World cities in a world-system

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Evidence of the globalization of the world economy is everywhere, from supermarket shelves to clothes tags. Similarly, the dominance of a relatively small number of cities within world affairs is continually scrolled through newcasts, business reports, and popular media. At face value, there is nothing very special in this: it is widely accepted as part of the conventional wisdom about the state of the world today. Closer scrutiny, however, reveals both the globalization of the economy and its associated patterns of urbanization to involve much more than meets the eye in the supermarket or on the television news. Both rest on a complex web of interdependent and quite stealthy processes that are, collectively, of fundamental importance to the political economy of contemporary societies. In this book, the nature of world cities and their relationships with one another and with the world economy are examined within various conceptual frameworks and analysed at several spatial scales. This chapter introduces the major themes of the book, setting them within the context of different perspectives on globalization and on world cities.

Perspectives on globalization

During the 1970s and 1980s there was an important shift from an international to a more global economy. In the international economy goods and services are traded across national boundaries by individuals and firms from different countries, and the trade is closely regulated by sovereign nation-states. In the global economy goods and services are produced and marketed by an oligopolistic web of global corporate networks whose operations span national boundaries but are only loosely regulated by nation-states. Just how important the shift has been, and how it should be interpreted and understood in theoretical terms, are still very much contested issues. Certainly, the globalization of the world-system must be recognized as having roots that go back well over a century. Robertson (1990) argues that the nineteenth-century idea of

the homogeneous unitary nation-state was in fact part and parcel of the initial transition toward a global infrastructure (international agencies and institutions, global forms of communication, the acceptance of unified global time, the development of global competitions and prizes, the development of standard notions of citizenship and human rights) that constituted the key precondition for the recent acceleration of economic globalization.

Any uncertainty over the recent acceleration of globalization must be attributed in part to its stealthiness. It was – and still is – easy to read the *internationalization* of the economy from trade figures or from consumer goods. The American purchaser of a replica soccer jersey for the Irish national team, for example, can see at once that it was made in China and that it features the name of a German automobile manufacturer (Opel) as a sponsor to the team. As a soccer fan, he or she may know that the manufacturer of the jersey (Adidas), a German firm, is now French-owned; it is much less likely that he or she will happen to know that the team sponsor, Opel, is a subsidiary of (American) General Motors (GM). The *globalization* of the economy is less easily read. Trade figures are infrequently reported in terms of flows between or within corporations, while the global elements in many products are invisible. Take, for example, an ostensibly American car such as the Pontiac Le Mans. Of the sticker price of $20,000, only $7,600 goes to Americans (workers and management in Detroit, lawyers and bankers in New York, lobbyists in Washington, and GM shareholders all over the country). Of the rest, 48 per cent goes to South Korea for labour and assembly, 28 per cent to Japan for advanced components such as engines and electronics, 12 per cent to Germany for styling and design engineering, 7 per cent to Taiwan and Singapore for small components, 4 per cent to the United Kingdom for marketing, and about 1 per cent to Barbados or Ireland for data processing (Reich 1991).

The automobile industry, along with the pharmaceutical industry and the steel industry, has in fact been in the vanguard of economic globalization, with a history of transnational joint ventures, personnel exchanges, cross-licensing research, production partnerships, and shared ownership that goes back several decades. Through such arrangements, for example, Chrysler is linked to Mitsubishi, Samsung, Fiat, and Volkswagen; GM to Toyota, Isuzu, and Suzuki; Ford to Mazda, Jaguar, and BMW; Nissan to Volkswagen and Daewoo; Mitsubishi to Hyundai; Renault to Volvo. In the past fifteen to twenty years, transnational corporations with strategic links and alliances have come to dominate many other industries, especially those associated with the high-technology spearhead for the next Kondratiev cycle.

(Thus, for example, strategic alliances link Motorola to Nippon Electric Company and, in turn, to Hitachi; Nippon Telephone and Telegraph is linked to IBM as well as to Mitsui and Hitachi; Sony to RCA; Ericsson (Sweden) to Honeywell and Sperry; Ricoh to Rockwell; Siemens to Intel; Fujisu to Texas Instruments (Petrella 1991).) Meanwhile, the most innovative companies have moved away from the massive, vertically integrated, Fordist organizational principles of the first-generation transnationals, 'downsizing' to exploit economies of scope within network corporations. These are the corporations that have been most successful in exploiting the Japanese *kanban* strategy of flexible production systems, with telematics (advanced combinations of telecommunications and computing technologies) underpinning a new (and much more variable) geometry of international economic activity and a new social division of labour (Castells 1989; Sayer and Walker 1992).

In tandem with the globalization of industry, part cause and part effect, has been the globalization of finance. Following Thrift (1989), we can recognize three main components of the globalization of finance: (1) the growth of the Eurodollar market and the consequent growth in trading in exchange rates of domestic currencies; (2) the emergence of transnational banks and investment companies, the development of a global venture-capital industry, and the advent of 24-hour global trading in capital and securities markets; and (3) increasing interest by national governments, encouraged by transnational organizations such as the World Bank, the IMF, and the OECD, in attracting foreign investment. The globalization of finance has been an important enabling factor in the globalization of industry, facilitating transnational corporations' need for access to enormous amounts of capital for mergers, acquisitions, and operational restructuring (Versluyen 1981). It has brought about a shift from banks' traditional role of supporting trade between nations and firms to one of supporting the expansion of the manufacturing capacity of large corporations, and of partnerships between states, international financial institutions, and private capital (Sachar, 1990). At the same time it can be argued that some key aspects of the globalization of finance were a result of the special needs of transnational manufacturing corporations in their drive for global production and marketing capacity (Parboni 1981). Anthony Sampson argues that 'The global money that has emerged in the last two decades has baffled most people. It has no visible home; out of the auditors' sight, this global money slips between tax havens, treasuries, and investigators; and it is not accountable to any nation or government' (1991: 64). Accelerated by telematics (Moss 1987) and cut loose by government deregulation, the mobility of capital and fluidity of capitalist relations of production have brought an entirely

new dimension to the world economy, with the Japanese, in particular, becoming expert at the science of *zai-tech* (financial engineering) and the art of flexible specialization (Kenny and Florida 1988).

This new mega-cephalic corporate and financial dimension has, in turn, driven another important dimension of globalization: a series of cultural flows that has come to underpin the contemporary world-system. Appadurai (1990) suggests that there are five different dimensions to such flows: 'ethnoscapes' (produced by flows of business personnel, guestworkers, tourists, immigrants, refugees, etc.); 'technoscapes' (flows of machinery, technology, and software produced by transnational corporations and government agencies); 'finanscapes' (flows of capital, currency, and securities); 'mediascapes' (flows of images and information through print media, television, and film); and 'ideoscapes' (flows of ideological constructs, mostly derived from Western world-views: e.g. democracy, sovereignty, representation, welfare rights, etc.). To these I would add a sixth: 'commodityscapes', produced by flows of material culture that encompass everything from architecture and interior design through to clothes and jewellery.

The Hanseatic dimension and triadic techno-nationalism in the world economy

This, of course, is where world cities come in. World cities are centres of transnational corporate headquarters, of their business services, of international finance, of transnational institutions, and of telecommunications and information processing. They are basing points and control centres for the interdependent skein of financial and cultural flows which, together, support and sustain the globalization of industry. 'The new world order taking shape is not the one imagined by the obsolete statesmen of the cold war era. Rather than an order of nation-states weighing in one a new global balance of power, an archipelago of technologically highly developed city-regions – or mass-consumer *technopoles* – is evolving' (Petrella 1991: 59). This archipelago is likened by Petrella to the Hanseatic League of thirteenth-century to fifteenth-century Europe, when trade within and between the Rhineland and the Baltic was organized and controlled by autonomous cities.

The importance of the contemporary archipelago of world cities within the world economy has been intensified by the strategic policies of restructured transnational corporations. The basic idea is to achieve commercial supremacy by focusing on the seven or eight hundred million consumers in the triad of core economies within the world-system (i.e. Europe, the United States of America, and Japan) who are

able to sustain materialistic lifestyles. This is what Sony's Akio Morita means when he uses the term 'global localization'; Kenichi Ohmae, a management strategist, calls it a 'global insider' strategy. Seen in a broader perspective, it forms the logical framework for the tactical flexibility of transnational corporations. It is this flexibility, of course, that underpins the *new regime of accumulation* – neo-Fordism – that has rewritten the economic geography not only of core countries but also of semi-peripheral and some peripheral countries. In these new economic landscapes the archipelago of world cities not only represents the most important 'theatres of accumulation', but also constitutes the locus of key managerial, financial, research and development, business service, and information processing and interpreting functions.

The triadic strategy and flexible tactics of transnational corporations have been bolstered by the national governments of core countries, which have vigorously pursued policies aimed at financial deregulation, (selective) trade reforms, less restrictive labour markets, and heavy subsidies for telematics and for science and technology with commercial potential. Riccardo Petrella calls it 'triadic techno-nationalism'; a broader perspective allows us to see it as part of the new *mode of regulation* associated with neo-Fordism (Hirst and Zeitlin 1992; Itoh 1992; Jessop 1992). The chief beneficiaries, in spatial terms, have been the world cities of the core economies, the 'mass-consumer technopoles' that have become pre-eminent centres of commercial innovation and corporate control, undisputed centres of taste-making, crucibles of consumer sensibility, and seedbeds of material culture.

It follows from all of this that world cities and the world-system must be problematized together, as John Friedmann and Goetz Wolff (1982) argued more than a decade ago (see also Friedmann 1986 and Rodriguez and Feagin 1986).

Perspectives on world cities

Recognizing world cities as control points, as powerful centres of economic and cultural authority within the contemporary world-system, begs the important question of what we mean by 'power' and 'control'. Without reifying cities themselves as actors, we can readily see that the distinctiveness of world cities is in their nexus of decision-making and interaction relating to economic, cultural, and political information. Their significance within a world economy that has been dramatically decentralized through the globalization of industry (the 'new international division of labour') and the advent of telematics lies in their role as centres of *authority*, as places that are able to generate and disseminate

discourses and collective beliefs, that are able to develop, test, and track innovations, and that offer 'sociable' settings for the gathering of high-level information (economic, political, cultural) and for establishing coalitions and monitoring implicit contracts: 'Thus the world economy may have become more decentralized, but it is not necessarily becoming *decentred*' (Amin and Thrift 1992: 576). In chapter 2 John Friedmann examines the 'theoretical object' of world cities, elaborating the conceptual issues involved in pursuing the rather elusive notion of world cities, and arguing that the world city paradigm allows us to make visible some of these important dimensions of the meta-narrative of capital. In chapter 3 Peter Taylor reviews the changing role of world cities in relation to the evolving world-system. In chapter 4 Saskia Sassen shows how the concentration and specialization of financial and service functions within the contemporary global urban system has fostered localized economic cores so potent that they have generated entirely new production complexes.

The multidimensional nature of world cities as distinctive settings and centres of authority begs another question: that of the homogeneity of world cities as a class of metropolitan areas. It is clear that New York, London, and Tokyo stand in a league of their own, even though the discourse on world cities generally admits a dozen or more additional cases. It is also clear that there are some significant differences between New York, London and Tokyo, not just as metropolitan areas but also as world cities. Tokyo's status is based very largely on the economic dimensions of world city-ness, with little of the cultural diversity or dynamism of London and New York, and nothing comparable to their legacies of political and military hegemony. Tokyo's economic control functions, moreover, derive more from neo-Fordism and flexible specialization than from the (late) Fordist regime of accumulation that established the foundation for the world city-ness of London and New York (Cybriwsky 1991; Fujita 1991; Machimura 1992; Miyamoto 1993). London and New York, meanwhile, are differentiated from one another in terms of governance and politics: London is a capital city with an imperial past, a city of migrants that is driven by class politics; New York is a city of immigrants, driven by ethnic politics (Fainstein, Gordon, and Harloe 1992; Sassen 1991, 1994; Shefter 1993). As Robert Beauregard points out in chapter 13 (and as Peter Rimmer (1986) recognized), world cities must be seen as differentiated not only through the different relationships that each develops with respect to its role as regional interface between core, semi-periphery, and periphery, but also through their internal mediation of macro-level economic, cultural, and political processes by way of the contingent conditions of local socio-

economic and political structures – and, indeed, through the physical structure of metropolitan areas. In chapter 10 Janet Lippman Abu-Lughod shows how the reactions and fates of two American world cities – New York and Chicago – have been contingent not only on world-system forces over time, but also on the specificities of their individual historical trajectories, their strategic locations within the US and world urban systems, and their respective demographic composition.

Although Friedmann's heuristic hypothesis of a hierarchy of world cities with distinctive and convergent characteristics has strong appeal, the very nature of the contemporary world-system (with the flexibility of corporations within global networks and the warpage of new telecommunications media constantly revising the role of 'lower-order' world cities) means that a hierarchical classification of world cities is less and less satisfactory. This is particularly true if world cities are to be theorized in terms of their relation to world-system processes. Cities' hierarchical positions (especially 'secondary' world cities in the triadic core and the regionally dominant world cities in semi-peripheral and peripheral areas) may be reversed according to the kind of functions considered: corporate management versus transnational NGOs (non-governmental organizations) versus cultural leadership. Take Milan, for example: strong at the global scale in terms of cultural leadership, strong in Mediterranean Europe in terms of finance, but relatively dependent in terms of corporate control and information processing activities.

It may be more useful, therefore, to think in terms of functional classifications. Figure 1.1 shows every city with at least one headquarters office of a Fortune Global 500 company *and* with at least one headquarters office of an international non-governmental organization (NGO) or inter-governmental agency (IGO). The primacy of each city is also shown, as a crude indication of its cultural dominance. Such classifications do allow the *nature* of metropolitan dominance within the world-system to be pursued. Note, for example, the way that figure 1.1 brings out the very different characters of London, New York, and Tokyo as world cities. It must be recognized, though, that this sort of approach opens up the issue of how we might justify specific functional criteria (such as those used illustratively in figure 1.1). This is an issue addressed in chapter 8 by David Simon, who argues that world cities, as defined by Friedmann and others, should be seen as a subset of a larger group of major cities with significant supranational roles. David Smith and Michael Timberlake, on the other hand, point to the methodological logic of network analysis as a means of mapping the structural relationships and clarifying the functional interdependencies of world cities (chapter 5).
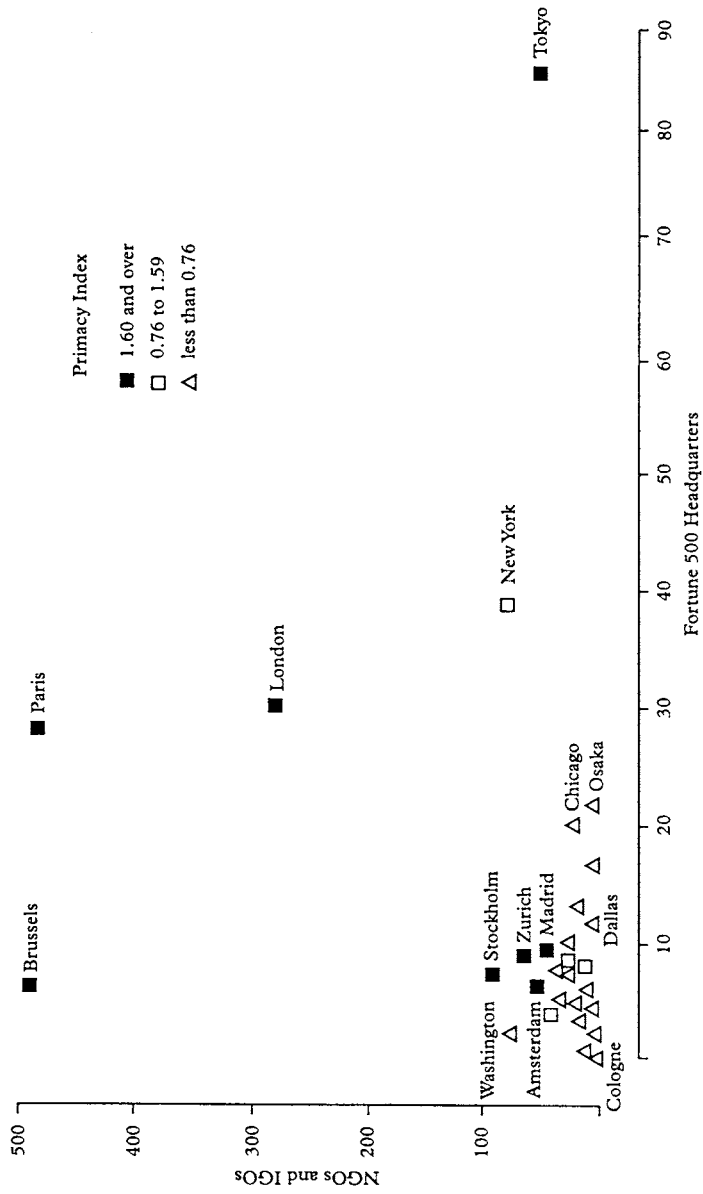
Figure 1.1 World cities classified according to three major functions: (1) transnational business (measured by the number of global Fortune 500 headquarters located in each metropolitan area, 1993); (2) international affairs (measured by the number of NGOs and IGOs located in each metropolitan area, 1993); and (3) cultural centrality (national urban primacy: the ratio of the city's population to that of the largest, or next largest, city, 1992). Included on the figure but not identified: Atlanta, Düsseldorf, Frankfurt, Hamburg, Hartford (CT), Houston, Los Angeles, Milan, Montreal, Munich, Nagoya, Philadelphia, Rome, San Francisco, and Toronto.

The social construction of world cities

Problematizing world cities in this way (in terms of different but interrelated functions relative to core, semi-periphery and periphery) inevitably raises the question of *scale*: at what level of resolution can we best identify and/or theorize the functional dynamics of world cities? Here we are confronted with a knotty problematic of its own. Although geographers have long wrestled with the issue of scale, we do not have any coherent, critically thought-out language for different scales that could be deployed in examining the ways in which world cities are constructed and sustained. For world cities, like any other place, *are* socially constructed, and at different scales. 'The making of place implies the production of scale in as far as places are made different from each other; scale is the criterion of difference not so much between places as between different *kinds* of places' (Smith 1993: 99). As Neil Smith goes on to point out, geographic scale is hierarchically produced as part of the social and cultural, economic and political landscapes of contemporary capitalism and patriarchy. At the same time, 'The construction of scale is not simply a spatial solidification or materialization of contested social forces and processes; the corollary also holds. Scale is an active progenitor of specific social processes. In a literal as well as a metaphorical way, space *contains* social activity and at the same time provides an already partitioned geography within which social activity *takes place*' (Smith 1993: 101).

A conventional sequence of scales might be: body, home, community, urban, region, nation, world-region, global. World-systems theorists would add (not merely add, perhaps, but emphasize) core–periphery. World cities cut across several of these, from the urban through regional, national, and core–periphery scales to the global. We can locate world city-ness, in other words, at several different scales: from the global urban system to the relatively small social worlds that constitute the milieux of what Tom Wolfe (1987) called the 'masters of the universe': the key 'players' in transnational business and finance. In terms of theorizing world cities, we can recognize at least four pertinent scales:

1 *The global urban system.* Though the literature on urban systems remains dominated by descriptions and analyses of nationally bounded urban systems (see, for example, Bourne et al. 1989; Van der Woude 1990), we are beginning to understand more about the global urban system: not just through hierarchical classifications (see, for example, Brown 1991) but also through analyses of the networks and interdependencies through which the global urban system is constructed (see, for example, Smith and Timberlake in chapter 5).

2 *The regional interface* between world cities and nation-states or groups
of nation-states that constitute core, semi-peripheral, or peripheral
regions. It is at this scale that we can see how world city, world-system
processes are challenging the nature of the boundaries and borders of
conventional perspectives on place and scale, producing changes that
are at once both liberating and intrusive (Mlinar 1992). In chapter 9,
for example, Ramón Grosfoguel analyses the historical–structural
developments that explain the emergence of Miami as a world city,
arguing that the logical of capitalist accumulation within the world-
system has not been the only determinant of world city formation: in
Miami's case, geopolitical security and geopolitical symbolism have
contributed significantly to world city status.

3 *The placelessness of world cities*, a dimension of world cities that can only
be scaled in the metric of 'cyberspace' (Benedikt 1992). The space of
information flows that Castells (1989) takes to constitute a new 'mode
of development' is increasingly rendering traditional, discrete metro-
politan areas into discontinuous city spaces of financial, economic,
cultural, and intellectual communities. And, though world cities
contribute the bulk of these spaces, they extend throughout the
geographic realm of the triadic core of the world-system, lending
world city-ness to many locales. In chapter 6 Donald Lyons and Scott
Salmon present evidence that the globalization of the world economy
is redefining the linkages within the US urban system and, in the
process, expanding the global control potential of some cities further
down the urban hierarchy.

4 *The metropolitan scale*, within which labour markets, social networks,
and the built environment are structured and restructured in order to
accommodate world city functions, along with other, traditional,
metropolitan functions (Douglass 1993; Sassen 1991).

At the same time, we must recognize the interdependence between
scales that is an important dimension of the world city phenomenon.
This is emphasized by Peter Taylor (chapter 3), who describes the
changing nature of the mutuality between the compartmentalized
territorial organization of nation-states and the functional pattern of
points and flows between major cities within the evolving world-system.

Global metropolitanism and the fast world

As stressed in much of the literature, world cities are very much a
product of the enabling technology of telematics. They are also, as the
same literature also emphasizes, the enabling structure for an emergent
'informational economy'. Yet we are still a long way from William

Gibson's depiction (1984, 1987) of a dystopian information society whose governing economy is transnational and cyberspatial, whose cities are populated by technology-dependent individuals. From a world-system perspective we can view world cities as tending to undermine the narratives and myths that have sustained the construction of nations from states and vice versa. The other side of this coin is that world cities, as proscenia for materialistic, cosmopolitan lifestyles, as crucibles of new narratives, and as carriers of new myths, can be seen as being central to the construction of new, transnational sensibilities. These sensibilities, together with the cultural flows that sustain them, are seen by some as adding up to a global culture (Featherstone 1990, 1993). A key issue here, of course, is *where* such a culture is located, both geographically and socially. Another important issue concerns whether or not the development of a global culture necessarily entails a weakening of the sovereignty of nation-states (Arnason 1990; Mlinar 1992). Samuel Huntington (1993) has suggested that world politics is entering a new phase, in which the fundamental sources of conflict will not be ideological or economic, but cultural. This points to yet another important issue: the place of culture in world-systems theory (Bergesen 1990; Boyne 1990; Wallerstein 1990). Several of the chapters in this book explore the political and cultural dimensions of global metropolitanism. Anthony King (chapter 12) treats world cities as cultural spaces with significance for the construction of new cultural and political identities. Michael Smith (chapter 14) develops this approach through a portrayal of the globalization of grassroots politics of transnational migrants, exiles, and refugees. Graham Todd provides a rather different perspective through a portrayal of the social spaces of globalization that have been generated through service-sector growth (chapter 11). Andrew Kirby, Sallie Marston, and Kenneth Seasholes point out in chapter 15 that grassroots movements from a variety of social strata have begun to respond to global processes of political and economic restructuring by channelling their energy into 'municipal foreign policy', a transnational politics that transcends the formal realities of international affairs.

Such issues require us to consider carefully the nature of global metropolitanism. On the one hand, as John Friedmann points out in chapter 2, there is a dimension of global metropolitanism that is rooted in the explosively growing transnational capitalist class, the new bourgeoisie and new *petite bourgeoisie* who define themselves through globally oriented, populist value systems and through possession of high-end consumer goods: clothes by Hugo Boss and Issey Miyake, wheels by BMW and Jaguar, watches by Cartier, kitchen gadgets by

Braun and Krups, sound system by Bang & Olufsen; a condo in Grand Cayman in January, a cottage in Provence in June, Beaujolais Nouveau in November (Bourdieu 1984, 1993; Hannerz 1992; Sklair 1991).

There is another dimension of global metropolitanism that is more widely accessible. A product of satellite communications networks, high bandwidth cable and radio-frequency systems and, above all, of global markets in television (especially music television) and advertising, this is the dimension of the permanently ephemeral and the immediately accessible. The lingua franca of this global metropolitanism is the patois of American television soap operas and comedy series; its dress code and world-view are taken from MTV and the sports pages; its politics is from the cyberpunk *Mondo 2000*, and its lifestyle is defined by promotional 'spots' for Budweiser, Coca-Cola, Levis, and Nike (Twitchell 1992).

These two dimensions of global metropolitanism are, of course, intertwined in a dialectic of their own. The more global pop culture draws from the hedonistic materialism of the transnational élite, the more the latter is driven toward creative distinctiveness in its attitudes and material ensembles. The more self-consciously stylish the new bourgeoisie, the more tongue-in-*chic* the wannabees and the cyberpunks. Meanwhile, both dimensions are also part of a large dialectic: between modernity and postmodernity. At face value global metropolitanism may seem to be a straightforward expression of modernity, a (somewhat debased) meta-culture of Eurocentric universalism that draws on the meta-narrative of Western capitalism and the Enlightenment project. Yet the hedonism, cosmopolitanism, ephermeralism, and populism of metrocentric global cultures are distinctively postmodern. There is clearly a good deal of grist here for the mill of critical social theory that is concerned with modernity and postmodernity. In particular, and from a world-systems perspective, there are debates to be pursued in terms of the relationships between modernity/postmodernity and post-colonialism. From a world cities perspective there are debates to be pursued in terms of the relationships between modernity/postmodernity and ways of life in world city milieux.

The fast world, cyburbs and cyberia

Yet, intriguing and significant as global metropolitanism may be, we should not lose sight of the fact that we are talking here about phenomena that directly affect only a fraction of the world's population. Another defining characteristic of global metropolitanism is that it represents a 'fast world' (the triadic core and its archipelago of world

cities) that is becoming decoupled from the 'slow world' (the periphery). Economic polarization and dependent development have been compounded by the effects of transport infrastructure (as David Keeling shows in chapter 7) and of the time–space compression introduced by the telematics that now undergird the fast world. As Alvin and Heidi Toffler observe, the old adage 'time is money' is becoming obsolete: 'In the new accelerated system of wealth creation, it is being superseded by a new hidden law of economics in which time is no longer just money. Now each unit of saved time is actually worth more money than the last unit. The faster economic processes work, the more wealth is created in the same period with the same or even fewer resources' (Toffler and Toffler 1991: 56). This presages a phase of world development in which the mega-cities of the periphery will fare no better than the catatonic agrarian societies that have fuelled their (demographic) growth, and in which both will lapse decisively and irretrievably into a 'slow' economic time zone.

Much the same kind of scenario can be envisaged within the fast world, since it is clear that the decoupling of fast and slow is being reproduced internally, and seems set to continue. Just as we can see the world city-ness of regional metropoli, so we can see the Third World-ness of world cities. We do not yet have the linguistic or conceptual apparatus with which to deal with such phenomena, however. New worlds require new words and new ways of thinking. Thus Richard Ingersoll, for example, envisages a rearticulation of class structure within the metropoli of the fast world, with 'infocrats' at the top controlling the production of electronic information. Below them will be various grades of 'cyberproletariats', who will depend on telematics in their work. Finally, at the bottom will be a growing underclass, the 'lumpentrash': 'those who literally do not, and probably will never, compute' (Ingersoll 1993: 5). We might, then, envisage infocrats inhabiting the spaces of global metropolitanism, with the cyberproletariat in cyburbia and the lumpentrash in the cyberia of inner-city ghettos and ageing industrial suburbs. The socio-spatial polarization and restructuring of world cities is already a topic of extensive analysis (see, for example, Fainstein, Gordon, and Harloe 1992; Fujita 1991; Machimura 1992; Mollenkopf and Castells 1991; Pryke 1991; Sassen 1991, 1994). What has been less closely examined, however, is what this polarization means in terms of ecological degradation, the local politics of policy-making, and the whole question of managing and administering highly polarized world cities. As we have seen world cities must be theorized at several different scales. In chapter 16 Roger Keil's discussion of the environmental problematic in world cities shows very clearly how ecological degrada-