aspects of class-domination and all of the urban pathology and restless incoherence that goes with it.

Interior to this general argument I want to construct another, which will, I hope, help us understand the politics of urban protest, the forms of urban power, and the various modes of urban experience. Confusions arise, I shall show, because command over money, command over space, and command over time form independent but interlocking sources of social power, the

repressive qualities of which spark innumerable movements of revulsion and revolt. The demands to liberate space from its various forms of domination, to liberate time for free use, and to exist independently of the crass vulgarity of pure money valuations can each be built into social protest movements of enormous breadth and scope. Yet creative use of money, space, and time also lies at the heart of constructive urban experience. It is exactly this dialectic that many of the great urban novelists — some of whose insights I use as raw material — pick up on and weave into their plots and sentiments. The confusion is compounded, however, by the restless and contradictory dynamic of capital circulation and accumulation. Though class struggle then surges to the fore as the principal axis of revulsion and revolt, the other axes do not disappear but take on curiously warped and contorted forms, which in turn undermine the clarity of class struggle and its objectives. Precisely for this reason, urban social movements take on mixed political coloration and can quickly change their spots according to shifting circumstances. The vision of possible alternatives is put up for grabs, and political-economic analysis appears either unduly rigid or just plain dumb in the face of an urban history that is as confused as the multiple forces that shape it. Part of this confusion, I hold, can be rendered tractable by looking carefully at money, capital, space, and time as frameworks binding the political economy of the urban process into particular configurations.

#### I. MONEY

"It is very difficult to write a novel about money," said Zola (1967, 1236) — "it is cold, glacial, devoid of interest." Money, Simmel (1978) likewise complained, though central to every aspect of our life and culture, is itself devoid of any content "save that of possession" (325); it is "the representation of abstract group forces" (301) which "in every domain of life and in every sense strive to dissolve substance into free-floating processes" (168). "To the extent that money, with its colorlessness and its indifferent quality can become a denominator of all values," Simmel (1971, 330) wrote, "it becomes the frightful leveler — it hollows out the core of things, their specific values and their uniqueness and incomparability in a way which is beyond repair. They all float with the same specific gravity in the constantly moving stream of money."

This was hardly promising raw material for grand literature or even, as Simmel discovered to his cost, good philosophizing. Marx's lengthy enquiries on the subject (including the third chapter of *Capital*) make for dull reading compared with his inspired prose when he confronts exploitation in the labor process. Zola's *L'argent* (as he himself foretold) was uninspired; and Dreiser,

who explored themes of distance, desire, and commodification with such dramatic intensity in *Sister Carrie*, came quite unstuck when he tried to construct an epic trilogy on the heartless, undifferentiated world of money and financial manipulation. So even though the truly epic novelists of the nineteenth-century urban scene, like Dickens and Balzac, typically used the circulation of money to tie together their "totalizing vision" (Williams 1960, 28) of city life, they evidently judged it safer to treat money itself as a fact of nature (or at least of human nature) that was as immutable as it was all-encompassing. "Papa! what's money?" asks little Paul of a startled Mr. Dombey, whose stumbling evasions on the subject leave the very junior partner-to-be "still cogitating and looking for an explanation in the fire." Having no answer either, Dickens lets the question dissipate up the chimney (as it were), perhaps to reappear as that "dark and invisible cloud" that he sees hovering over the teeming social life of the city. For money lies not only at the center of Mr. Dombey's concerns. It forms, in the novel as in the social world, the thread of connection that binds men and women, each pursuing their individual courses, "into an effective common life within which all individual lives are eventually held and shaped" (Williams 1960, 28).

The profundity of little Paul's question is matched only by the depth of our inability to provide satisfactory answers. Money is simultaneously everything and nothing, everywhere but nowhere in particular, a means that poses as an end, the profoundest and most complete of all centralizing forces in a society where it facilitates the greatest dispersion, a representation that appears quite divorced from whatever it is supposed to represent. It is a *real or concrete abstraction* that exists external to us and exercises real power over us.

The meaning of the phrase "concrete abstraction" deserves elaboration. Money, Marx shows us, arises out of concrete social practices of commodity exchange and the division of labor. The grand diversity of actual labor processes given over to the production of all manner of goods of specific qualities (concrete-labor applied to produce use values) gets averaged out and represented in the single abstract magnitude of money (exchange value). Bonds of personal dependency are thereby broken and replaced by "objective dependency relations" between individuals who relate to each other through market prices and money and commodity transactions. "Individuals are now ruled by abstractions," says Marx (1973, 146–68), "whereas earlier they depended on one another." With the growth of the division of labor, money appears more and more as a "power external to and independent of the producers," so what "originally appears as a means to promote production becomes a relation alien (to them)." The "form-giving fire" of the labor process is represented and fetishized as a passive thing — money. Furthermore, "the power which each individual exercises over the activity of others or over social wealth exists in him as the owner of exchange values, of money."

Money becomes the mediator and regulator of all economic relations between individuals; it becomes the abstract and universal measure of social wealth and the concrete means of expression of social power.

Money, Marx (1973, 224–25) goes on to observe, dissolves the community and in so doing “becomes the *real community*.” But what kind of community does money define? What does money represent for it? And how can we locate the meaning of that particular kind of community called “urban” within its frame?

Consider, first, what money represents. “Since labor is motion, time is its natural measure,” writes Marx (1973, 205), and from this we see that money is “objectification of general labor time” on the world market (abstract labor). The community of money cannot, therefore, be understood independently of the social meaning of either space or time. I lay aside these crucial interrelations for the moment; they will be taken up later.

The community of money is strongly marked by individualism and certain conceptions of liberty, freedom, and equality backed by laws of private property, rights to appropriation, and freedom of contract. Such personal freedoms and liberties exist, of course, in the midst of an “objective bondage” defined through mutual dependency within the social division of labor and a money economy. But the freedoms are of great social significance: “Since freedom means independence from the will of others, it commences with independence from the will of specific individuals. . . . The inhabitants of a modern metropolis are independent in the positive sense of the word, and even though they require innumerable suppliers, workers and cooperators and would be lost without them, their relationship to them is completely objective and is only embodied in money” (Simmel 1978, 300). The owners of money are free (within constraints) to choose how, when, where, and with whom to use that money to satisfy their needs, wants, and fancies (a fact that the free-market ideologues perpetually dwell upon to the exclusion of all else). The tremendous concern with personal freedoms and the pursuit of liberty (and the anger felt at its frustration) must in Simmel’s view, be traced back to the qualities of money economies. Marx likewise attaches bourgeois notions of constitutionality to the inherent qualities of the money form.

There is also something very democratic about money. It is a “great leveler and cynic,” says Marx, because it eliminates all other marks of distinction save those contained in its possession. “The existence of the infinite, quantitative grading of money ownership,” says Simmel (1978, 391), “permits (social) levels to merge into one another and removes the distinctive formation of aristocratic classes which cannot exist without secure boundaries.” The erosion of traditional class distinctions and their replacement by the crass democracy of money was the sort of social transformation that Henry James, for one, viewed with wistful regret. The tendency to eliminate clear

class distinctions is reinforced, in Simmel’s view, by the rise of a variety of occupations (from the street vendor to the banker) which have no other content than making money. The typical turbulence of the circulation and making of money also incites “the awareness of difference” that underlies the demand for egalitarian reforms, some of which are bound to see the light of day (Simmel 1978, 270, 433).

The style of urban life necessarily reflects such conditions. The breakdown of clear class distinctions is accompanied by rising barriers between individuals. While Simmel will ultimately translate this into a tragic vision of the loneliness of creative individualism (a condition which, unlike Marx, he can see no way to transcend), he nevertheless sees it as “indispensable for the modern form” of urban life: “The pecuniary character of relationships, either openly or concealed in a thousand forms, places an invisible functional distance between people that is an inner protection and neutralization against the overcrowded proximity and friction of our cultural life” (477).

The sense of social structure which Simmel presents is very different from that traditionally associated with Marx. Yet there is nothing here that is actually inconsistent with Marx’s theory of money. What is missing, of course, is any consideration of the circulation of capital (as opposed to money) and the class relations implied therein. The processes we have so far described are real enough, but the contrast with the rules of capital circulation is of more than passing interest. It indicates a deep tension between the individualism and equality that the possession of money implies and the class relations experienced in the making of that money.

The objective, measurable, and universal qualities of money call forth other forms of social transformation within the community that money defines. “The idea that life is essentially based on intellect, and that intellect is accepted in practical life as the most valuable of our mental energies,” says Simmel (1978, 152), “goes hand in hand with the growth of a money economy.” Two aspects of this intellectual activity call for comment. First, the more we deal with abstract symbols of money (like bank notes) rather than with a tangible commodity of intrinsic value (like gold), the more we are forced to resort to abstract and symbolic modes of thought that match the “concrete abstraction” of the money form. “Consider,” says Simmel, “the complicated psychological pre-conditions required to cover bank notes by cash reserves” and what this means for the symbolic content of our own thinking. Marx, too, emphasizes how the faith needed to operate on paper money or credit has to have a quasi-religious quality if it is to sustain the complex transactions of a modern money economy. Second, the content of this intellectual activity is deeply affected by the nature of money operations. “The measuring, weighing and calculating exactness of modern times” stands in “a close causal relationship to the money economy,” which demands

"continuous mathematical operations in our daily transactions." A money economy demands a certain kind of rationalism, based on exact, precise, and rigorous measurement of calculable magnitudes (Godelier 1972). This is the kind of positivist intellectual equipment we necessarily use every time we confront something as simple as a market price.

A money economy, Simmel (1978, 411) concludes, presupposes "a remarkable expansion" and intensification of mental processes to produce "a fundamental re-orientation of culture towards intellectuality." From this derives the growth of independent intellectual activities and professions oriented to exploring the rational calculus of economic life. A material basis is here defined for the rise of powerful vested interests in principles of objective measurement, rational computation, and economic calculation. Such modes of thought can extend over all spheres of social concern. It was, for example, no accident that Sir Isaac Newton was also, for a time, Master of the King's Mint. The kind of materialist and positivist science produced is, however, as great a leveler and cynic as the money form it mimics. All phenomena are brought under a single homogeneous and supposedly universal form of thought. Everything is reduced to a common plane of intellectuality, which functions as the secular religion of the money economy. And such modes of thought have, in turn, to be powerfully protected. For, as Simmel (1978, 172) notes, "Only in a stable and closely organized society that assures mutual protection and provides safeguards against a variety of elemental dangers, both external and psychological, is it possible for such a delicate and easily destroyed material as paper to become [money]."

This sketch, constructed with the aid of Marx and Simmel, of the kind of "community" that money defines is by no means complete. But it does provide a sufficient base out of which to evolve an understanding of other facets of the social process (including, as we shall see, revulsion and revolt against the money calculus) which invest urban life under capitalism with its specific qualities. The first step down that path, however, entails the integration of conceptions of space and time into the argument.

## II. TIME

"Economy of time," says Marx (1973, 173), "to this all economy ultimately reduces itself." But what are the qualities of this time to which all economy is to be reduced? We here encounter a paradox. For though money may represent social labor time, the rise of the money form transforms and shapes the meaning of time in important and specific ways. Simmel (1978, 505-6) thus argues that "the modern concept of time — as a value determined by its usefulness and scarcity" became widely accepted only to the degree that market capitalism flourished. Le Goff (1980, 35-36) agrees. The enlarge-

ment of the monetary sphere of circulation and the organization of commercial networks over space, he argues, forced the merchant, at least as long ago as the fourteenth century, to construct "a more adequate and predictable measurement of time for the orderly conduct of business." This need was reinforced to the degree that merchants became the organizers of urban-based production. Thus, the "cultivation of urban labor in the fourteenth century" spawned a "fundamental change in the measurement of time which was indeed a change in time itself." Symbolized by clocks and bells that called workers to labor and merchants to market, separated from natural rhythms and divorced from religious significance, "a sort of chronological net in which urban life was caught" was created by merchants and masters. The new definition of time did not pass undisputed by religious authority any more than by the urban laborers called to accept the new temporal discipline. "These evolving mental structures and their material expressions," Le Goff concludes, "were deeply implicated in the mechanisms of class struggle."

But the reach and fineness of mesh of this new chronological net was no greater than the class power that lay behind it. For though bureaucratic and state interests might rally behind it as a convenient framework for social control, the compelling necessity to respect the new definitions of time lay primarily with the merchants and masters who long maintained only a local, and then often by no means dominant, power within the broader society in which they were inserted (Thrift 1981). The issue of time and its proper notation consequently remained, E. P. Thompson assures us, a lively focus of class struggle throughout the birth-throes and even unto the consolidation of urban industrial capitalism. The long historical passage to the domination of this new sense of time was partly a matter of technology, due to the introduction of cheap timepieces (Landes 1983) and of gas and electric lighting to overcome the constraints of the "natural" working day.<sup>1</sup> But more fundamentally it was a question of class relations which forced the use of those technological possibilities along lines dictated by capital circulation. Society became enmeshed in a single and universal chronological net only to the degree that class forces mobilized in both production and exchange came together. And that happened most spectacularly toward the end of the nineteenth century.

The struggle over time in production goes back, both Le Goff and Thompson agree, to at least the medieval period. For his part, Marx notes that the struggle over the length of the working day goes back to the Elizabethan period when the state legislated an increase in the length of the customary working day for laborers freshly released from the land by violent

<sup>1</sup> Engels (1971, 336-52) has a most interesting account of the labor struggles waged by carpenters in Manchester after 1844 when gas lighting was introduced as part of a strategy to increase the length of the working day.

primitive accumulation and consequently prone to be unstable, undisciplined, and itinerant. The incarceration of the unemployed with the mad (which Marx highlights and Foucault erects into a whole book) was but one of many means to bring the labor force to heel. Over several generations, "new labor habits were formed, and a new time-discipline imposed," E. P. Thompson (1967, 90) confirms, forged under the pressure to synchronize both the social and the detail division of labor and to maximize the extraction of the laborer's surplus labor time (the basis of profit). Thus came into being "the familiar landscape of industrial capitalism, with the time-sheet, the timekeeper, the informers and the fines." The battle over minutes and seconds, over the pace and intensity of work schedules, over the working life (and rights of retirement), over the working week and day (with rights to "free time"), over the working year (and rights to paid vacations) has been, and continues to be, royally fought. For the worker learned to fight back within the confines of the newly internalized sense of time: "The first generation of factory workers were taught by their masters the importance of time; the second generation formed their short-time work committees in the ten-hour movement; the third generation struck for overtime or time-and-a-half. They had accepted the categories of their employers and learned to fight back within them. They had learned their lesson, that time is money, only too well" (Thompson 1967, 90).

But even though the new time discipline and its associated work ethic may have been successfully implanted fairly early on in the Manchesters, Mul-houses, and Lowells of the early industrial revolution, it did not so easily take root in the grand metropolis or in rural areas. Time literally sprawls in Dickens's world in a way that mainly reflects the time frame of the merchant capitalist. The High Street clock made it appear "as if Time carried on business there and hung out his sign." The mass of his characters are scarcely tied down to the tight Gradgrind schedule of industrial Coketown. It took revolutions in the realm of circulation rather than in production (as Thompson tends to imply) to impose the universal sense of abstract and objective time we now so commonly accept as basic to our material existence. And in this it was the extraordinary and rapid conquest of space through the advent of the railroad, the telegraph, the telephone, and the radio that finally forced matters (Pred 1973).

It was, after all, only in 1883, Kern (1983, 12) reminds us, that the more than two hundred local times that a traveler encountered on a rail journey from Washington to San Francisco were brought to order and the unprofitable confusion ended that had, for example, the Pennsylvania Railroad system operate on a Philadelphia time that was five minutes different from that of New York. It was only in 1884, also, that the first moves were made toward international agreement on the meridian, time zones, and the beginning of

the global day. And it was many years before even the advanced capitalist countries coordinated their clocks.

The tightening of the chronological net around daily life had everything to do with achieving the necessary coordinations for profitable production and exchange over space. Simmel (1971, 328) spelled out the rationale with devastating accuracy. "If all the watches in Berlin suddenly went wrong in different ways even only as much as an hour," he wrote, "its entire economic and commercial life would be derailed for some time." Spatial separation (itself made more and more possible with increasing sophistication of the money economy) "results in making all waiting and breaking of appointments an ill-afforded waste of time." The "technique of metropolitan life," he continued, "is not conceivable without all of its activities and reciprocal relationships being organized and coordinated in the most punctual way into a firm, fixed framework of time which transcends all subjective elements." The tight scheduling of the newly emerging mass transit systems at the end of the nineteenth century, for example, profoundly changed the rhythm and form of urban life (though the idea of fixed time schedules over invariable routes at a fixed price had been around since the first omnibus routes in the 1820s). The coming of the railroad likewise "flaunted agricultural time keeping," for even "the comparatively slow haste of the back-country freight train rumbling from town to town," says Stilgoe (1983, 23), "suffused every structure and space" in the railroad corridors with a new sense of time. The early morning milk train in Thomas Hardy's *Tess* captures that new sense of time and of rural-urban connection across space magnificently.

But there were all kinds of equally significant indirect ways in which the conquest of space after 1840 shifted the whole sense and valuation of time for all social classes. The rise of the journey to work as a phenomenon of urban living was itself connected to the increasing partition of time into "working" and "living" in separate spaces. And there were all manner of secondary effects of such a journey to work upon customary meal times, household labor (and its sexual division), family interactions, leisure activities, and the like. The rise of mass-circulation newspapers, the advent of telegraph and telephone, of radio and television, all contributed to a new sense of simultaneity over space and total uniformity in coordinated and universally uniform time.

Under such conditions the qualities of money could further affect matters. The fact that money can function as a store of value, and hence of social power, that can be held over time allows individuals to choose between present and future satisfactions, and even allows consumption to be moved forward in time through borrowing (Sharp 1981, 163). Individuals are thereby forced to define their own time horizons, their individual "discount rate" or "time preference" as they contemplate whether to expend their social

power now or conserve it for later. The social representation of time preference is given by financial institutions, which state time horizons and discount rates for borrowing. Mortgage and interest rates and terms then appear as "concrete abstractions" to which individuals, firms, and even governments have to respond.

The function of money as a store of value also permits the accumulation of social power in individual hands over time. Compared to other forms of social wealth, money power can, as Marx points out, be accumulated without limit — logistical curves of geometrical expansion over time become entirely feasible. Money here counters its democratizing function, since it also counts among its qualities the capacity for a most unequal distribution of a universal form of social power. The question of intergenerational transfer of wealth (or debts) then arises, hence the social significance that Marx and Engels attach to inheritance and the bourgeois form of the family. Even those with limited money resources can find ways, as Hareven (1982) brilliantly demonstrates, to integrate their sense and use of "family time" into the newly emerging demands and schedules of "industrial time."

The shaping of time as a measurable, calculable, and objective magnitude, though deeply resented and resisted by many, had powerful consequences for intellectual modes of thought. The nineteenth and twentieth centuries saw the birth of innumerable professions that had a deep and vested interest in a rigorous definition and measurement of time, since their whole *raison d'être* was to advise on the efficient allocation of what had become a scarce and quantifiable resource. Engineers, chemists, economists, industrial psychologists, to say nothing of the experts in time and motion study, computerization, automation, electronics, and information transfer, all have in common an abstract conception of time that can be used in concrete ways, usually directed toward making money. Small wonder that differential calculus, with its fine analytics of rate of change over measurable time, became the basis for much of modern technical education. Thus economists, while demanding calculus as a prerequisite to the understandings they have to offer, are also quick to point out that "time is a scarce resource that must be spent" and that "a basic problem of human existence" (with respect to which they stand to offer us the friendliest of advice) "is to spend it well, to use it to bring about the greatest return of happiness that can be achieved" (Sharp 1981, 2). The intellectual baggage that goes with the equation "time is money" is evidently of enormous extension and sophistication.

### III. SPACE

"Tess . . . started on her way up the dark and crooked lane or street not made for hasty progress; a street laid out before inches of land had value, and when

one-handed clocks sufficiently divided the day" (Thomas Hardy). So begins E. P. Thompson's (1967) classic piece on time and work-discipline under industrial capitalism. Yet Thompson makes nothing of the fact that the street that so impeded Tess's progress was formed "before inches of land had value." I make the remark because social historians and theorists all too rarely take Le Goff's (1980, 36) advice to put the simultaneous conquest of time and space at the center of their concerns. The medieval merchant, Le Goff argues, discovered the fundamental concept of "the price of time" only in the course of exploring space. And we have already seen how it was only through the conquest of space after 1840 that an abstract, objective, and universal sense of time came to dominate social life and practice.

The priority given to time over space is not in itself misplaced. Indeed, it mirrors the evolution of social practices in important ways. What is missing, however, is an appreciation of the practices that underlie the priority. Only in such a light can we understand those situations in which location, place, and spatiality reassert themselves as seemingly powerful and autonomous forces in human affairs. And such situations are legion. They vary from the urban speculator turning inches of land into value (and personal profit), through the forces shaping the new regional and international division of labor, to the geopolitical squabbles that pit city against suburb, region against region, and one half of the world in sometimes violent conflict with the other. Given the seriousness of such events, we ignore the question of space at our peril.

Space cannot be considered independently of money because it is the latter, as Marx (1973, 148) insists, that permits the separation of buying and selling in both space and time. The breaking of the bonds of personal dependency through money exchange is here paralleled by the breakdown of local barriers so that "my product becomes dependent on the state of general commerce and is torn out of its local, natural and individual boundaries." The world market ultimately defines the "community" of exchange interactions, and the money in our pocket represents our objective bond to that community as well as our social power with respect to it. Here, too, money is the great leveler and cynic, the great integrator and unifier across the grand diversity of traditional communities and group interests. Commodity exchange and monetization challenge, subdue, and ultimately eliminate the absolute qualities of *place* and substitute relative and contingent definitions of places within the circulation of goods and money across the surface of the globe. Zola (1980, 452-58) caught the rural impact of all this with great dramatic intensity in *La terre*. Frank Norris (1981, 44) saw the same integrations. Watching the prices coming over the wires that connected them to the world market, the California wheat ranchers lost their sense of individuality. "The ranch became merely the part of an enormous whole, a unit in the vast agglomeration of wheat land the whole world round, feeling the effects of causes thousands of miles distant." Under the impact of the transport and communications revolution, the world

market and the space it embraced came to be felt as a very real, concrete abstraction in relation to everyone's social practice.

The social effects are legion. To begin with, money "permits agreements over otherwise inaccessible distances, an inclusion of the most diverse persons in the same project, an interaction and therefore a unification of people who, because of their spatial, social, personal and other discrepancies in interests, could not possibly be integrated into any other group formation" (Simmel 1978, 347). By the same token, money creates an enormous capacity to concentrate social power in space, for unlike other use values it can be accumulated at a particular place without restraint. And these immense concentrations of social power can be put to work to realize massive but localized transformations of nature, the construction of built environments, and the like. Yet such concentrations always exist in the midst of the greatest dispersion because the social power that money represents is tied to an immense diversity of activities across the world market.

We here encounter paradoxes with deep implications. The price system, for example, is the most decentralized (socially and spatially) of all socially coordinated decision-making mechanisms, yet it is also a powerful centralizing force that permits the concentration of immense money power in a few hands. Even the notion of distance takes on quite new meanings. Desire, Simmel (69-76) suggests, arises "only at a distance from objects," yet presupposes "a closeness between objects and ourselves in order that the distance should be experienced at all." Money and exchange across the world market turn the metropolis into a veritable bordello of consumer temptation in which money (or the lack of it) becomes itself the measure of distance. This was the theme that Dreiser got at so sensationally in *Sister Carrie*. And it has vital meanings. A whole world of commerce and money exchanges collapses into a confrontation on New York's Fifth Avenue or in Baltimore's Harborplace—between individual desire and a vast array of commodities drawn from all corners of the earth. The nature of political participation is no less dramatically affected. Money, Simmel (1978, 344) notes, permits political participation without personal commitment (people give money more easily than time) as well as participation in far-off causes, often to the neglect of those near at hand. Dickens parodies such a habit through the character of Mrs. Pardiggle in *Bleak House*; she is so obsessed with raising money for the Tookalooop Indians that she quite neglects her own children.

But what is the nature of this "space" across which and within which such processes operate? The conquest of space first required that it be conceived of as something usable, malleable, and therefore capable of domination through human action. A new chronological net for human exploration and action was created through navigation and map making. Cadastral survey permitted the unambiguous definition of property rights in land. Space thus came to be

represented, like time and value, as abstract, objective, homogeneous, and universal in its qualities. What the map makers and surveyors did through mental representations, the merchants and landowners used for their own class purposes, while the absolutist state (with its concern for taxation of land and the definition of its own domain of domination) likewise relished the clear definition of absolute spaces within a fixed spatial net. Builders, engineers, and architects for their part showed how abstract representations of objective space could be combined with exploration of the concrete, malleable properties of materials in space. But these were all just islands of practice, light chorological nets thrown over a totality of social practices in which all manner of other conceptions of place and space—sacred and profane, symbolic, personal, animistic—could continue to function undisturbed. It took something more to consolidate space as universal, homogeneous, objective, and abstract in most social practices. That "something" was the buying and selling of space as a commodity. The effect was then to bring all space under the single measuring rod of money value.

The subsumption of places and spaces under the uniform judgment of Plutus sparked resistance, often violent opposition, from all kinds of quarters. The struggle over the commodification of land and space goes back at least as far and was certainly as long drawn out and fiercely fought as that over the meaning and control of time. Here, too, it was the transport and communications revolution of the nineteenth century that finally consolidated the triumph of space as a concrete abstraction with real power in relation to social practices. The independent power of the landlord class was broken, and in the process land became nothing more than a particular kind of financial asset, a form of "fictitious capital" (Harvey 1982, chap. 11). Or, put the other way round, land titles became nothing other than "coined land" (Simmel 1978, 508).

But there is a contradiction in this. The homogeneity of space is achieved through its total "pulverization" into freely alienable parcels of private property, to be bought and traded at will upon the market (Lefebvre 1974, 385). The result is a permanent tension between the *appropriation* and use of space for individual and social purposes and the *domination* of space through private property, the state, and other forms of class and social power (Lefebvre 1974, 471). This tension underlies the further fragmentation of otherwise homogeneous space. For the ease with which both physical and social space could now be shaped—with all that this implies for the annihilation of the absolute qualities of place and of the privileged territoriality of traditional communities sealed off in aristocratic, religious, or royal quarters (among others)—poses a serious challenge to the social order. In whose image and to whose benefit is space to be shaped? Where the land market is dominated by money power, the democracy of money takes charge. Even the largest palace

can be bought and converted into office or slum building. The land market sorts spaces to functions on the basis of land price and does so only on the basis of ability to pay, which, though clearly differentiated, is by no means differentiated enough to etch clear class and social distinctions into the social spaces of the city. The response is for each and every stratum in society to use whatever powers of domination it can command (money, political influence, even violence) to try to seal itself off (or seal off others judged undesirable) in fragments of space within which processes of reproduction of social distinctions can be jealously protected.

There was, then, a dramatic transformation in the sense of urban space as the democracy of money increasingly came to dominate the land market in the nineteenth century. As John Goode (1978, 91–107) perceptively notes, "The organization of space in Dickens is based on a tension between obscurity and proximity"; it is a space of accidental encounters in which the exploratory zeal of the merchant class can still hold sway. Characters can freely move across spaces precisely because to do so is not to challenge the prevailing class distinctions. But George Gissing's novels of the late nineteenth century portray a very different London. "The city is no longer the meeting-place of the classes; on the contrary, it is the structured space of separation" that can be "charted, literally mapped out," with "distances which have no contingency" and "zones functioning as class and economic differentials." The "social space of the city, insofar as it is created space," Goode concludes, "is partly organized to keep class relationships to an abstraction — suburbs, ghettos, thoroughfares are all ways of keeping the possibilities of direct confrontation at bay." The irony, of course, is that at the very historical moment when the potentiality of the city as "a place of encounters" (to use a favorite expression of Lefebvre's) was at its apogee, it became a fragmented terrain held down and together under all manner of forces of class, racial, and sexual domination.

How can this fragmentation be reconciled with the homogeneity of universal and objective space? That question has provoked a variety of theoretical and practical responses. Durkheim (1965), for one, recognized the importance of the fragmentations and represented them as social spaces within the organic solidarity of society as a whole. The urban reformers (like Charles Booth, Octavia Hill, and Jane Addams) and sociologists (particularly of the Chicago School) set out to explore the fragments and to try to identify or impose some sense of "moral order" across them. And there arose a whole host of professionals — engineers, architects, urban planners, and designers — whose entire mission was to rationalize the fragments and impose coherence on the spatial system as a whole (Giedion 1941). These professionals, whose role became more and more marked as progressive urban reformers acquired political power, acquired as deep a vested interest in the concept of

homogeneous, abstract, and objective space as their professional confrères did with respect to the concrete abstractions of time and money. Even art, Kern (1983, 144–52) suggests, succumbed in its turn to cubism in a culture that affirmed "the unreality of place" at the same time as it sought to confine forms to a flat surface in homogeneous and abstract space. The consequent tensions between "the world of three dimensions that was their inspiration and the two-dimensionality of painting that was their art" generated canvases that were as fragmented and shattered in their appearance as the urban social landscapes that they often sought to depict.

The growing consensus that space must be, in spite of its evident fragmentations, objective, measurable, and homogeneous (how else could it be ordered for the rational conduct of business?) was accompanied by another emerging consensus toward the end of the nineteenth century. Writers as diverse as Alfred Marshall and Proust concluded that space was a less relevant dimension to human affairs than time. In this, once more, the transport and communications revolution was fundamental. As early as the 1840s, Leo Marx (1964, 194) tells us, Americans were taken with the "extravagant" sentiment that the sublime paths of technological progress were leading inexorably to the "annihilation of space and time" (a phrase apparently borrowed from a couplet of Alexander Pope's: "Ye Gods! annihilate but space and time / And make two lovers happy"). The other Marx (Karl, 1973, 524–44) more soberly reduced this extravagant idea to the annihilation of space by time. For though the medieval merchant discovered the price of time through the exploration of space, it was, Marx insisted, labor time that defined money, while the *price of time* or *profit* was the fundamental dimension to the capitalist's logic of decision. From this Marx could derive what he saw as a necessary impulsion under capitalism to annihilate the constraints and frictions of space, together with the particularities of place. Revolutions in transport and communications are, therefore, a necessary rather than a contingent aspect of capitalist history.

The consequent victory of time over space and place had its price. It meant acceptance of a way of life in which speed and rush to overcome space was of the essence. Thomas Musil thought he caricatured when, in *The Man without Qualities*, he depicted "a kind of super-American city where everyone rushes about, or stands still, with a stop-watch in his hand. . . . Overhead trains, overground-trains, underground trains, pneumatic express mails carrying consignments of human beings, chains of motor vehicles all racing along horizontally, express lifts vertically pumping crowds from one traffic level to another. . . ." (quoted in Kern 1983, 127) but he was merely describing the kind of organization of flows over space that paralleled Simmel's description of time requirements for the modern metropolis. "Steady uninterrupted flow was becoming the universal American requirement" says Jackson (1972,

238); and engineers and planners raised the science of such flows (of goods, of people, of information, of production processes) to the very pinnacle of their professional expertise (Stilgoe 1983, 26). In this respect the United States quickly established itself as "the most modern form of existence of bourgeois society" (Marx 1973, 104). Gertrude Stein (1974, 93-5) more or less agreed. "The Twentieth Century has become the American Century," she wrote, and "it is something strictly American to conceive a space that is filled always filled with moving." Kerouac's (1955, 25, 111) characters rushing frantically *On The Road* from coast to coast are living embodiments of that spirit: "We were leaving confusion and nonsense behind and performing our one and only noble function of the time, *move*." Such a rush of movement implied, of course, the dissolution of any traditional sense of community. "There was nowhere to go but everywhere," wrote Kerouac, and the sociologists and urban planners belatedly rushed to catch up with concepts like Webber's (1963, 1964) "community without propinquity" situated in "the nonplace urban realm."

The kind of community money defines is, evidently, one in which the organization of space and time, including the precedence of the latter over the former, takes on particular qualities. Money is, in turn, not independent of these qualities, since money represents nothing more than abstract social labor, socially necessary labor time, developed, as Marx (1972, 253) puts it, "in the measure that concrete labor becomes a totality of different modes of labor embracing the world market." The interrelations between money, time, and space form, thus, intersecting nets of very specific qualities that frame the whole of social life as we now know it. But the constraints of that frame do not pass unnoticed or unchallenged. To these challenges we must now turn.

#### IV. REVULSION AND REVOLT

While the community that money defines through time and space permits all manner of freedoms and liberties, the constraints imposed by the intersecting spatial, chronological, and monetary nets are repressive enough to spark all manner of revulsions and revolts. And from time to time the incoherent pieces of resistance coalesce and well up as some deep-seated demand to construct an alternative society, subject to different rules, outside of and beyond the rational discourse and the disciplines and constraints determined within the community of money. The utopian elements within all such proposals and actions are, it is interesting to note, almost always seeking a different notion of value and different modes of operation in time and space from those that have increasingly come to dominate all aspects of social life.

The cynical leveling of all human activities and experiences to the heartless

and colorless qualities of money has always proved hard to accept. "We experience in the nature of money itself something of the essence of prostitution," says Simmel (1978, 377); and Marx (1973, 163) expresses a parallel sentiment. Baudelaire returned again and again to this theme (see chap. 3). From this there arises "a deep yearning to give things a new importance, a deeper meaning, a value of their own" other than the "selling and uprooting of personal values" (Simmel 1978, 404). "Commerce," says Baudelaire (1983b, 65, 88), "is in its very essence satanic." It is "the vilest form of egoism" in which "even honesty is a financial speculation." There are, he goes on to proclaim, "only three beings worthy of respect: the priest, the warrior and the poet. To know, to kill and to create." Simmel (1978, 97) gives that wounded cry a deeper psychological meaning. "Some people consider violent robbery more noble than honest payment; for in exchanging and paying one is subordinated to an objective norm, and the strong and autonomous personality has to efface itself, which is disagreeable." The gangster, the crook, the messianic revolutionary, and even the financial swindler excite as much secret approbation as public condemnation (particularly when their exploits are spectacularly carried off).<sup>2</sup> The ability to live a way of life "that does not have to consider the money value of things" likewise has "an extraordinary aesthetic charm," comments Simmel (1978, 220), and Baudelaire, for one, lived out that aesthetic sense in being simultaneously impoverished poet and exquisite dandy. Sentiments of revulsion and gestures of defiance against the dull rationality of the monetary calculus abound in contemporary life.

Revulsion against the tightening chronological net around all aspects of social life has been no less marked. It took decades before the skilled workers, for example, would surrender their right to "blue Monday," and in certain occupations, such as mining and construction, absenteeism and intermittent employment are so normal as hardly to call for special comment. And the fight over minutes and moments within the labor process is as eternal as it has been fierce, forcing employers even in recent years to all manner of concessions (flexitime, quality circles, etc.) in order to contain the spirit of revolt in bounds.

<sup>2</sup> The peculiar and deeply paranoid bourgeois fear of the criminal classes in the nineteenth century, a reading of Chevalier (1973) suggests, had much to do with the idea that there was an alternative and subversive underworld that constituted a totally different form of society from that projected by bourgeois culture. "The thieves form a republic with its own manners and customs," wrote Balzac; "they present in the social scene a reflection of those illustrious highwaymen whose courage, character, exploits and eminent qualities will always be admired. Thieves have a language, leaders and police of their own; and in London, where their association is better organized, they have their own syndics, their own parliament and their own deputies" (quoted in Chevalier 1973, 70-71).

There were also many voices within the bourgeoisie, like that of Simmel, who worried about or openly revolted against the rigid discipline of the watch. "We are weighed down, every moment," complained Baudelaire (1983b, 97), "by the conception and sensation of Time." Its seeming scarcity arose, he felt, out of a pace and style of modern life in which "one can only forget Time by making use of it." "It was briefly fashionable," records Benjamin (1973, 54), for Parisians during the 1840s to express their contempt for the discipline of time by taking "turtles for a walk in the arcades." At the end of the nineteenth century in particular, the bourgeois literati sought refuge from the domination of universal and abstract public time through subjective explorations of their own private sense of time (Proust and Joyce spring most easily to mind). Conrad expressed the sense of revolt more directly: he had the anarchist in *The Secret Agent* take on the task of blowing up the Greenwich meridian. But although our thinking about time has never been the same since, this spirit of revolt, which Kern (1983) for one makes much of, was nourished out of a context in which time was becoming more and more rationally and universally defined. What the literati really discovered, of course, was something that had been evident to the working classes for generations: that it takes money to command free time, real as opposed to imaginary release from the rigid discipline of organized public time. In this respect poor Baudelaire lived under a double sufferance: despising money, he lacked the means to put himself outside of the discipline of time. Small wonder that he never ceased to rail against the crassness of bourgeois materialism and elevated the dandy and the flâneur to the status of heroes.

The capacity to appropriate space freely has likewise been held, in both thought and social practice, an important and vital freedom. Freedom to roam the city streets without fear of compromise is not necessarily given by money. Indeed, situations frequently arise where the least privileged in the social order have the greatest liberty in this regard (Cobb 1975, 126). Restriction of the freedom to appropriate space through private property rights and other social forms of domination and control (including that exercised by the state) often provokes all manner of social protest movements (from the reappropriation of central Paris during the Commune by the popular classes expelled therefrom by Haussmann's works, to civil rights sit-ins and "take-back-the-night" marches). The demand to liberate space from this or that form of domination and reconstitute it in a new image, or to protect privileged spaces from external threat or internal dissolution, lies at the center of many urban protest movements and community struggles (Lefebvre 1974; Castells 1983). And to the degree that the fragmentation of space which accompanies its homogenization allowed the formation of protected islands outside of direct social control, so opportunities arose for all manner of

subversive visions of community and place, and their spatial integument, to take root. Innumerable dissident groups — anarchists like Kropotkin (1968), women of the sort that Hayden (1981) describes, communitarians like the religious and secular groups (the Caberists, for example) that played such an important role in the settling of America, the alternative life-style movements that created the "communes" of the 1960s, and so forth — all sought to liberate and appropriate their own space for their own purposes. And in so doing they mounted a practical challenge to the supposed homogeneity of abstract, universalized space.

But such social movements must be understood in terms of what they are revolting against. The search for "authentic community" and a "sense of place" became all the more fierce as the community of money and the annihilation of absolute place under the domination of money became more powerfully felt. And the search bore partial fruit. Kinship ties were resurrected by urban dwellers (Hareven 1982), new networks of social contacts forged (Fischer 1982), and whole new communities created that often managed to seal themselves off in protected spaces behind all manner of symbols and signs (from gatehouses and walls to street names and postal codes) to emphasize the special qualities of neighbourhood and place. Urban style and fashion, Simmel (1978) points out, are convenient ways to reintroduce the social distinctions that the democracy of money tends to undermine. And so arose the modern sense of "community" so dear to sociologists, though they took a while to lose that prejudice that sees rurality as the true incarnation of authentic community and the city as merely the site of social breakdown, of pure individualism and social anomie. Gans (1962) thus brought to life in *The Urban Villagers* what had been evident to close observers of the urban scene for many years; that the struggle to create protected places and communities was as fiercely fought in urban areas (Gissing's London, for example) as its evident loss was felt in rural areas (like Hardy's Wessex). Under such conditions, too, the family can take on new meaning and significations, as a "haven in a heartless world" (Lasch 1977), a social center in which considerations of money, time, and space can be treated in a radically different way from those prevailing in public life (Hareven 1982).

The revolt within intellectual circles against the kind of rationality implied within the community of money — a rationality that extended, as we have seen, across conceptions of time and space as well as of value — is as broad as it is historically long. For if Auguste Comte, the father of positivism, anointed the bankers as managers of his utopia (a far from utopian condition, as we seem close to realizing in practice these days), there were many others, from Carlyle and Ruskin, to William Morris and Nietzsche, through Heidegger and Sartre, who saw things quite differently. And if liberals, those "historical

representatives of intellectualism and of money transactions," as Simmel (1978, 432) calls them, have been inclined "to condone everything because they understand everything" and to represent it in a kind of passionless and objective scientific discourse, there have been many others, from conservatives to Marxists, prepared to dispute them with a passion liberals have found both disconcerting and distasteful.

More problematic are those social movements that reject rationality and seek solace in mysticism, religion, or some other transcendental or subjective ideology. Religious alternatives or proposals for alternatives to the community of money abound and frequently spark social practices outside of the overwhelming rationalities of modern life. Fascism likewise defines an alternative sense of community to that defined by money, exalts absolute place (the soil, the fatherland), appeals to an entirely different sense of historical time (in which the playing out of myth has great importance), and worships values of a higher order than those embodied in money. Far from being a direct expression of capitalism, fascism as an ideology expresses violent opposition to the rationality implicit in the community of money, and the historical symbols of that community – Jews and intellectuals – are consequently singled out for persecution. Marxists also seek a society in which the value of human life is appraised in ways other than through the market. And while they usually cling to the idea of rational planning as a positive virtue, they have often embraced in practice nationalist definitions of community that are as opposed to their own ideology of internationalism as they are to the universality of money. Indeed, there has been hardly a single dissident cultural, political, or social movement these last two hundred years in the advanced capitalist world that has not had somewhere at its base some kind of striving to transcend the money form and its associated rational conceptions of the proper use of space and time. Most of the vivacity and color of modern life, in fact, arises precisely out of the spirit of revulsion and revolt against the dull, colorless, but seemingly transcendental powers of money in abstract and universal space and time.

Yet all such social movements, no matter how well articulated their aims, run up against a seemingly immovable paradox. For not only do the community of money define them in an oppositional sense, but the movements have to confront the social power of money directly if they are to succeed. Colorless and heartless it may be, but money remains the overwhelming source of social power, and what Marx calls its "dissolving effects" are perpetually at work within the family or within alternative "authentic communities" that social groups struggle to define. Such a tendency is writ large in the history of innumerable organizations, from communes that either founder on money questions or convert into efficient enterprises, religious organizations that become so obsessed with the accumulation of money that they pervert the message they propose, to socialist governments that come to

power with noble visions only to find they lack the money to carry out their plans. All manner of oppositional movements have come to grief as they stumble upon the rock of money as the central and universal source of social power.

It takes money, we can conclude, to construct any alternative to the society predicated on the community of money. This is the essential truth that all social movements have to confront; otherwise, it confronts and destroys them. Money may be, as the moralists have it, the root of all evil, yet it appears also as the unique means of doing good. Zola (1967, 224–25) understood that truth very well:

Mme Caroline was struck with the sudden revelation that money was the dung-heap that nurtured the growth of tomorrow's humanity. . . . Without speculation there could be no vibrant and fruitful undertakings any more than there could be children without lust. It took this excess of passion, all this contemptibly wasted and lost life, to ensure the continuation of life. . . . Money, the poisoner and destroyer, was becoming the seed-bed for all forms of social growth. It was the manure needed to sustain the great public works whose execution was bringing the peoples of the globe together and pacifying the earth. She had cursed money, but now she prostrated herself before it in a frightening adulation: it alone could raze a mountain, fill in an arm of the sea, at last render the earth inhabitable to mankind. . . . Everything that was good came out of that which was evil.

Love and money may make the world go around, Zola seems to say, but love of money provides the raw energy at the center of the whirlwind.

#### V. MONEY, SPACE, AND TIME AS SOURCES OF SOCIAL POWER

That the possession of money confers enormous social powers upon its owners requires no substantial demonstration. Marx (1964b, 167) parodies (though not by much) the seeming magic of its powers thus:

The extent of the power of money is the extent of my power. . . . I am ugly, but I can buy for myself the most beautiful of women. Therefore I am not ugly. . . . I am stupid, but money is the real mind of all things and how then should its possessor be stupid? Besides, he can buy talented people for himself, and is he who has power over the talented not more talented than the talented? Do not I, who thanks to money am capable of all that the human heart longs for, possess all human capacities? Does not my money, therefore, transform all my incapacities into their contrary?

The social power of money has, therefore, ever been the object of desire, lust, and greed. Thus does the concrete abstraction of money acquire its powers relative to and over us.

But what of space and time? Once constituted as concrete abstractions within the community of money, do they not also become sources of social power? Do not those who dominate them also possess strong powers of social control? Such a thesis calls for at least some minimal demonstration. The demonstration will lack point, however, unless we also bear in mind that it is the interconnections between command of money, space, and time as intersecting sources of social power that in the end matter.<sup>3</sup> Money can thus be used to command time (including that of others) and space, while command over time and space can easily be parlayed back into command over money. The property speculator who has the money to wait and who can influence the development of adjacent spaces is in a better situation than someone who lacks powers in any one of these dimensions.

Command over space, as every general and geopolitician knows, is of the utmost strategic significance in any power struggle. The same principle also applies within the world of commodity exchange. Every supermarket manager also knows that command over a strategic space within the overall construction of social space is worth its weight in gold. This value of space lies at the root of land rent. But spatial competition is always monopolistic competition, simply because two functions cannot occupy exactly the same location. Capture of strategic spaces within the overall space can confer much more than its aliquot share of control. The struggle between diverse railroad interests in the nineteenth century provides abundant examples of this principle at work, while Tarbell (1904, 146) pictures Rockefeller "bent over a map and with military precision [planning] the capture of the strategic locations on the map of East Coast oil refineries." Control over strategic land parcels within the urban matrix confers immense power over the whole pattern of development. And although the liberation of space and the annihilation of space by time erode any permanent power that may attach to control of strategic spaces, the monopolistic element is always recreated afresh. Indeed, control over the production of spatial organization then becomes fundamental to the creation of new spatial monopolies. The importance of such monopoly power is precisely that it gives rise to monopoly rent and can thereby be converted into money.

But the created space of society is also, as Lefebvre (1974) insists, the space of social reproduction. Thus, control over the creation of that space also confers a certain power over the processes of social reproduction. We can see

<sup>3</sup> These intersections are, I suspect, at the root of Benjamin's (1973) fascination with the figures of the *flâneur*, the dandy, and the gambler in nineteenth-century culture. He comments, for example, "To the phantasmagoria of space, to which the *flâneur* was addicted, corresponded the phantasmagoria of time, to which the gambler dedicated himself. Gambling transformed time into a narcotic" (174).

this principle at work within the most diverse of social circumstances. The organization of space within the household says much about power and gender relations within the family, for example, while hierarchical structures of authority or privilege can be communicated directly through forms of spatial organization and symbolism. Control over spatial organization and authority over the use of space become crucial means for the reproduction of social power relations. The state, or some other social grouping such as financiers, developers, or landlords, can thus often hide their power to shape social reproduction behind the seeming neutrality of their power to organize space (Lefebvre 1974, 369). Only at certain moments – gross gerrymandering of political boundaries, the dismantling of spaces of opposition by a higher power (the suppression of the Paris Commune or recent attempts to do away with the Greater London Council), corruption within a system of planning permissions – does the nonneutrality of the creation of space become evident. The power to shape space then appears as one of the crucial powers of control over social reproduction. And it is exactly on this basis that those who have the professional and intellectual skills to shape space materially and effectively – engineers, architects, planners, and so on – can themselves acquire a certain power and convert their specialized knowledge into financial benefit.

The relation between command over money and command over time as sources of social power is no less compelling. Those who can afford to wait always have an advantage over those who cannot. The case is at its most obvious during strikes and lockouts when workers (in the absence of any extensive money reserves) can quickly be reduced to starvation while the owners, however much their profits may be singed, continue to dine at full tables. Capitalists can continue to command the surplus labor time of workers in part because they can wait them out during phases of active class struggle. The same principle applies within the bourgeoisie. The merchant who can wait on payment has a power advantage over a producer who cannot, and at moments of crisis well-heeled financiers can dispose of rivals who have to roll over their debts – thus did James Rothschild dispose of the Pereires's *Crédit Mobilier* in 1867. Differential capacity to command time consolidates the hierarchy of money power within the bourgeoisie.

Similar pressures exist within the work force and in the hidden interiors of family life. If, for example, there is any sense at all to that strange concept of "human capital formation," it is simply that those who can afford to defer present gratification have the opportunity to acquire skills that may form the basis for improved life chances. In effect, workers use time (their own or that of their children) in the hope, sometimes vain, that education will yield a long-run increase in money power. The organization of money and time within the family for this and other purposes is a complex affair; for as Hareven (1982) shows, different trade-offs exist between members of a family

(the capacity to mobilize time is not always a matter of money), and different ways for capturing any monetary benefits can also be devised. For while male wage earners may assume that bringing home money gives them the right to command the time of spouse and children, the worktime of women in the home can also be viewed as one of the crucial assets within the family for freeing the time of others to capture monetary benefits in the marketplace (Pahl 1984). Small wonder that the relations between the command of money and time within family life form a crucial zone of gender conflict.

Also, while many within the bourgeoisie fritter away the "free time" given by money wealth in immediate and luxurious self-indulgence (a practice viewed as doubly outrageous when indulged in by workers), there are also those who use the free time so liberated to engage in scientific, artistic, and cultural endeavors that can in turn be parlayed into enormous power in the realms of scientific knowledge, technological understanding, and ideology. Power over research or cultural production time (including the time of others) is a vital power over social reproduction which resides with the wealthy or the state. Many an artist and researcher has tried to revolt against the hegemony of money power over their time. The most successful, of course, have been those who have converted a technical expertise over the efficient disposal of other people's time into the kind of monopoly power that allows them to extract a monopoly price. Herein, to a large degree, lies the significance of the buying and selling of scientific and technical know-how over the proper use of time, space, and money in contemporary society.

Money, time, and space all exist as concrete abstractions framing daily life. Universal, objective, and minutely quantifiable, they each acquire these particular qualities through certain dominant social practices of which commodity exchange and the social division of labor are in the first instance of the greatest importance. Prices, the movements of the clock, rights to clearly marked spaces, form the frameworks within which we operate and to whose signals and significations we perforce respond as powers external to our individual consciousness and will. And no matter how fiercely the spirit of revulsion and revolt may occasionally flare, the tight norms defined by such concrete abstractions are by now so deeply entrenched that they appear almost as facts of nature. To challenge these norms and the concrete abstractions in which they are grounded (to challenge, for example, the tyranny of the public clock or the necessity of the price system) is to challenge the central pinions of our social life.

But the concrete abstractions of money, time, and space are not defined independently of each other. Money, for example, arises out of exchange and the spatial division of labor and represents social labor time. But by the same token the formation of the world market depends crucially upon the rise of an appropriate money form and the spread of the psychological preconditions

necessary to its proper use. I insist upon the significance of such interrelations in part because other commentators (ranging from neoclassical economists to time-space geographers) so frequently ignore them. But I also insist that the power relations between individuals, groups, and even whole social classes, and the consequent capacity to find feasible paths of social transformation, are broadly defined through the meshing of monetary, spatial, and chronological nets that define the parameters of social action. For it is hard to go outside of these parameters. Even Conrad's secret agent, who wanted to blow up the Greenwich meridian, might be aghast at the social chaos that would surely now result.

#### VI. THE CIRCULATION AND ACCUMULATION OF CAPITAL

What happens when we inject the circulation and accumulation of capital into this framework of thought? Capitalists most certainly make use of the social power of money and carefully cultivate command over time and space as sources of social power.<sup>4</sup> But capitalist practices give money, time, and space even more specific (and in some cases restrictive) meanings than they have within the simple community of money. At the same time, these practices create incoherency and contradiction within the intersecting nets of social power.

All money is not capital. But capital is the social power of money used to make more money, most typically through a form of circulation in which money is used to buy commodities (labor power and means of production) which, when combined within a particular labor process, produce a fresh commodity to be sold at a profit. The importance of this form of circulation can be judged by the fact that most of the commodities sustaining daily life under advanced capitalism are produced this way.

Marx lays bare the essential characteristics of such a mode of production and circulation. The perpetual search for profit means "accumulation for accumulation's sake," the perpetual expansion of the value and the physical quantity of output over time. Logistical growth, necessary to maintain stability, is commonly regarded as inevitable and good. But expansion occurs through the exploitation of living labor in production. This presupposes the buying and selling of labor power as a commodity, a class relation between capital and labor, and struggle between them within the labor process as well as in the labor market. This class struggle, when coupled with intercapitalist competition, forces the system to be technologically dynamic. Technological

<sup>4</sup> This is one of the profounder and often unrecognized themes worked out in Marx's *Economic and Philosophic Manuscripts*.

change is also seen as inevitable and good. Marx's genius, of course, was to show how and why such a system was necessarily unstable. Technological change tends to remove living labor, the agent of expansion, from production and so undermines the capacity to expand. Periodic crises are, therefore, as inevitable as the twin compulsions toward logistical growth and technological revolution (cf. Harvey 1982, 1985).

Capitalism consequently creates a more and more universal sense of what Hareven (1982) calls "historical time." Cyclical rhythms of prosperity and depression integrate into periodic revolutions in the labor process. From 1848 to 1933, and from then until now, the world has experienced an ever-increasing synchronization of its economic activities. Our experiences, our life chances, and even our conceptual understandings increasingly depend upon where we are situated on the logistical growth curves and their periodic interruptions and descents into confusion and crisis. The temporal net of possibilities appears less and less open and more attached to the lawlike behavior of capitalist development over time.

This history occurs within a geography that is likewise subject to radical transformations. Capitalism, Marx (1973, 407–10) insists, necessarily accelerates spatial integration within the world market, the conquest and "liberation" of space, and the annihilation of space by time. In so doing it accentuates rather than undermines the significance of space. Capitalism has survived, says Lefebvre (1976, 21), "only by occupying space, by producing space." The ability to find a "spatial fix" to its inner contradictions has proven one of its saving graces (cf. Harvey 1982, 1985). While the community of money implies the formation of the world market, therefore, the community of capital requires the geographical deepening and widening of processes of capital accumulation at an accelerating rate.

Although the temporal and spatial rhythms of expansion and contraction are broadly given within the laws of accumulation, there are all manner of cross-cutting tensions that render the historical geography of capitalism an unpredictable and often incoherent affair. If, for example, the fundamental condition of crisis is one of overaccumulation – the existence of excess capital and labor side by side – then such surpluses can be absorbed by temporal displacement (debt-financed long-term investments), spatial expansion (the production of new spaces), or some combination of the two. Which dominates and where cannot be specified in advance. But we can say that the mechanics of urban growth (and indebtedness) and geographical construction (peripherally or within a system of cities) are embedded within such an overall process.

Other tensions exist. Consider, first, the time it takes for capital to complete its circulation from money back to money plus profit. Each labor process has its own turnover time, and increasing fragmentation in the

division of labor poses serious problems of coordination under conditions where profit is the sole objective. The problems are overcome through new uses of money. The credit system steps center stage to coordinate divergent turnover times. Furthermore, the acceleration of turnover time yields competitive advantage and so becomes an objective of technological change. This acceleration largely depends, however, on the deployment of fixed capital, which turns over slowly. Again, the technical problems of arranging such forms of investment can be resolved only through appeal to the credit system. The special relation between time and money is put to special use. But a tension arises because the circulation of a part of the capital has to be slowed down in order to accelerate the circulation of the remainder. There is no necessary net gain here. Pressure then arises to accelerate the turnover time of the fixed capital, to write off the value of fixed capital at an accelerating rate (no matter what its physical lifetime), and even to replace it before its economic lifetime is out. Machinery, buildings, and even whole urban infrastructures and life-styles are made prematurely obsolescent; "creative destruction" becomes necessary to the survival of the system. But the capacity to set such processes in motion depends upon conditions within the credit system – the supply and demand for money capital, the rate of money growth, and so on. Cyclical rhythms of investment and disinvestment in machinery and in built environments connect to interest rate movements, inflation, and growth of the money supply, and hence to phases of unemployment and expansion. Time horizons are more and more tightly defined via the credit system. But we also note that the meaning of value and the stability of money as its measure (its devaluation through inflation) also become more elastic in response to changing time horizons. The concrete abstractions of money and time become even more closely intertwined.

Consider, second, how pressures within the circulation of capital lead to the systematic pursuit of the annihilation of space by time. Again, we encounter a contradiction. Space can be overcome only through the production of space, of systems of communication and physical infrastructures embedded in the land. Natural landscapes are replaced by built landscapes shaped through competition to the requirements of accelerating accumulation. The "pulverization" and fragmentation necessary to homogenize space have to take definite forms. Landownership has to be rendered subservient to money power as a higher-order form of property, and land becomes a form of "fictitious capital"; thus, control over the production of space is passed to the interior of the credit system. The uneven development of space then becomes a primary expression of its homogeneity. Immense concentrations of productive force and labor power are assembled in urban areas in the midst of the greatest possible spatial dispersal of commodity flows within a spatially articulated urban hierarchy organized so as to minimize turnover time. This

fixed landscape of uneven development then becomes the barrier to be overcome. And overcome it is; but only through the same processes of "creative destruction" which wash away the dead weight of past investments from current concerns. The annihilation of space by time proceeds apace. But it is now the created spaces of capitalism, the spaces of its own social reproduction, that have to be annihilated.

Consider now the social implications of these dual contradictions. Space can be overcome only through the production of a fixed space, and turnover time can be accelerated only by fixing a portion of the total capital in time. The fixed spaces and times can be overcome only through creative self-destruction. We look at the material solidity of a building, a canal, a highway, and behind it we see always the insecurity that lurks within a circulation process of capital, which always asks: how much more time in this relative space? The rush of human beings across space is now matched by an accelerating pace of change in the produced landscapes across which they rush. Processes as diverse as suburbanization, deindustrialization and restructuring, gentrification and urban renewal, through to the total reorganization of the spatial structure of the urban hierarchy, are part and parcel of a general process of continuous reshaping of geographical landscapes to match the quest to accelerate turnover time. The destruction of familiar places and secure spaces of social reproduction provokes many an anguished cry, not only from the poor and impoverished who are left "grieving for a lost home," deprived of even the minor "sources of residential satisfaction in an urban slum" (to appropriate two of Fried's [1963; Fried and Gleicher 1961] more trenchant titles). Zola (1954b, 293-95) records the distress of a businessman of humble origins who discovers his childhood lodgings exposed in the midst of Haussmann's demolitions. Henry James (1946) was not to be outdone. Returning to New York after many years of absence, he saw an urban landscape possessed by "the reiterated sacrifice to pecuniary profit" (191) and "in perpetual repudiation of the past" (53). "We are only installments, symbols, stop-gaps," the proud villas seem to say; "we have nothing to do with continuity, responsibility, transmission" (11). There was, James admitted, much about the past that deserved repudiation, "yet there had been an old conscious commemorated life too, and it was this that had become the victim of supersession" (53). The whole American landscape, he complained, sat there "only in the lurid light of business, and you know . . . what guarantees, what majestic continuity and heredity, that represents" (161). Familiar places and secure spaces were being annihilated within the "whirligig of time" — but it was the circulation of capital that was calling the tune.

Out of sentiments such as these many a movement of revulsion and revolt can build against the monstrous figure of the developer, the speculator, the urban renewer, and the highway builder who, like Robert Moses, takes a

"meat-axe" to living communities. The evil inherent in such figures has become legendary. They are the centerpieces of what Berman (1982) defines as "the tragedy of development" whose epitome is Goethe's Faust, raging on the hilltop as he contemplates the one small piece of space, occupied by a venerable old couple, that has yet to be integrated into the rationalized and produced space appropriate for modern capitalist forms of development. Zola (1954b, 76-78) recaptures that very same image. Saccard, the archetypal speculator of Second Empire Paris, stands on the butte Montmartre with the "recumbent giant" of Paris at his feet, smiles into space, and "with his hand spread out, open and sharp-edged as a cutlass," cuts through space to symbolize Haussmann's wounding slashes through the veins of a living city, wounds that spurt gold and give sustenance "to a hundred thousand navvies and bricklayers." The perpetual reshaping of the geographical landscape of capitalism is a process of violence and pain.

Bourgeois objections to such consequences of capitalism are based on more than Baudelaire's (1983a, 90) lament that "no human heart changes half so fast as a city's face." They record more than nostalgia for the loss of a past, the destruction of the affectivity of "knowable communities" and familiar places (Williams 1973). They go deeper, too, than that anguished culture of modernity which Berman (1982, 15) evokes as a universally shared "mode of vital experience — experience of space and time, of the self and others, of life's possibilities and perils," experience that "promises us adventure, power, joy, growth, transformation of ourselves and the world — and at the same time, that threatens to destroy everything we have, everything we know, everything we are." What is being expressed, rather, is a pervasive fear that the dominant mode of production and social reproduction upon which the perpetuation of bourgeois power rests is itself nothing more than what Marx calls "a self-dissolving contradiction."

It is rather as if the strings within the monetary, temporal, and spatial nets that frame social life are pulled taut in the face of an accumulation process that demands their rapid adaptation and reorganization. Simultaneously tightened and stretched, the nets distort and snap, only to be hastily repaired into a patchwork quilt of new possibilities.

The sensation of disruption and incoherence in the framing of social life, in the true sources of social power, is universally felt but in different ways. For example, the social spaces of reproduction, which appeared so coherent to Gissing and which the Chicago sociologists could conveniently fit into some organic theory of urban form, lose their functional coherence and are transformed under contradictory pressures stemming from changing labor market demand on the one hand and the need to stimulate consumption through the mobilization of fashion and style as artificial marks of social distinction on the other. The obsolescence of "created community" becomes

just as important as its firm implantation. The speed-up of labor processes and of the circulation of money, goods, information, and so forth provokes resistance and protest from workers who are nevertheless integrated into the mass expectation of instantaneous satisfaction of their own wants and needs. Control over space likewise loses its coherence. The annihilation of space by time proceeds differentially according to whether it is money, commodities, productive capacity, labor power, information, or technical know-how that is being moved – control within one of these networks of motion can be all too easily by-passed by movement in another (with money and information appearing as superior powers simply by virtue of the speed with which they can be moved). The buying and selling of futures (itself an extraordinary conception requiring psychological and intellectual preconditions that far exceed anything Simmel ever dreamed of) can even invert the realities of economic time so as to make the time incoherencies of a Robbe-Grillet novel appear as a realistic representation. The value of money, once a secure representation of value, gyrates as wildly as the time-space horizons of social action. Not only does inflation render the social power of money suspect, but money itself disintegrates into a cacophony of competing definitions (paper, private debts, coin, gold, state debt, special drawing rights, quantified by mysterious numbers like M1, M2, M3). The circulation of capital explodes the contradictions inherent in the money form and proves far more effective, ironically, than any secret agent at undermining the coherence of money, space, and time as secure frameworks of social power.

These incoherencies create all manner of opportunities for social transformation into which almost any interest group can step with hope of gain. Opportunities for successful class struggle arise for a working class threatened by transformations in labor markets, labor processes, and the spaces of their social reproduction. But the incoherence and the threat to existing power relations coupled with sentimental attachment to the past spark just as many oppositional movements within an increasingly fragmented bourgeoisie. Movements of revulsion and revolt against capitalism, its social basis or particular effects, become as diverse and incoherent as the system they arise in opposition to. That can in turn provoke a demand to impose coherence, to define secure sources and forms of social power. And if capitalism itself appears threatened by its own internal contradictions, then civil society, if it is to remain capitalist, must somehow bring order to the chaos, rout out the incoherencies, and contain the ferments of revulsion and revolt. The openings created for social transformation must be closed off or clearly defined. A higher power, that of the state, must be invoked as a matter of social survival.

State power and authority must be used not only to contain diverse oppositional movements directly but to anchor the frameworks of money, space, and time as sources of social power. State management of the quantity

and qualities of money supply is one of its oldest and most venerable of functions. Central bank money now dominates other forms of money within an economy and is as secure as the state power on which it rests. The art of central banking becomes a litmus test of good government, because the state does not possess absolute powers of money creation but has to act as a powerful and secure mediator between the chaotic processes of money creation within its confines and the universal forms of money on the world market. The state manages and secures many of the basic time frames of decision making and coordination. It synchronizes clocks; it regulates the length of the working day, the length of a working life (through compulsory ages of school leaving and retirement), legal holidays and paid vacations, and hours of opening and closing (of commercial establishments and places of entertainment); and it enforces all the other bits and pieces of legislation that define the time frame of much of social life. The state affects the turnover time of capital either indirectly, through taxation procedures defined for amortization and depreciation and the setting of some social rate of time discount, or directly, by taking charge of many long-term investments and so thinking time horizons that the circulation of capital and financial markets cannot afford to contemplate. The state also facilitates planned obsolescence or spreading the costs of creative destruction (compensation for urban renewal or industrial restructuring, or amelioration of the social impacts of changing labor processes, for example). In all of these respects, the state intervenes to set a time frame within which private investment and individual decisions can be made. The state likewise protects rights to the appropriation of space (both private and public). The planning of the location of industry and population, of housing and public facilities, of transport and communications, of land uses, and so on, creates an overall spatial frame to contain and facilitate the innumerable and fragmented decisions that otherwise shape urban development. In all of these respects, the totalitarianism of the liberal capitalist state restrains the disintegrating tendencies of money, time, and space in the face of the contradictions of capital circulation.

To secure these frames of social action, the state needs more than the power, authority, and legitimacy to impose its will. It also must be able to call upon the requisite scientific and technical understandings. This gives added value to the rationality and intellectuality implied in the community of money. The professions that create and guard such knowledge acquire fresh importance, and their leading figures – Keynes, Le Corbusier, Wiener, and Koopmans, for example – enjoy great prestige. Such intellectuals acquire a well-grounded social power to the degree that their knowledge becomes a vital material force, not only with respect to techniques of production, but also with respect to the global framing of social action through control and management of money, space, and time. Those who can monopolize that

kind of knowledge are in a powerful social position. It was no accident, therefore, that the tightening of the monetary, spatial, and chronological nets in the latter half of the nineteenth century was accompanied by the rise of distinctive professions, each with its own corner on the knowledge required to give coherence to those nets. The whole thrust of the Progressive movement in America, a movement that had enormous implications for urban and regional management and planning, was to convert power over knowledge into a class power of intellectuals, professionals, and academics over and above the class war between capital and labor. Though it never rose above that war in the manner they imagined, the power of engineers and managers, economists and architects, systems analysts and experts in industrial organization, could not be taken lightly. It became powerfully embedded in key state and corporate functions as planning became the order of the day. Intellectual conflicts over the meanings of money, space, and time had and continue to have very real material effects. The conflict over modernity and design in architecture, for example, is more than a conflict over taste and aesthetics. It deals directly with the question of the proper framing of the urban process in space and time (Giedion 1941).

The ideals of socialism and centralized planning can appear attractive to such a professional class, as the cases of Oskar Lange, Le Corbusier, Hans Blumenthal, and many others abundantly illustrate. Socialism seemed to hold out the possibility of doing everything that the bourgeois state wanted to do but could not. In intellectual circles the debate over socialism was in practice often reduced to debate over the superior organization of productive forces and the superior rationality of state-planned allocations of space and time as opposed to those achieved by market processes in which money power played a dominant role. It took many years of bitter experience and reluctant self-criticism to recognize that the total rationalization of the uses of space and time by some external authority was perhaps even more repressive than chaotic market allocations (cf. Lefebvre 1974; Duclos 1981). Certainly, to the degree that space and time are forms of social power, their control could all too easily degenerate into a replication of forms of class domination that the elimination of money power was supposed to abolish.

#### VII. THE URBAN PROCESS AND ITS POLITICAL CONFUSIONS

The urban process under capitalism is fraught with the most extraordinary political confusions, the roots of which can partially be exposed by consideration of how urbanization is framed by the intersecting concrete abstractions of money, space, and time and shaped directly by the circulation of money capital in time and space. The tension between the individualism that

attaches to the spending of money and the class experience of earning that money splits the social and psychological foundations for political action. The struggle to command time (one's own or that of others) or to put oneself outside of the crass equation of time with money likewise leads to conflicting political perspectives. Those who are forced to give up surplus labor time to others in order to live will themselves engage in all kinds of struggles not only to limit the time taken from them but also to command the time of others (the time of other family members in housework or of those who offer services). And those who have sufficient money power may seek to define and use their own time in idiosyncratic ways. Money becomes the fundamental means to acquire free time. Only the *clochard*, or hobo, avoids that equation. Nevertheless, there is more than passing recognition on the part of even the most idiosyncratic user of free time that proper and efficient social coordination in universal time (in production as well as in exchange and communications) can be a means to liberate free time from the daily chores of production and reproduction. Even the most anarchistic of us like the traffic lights to be linked and the hours of opening and closing to be clearly marked. On the one hand, we recognize that rational social coordinations in universal time are necessary to sustain life in an urbanized world, while on the other we seek individual freedom from all such temporal discipline. The individualism that money imparts to the use of time conflicts with the social rationality required to be able to use that time creatively and well. State planning and regulation (of hours of labor, of opening and closing times, and so forth) appear unmitigated evils from one perspective and saving virtues from the other.

The struggle to command space is likewise plagued by all manner of ambiguities. The freedom to appropriate and move over space at will is highly valued. Money is an important but by no means exclusive means (as any tramp will tell you) of acquiring such freedom. But money is also often used to secure particular spaces against intrusion. The purchase of private property rights secures exclusive rights to dominate a parcel of space. I suspect the reason why car and homeownership make such an attractive combination is because it ensures an individualized ability to command and protect space simultaneously. Those without money power have to define their territorial privileges by other means. The urban gang protects its turf through violence, and low income and minority populations seek to define collective spaces within which they can exercise the strictest social control. Neighborhoods and communities may consequently be organized in ways antagonistic to pure market valuations, though it is surprising how much community action (particularly in more affluent areas) is oriented to purely market ends (from the defense of housing investments to controlled access to life chances within structured labor markets).

But the pulverization of space by private property and its segmentation into controlled social spaces are antagonistic to the ability to appropriate space freely. The inability to stroll a city out of fear of arrest for trespass or of violence because of some transgression of social space is frustrating. Fragmented powers of domination may also inhibit the structuring of urban space for the efficient use of time. Violently defended private and social spaces often render the structure of urban space relatively static and processes of spatial transformation highly conflictual. Even the vast power of money capital (with its penchant for reducing space to a form of fictitious capital) can be frustrated by such monopolies. Rational spatial planning and state control appear to be adequate responses to such problems, though such power can be used for radically different class purposes. The use of state power to free up space for capital (through forced expropriation, urban renewal, and the like) is very different from the use of state power to check the extraction of vast money revenues from those who have to appropriate spaces owned by others in order to live. On the other hand, nationalization of the land and abolition of private property rights does not necessarily liberate space for popular appropriation. It can even lead to the erosion of those limited rights to appropriate space given by private property and other mechanisms of securing social space. The prevention of one mode of dominating space merely creates another.

Such tensions obscure political consciousness and render all political programs problematic. Should the struggle to curb money power lead to curbing money uses? Should the struggle to curb the thirst for surplus labor be accompanied by an abandonment of concern for efficient means of producing a surplus product? Can the struggle to liberate space for free appropriation be waged without incurring new and even more damaging forms of domination? Should the struggle to free space and time from some dominant and repressive universal rationality entail abandonment of the search for super-efficient organizations of space and allocations of time to reproduce daily needs with the minimum of effort?

The analysis of money, space, and time in the context of capital accumulation with its dominant class relations reveals much about the dynamics of the urban process, its inner tensions, and the significance of urbanization to capitalism's evolution. It also helps us understand the dilemmas and confusions that the urban experience produces for political and intellectual consciousness. Given the intricate complexity and sheer scale of urbanization under capitalism and the peculiar mix of alienations and opportunities that arises out of the urban experience, the objectives of radical and revolutionary movements are bound to become confused. Political consciousness becomes multidimensional, often contradictory, and certainly fragmented. The history of urban social movements has to be read in exactly such a light. The history of class-based political movements also illustrates

how easily these can be torn asunder by exactly such fragmentations. Small wonder that left political movements all too often studiously ignore urban social movements as peripheral froth but in so doing undermine their credibility and their power to undertake a total transformation of capitalism into some alternative mode of production.

Capitalism these last two hundred years has produced, through its dominant form of urbanization, not only a "second nature" of built environments even harder to transform than the virgin nature of frontier regions years ago, but also an urbanized human nature, endowed with a very specific sense of time, space, and money as sources of social power and with sophisticated abilities and strategies to win back from one corner of urban life what may be lost in another. And while it may be true that some are losers everywhere, the vast majority find at least minor compensations somewhere while the rest find solace and hope in the intricacy of the game. Every political movement against the domination of capital must, at some point, confront such confusions. This is also the kind of fragmented and often contradictory political consciousness that permeates our intellectual representations and proposals as to what a genuinely humanizing urban experience might be all about. It is, therefore, imperative that we step back and reflect upon the rationality and social meaning of our conceptions of money, time, and space as frames within which capitalist urbanization and the urban experience unfold. That way, we can more freely seek conceptions that liberate rather than imprison our thinking as to what a noncapitalist but urbanized human future could be all about.