

## **1. The Informational City Is a Dual City: Can It Be Reversed?**

Manuel Castells

## Introduction

We are living through one of the most fundamental technological and social changes in history. The revolution in information technologies that took shape in the early 1970s, and diffused throughout the economy, society, and culture in the last quarter of the twentieth century, has profoundly transformed the way we live, work, produce, consume, communicate, travel, think, enjoy, make war and peace, give birth, and die. It has also transformed, as have all major technological revolutions, the material foundations of human life, time, and space (Castells 1996). Consequently, the combination of new information technologies and socioeconomic restructuring is reshaping cities and regions, ushering in new urban forms and processes that I identified as the “informational city” (Castells 1989). This multidimensional transformation is not technologically determined. Rather, it is the outcome of an interactive process between technology, economic strategies, social interests, cultural values, and power struggles. Thus, in principle, new social and spatial structures resulting from this multilayered process of change can be modified by social action, private strategies, and public policies. Prevailing trends, however, cloud what could be an exhilarating moment for humankind, opening up extraordinary possibilities for material prosperity and spiritual fulfillment, with the inducement of social exclusion in parallel to social development, deepening existing patterns of sociospatial segregation. These trends are rooted in powerful processes of economic globalization and capitalist restructuring that use to their advantage the potential of new information technologies, conditioning the social trajectory of technological change.

Thus, the emerging, informational city is by and large a dual city. By informational city, I understand an urban system with sociospatial structure and dynamics determined by a reliance of wealth, power, and culture, on knowledge and information processing in global networks, managed and organized through intensive use of information/communication technologies. By dual city, I understand an urban system socially and spatially polarized between high value-making groups and functions on the one hand and devalued social groups and downgraded spaces on the other hand. This polarization induces increasing integration of the social and spatial core of the urban system, at the same time that it fragments

devalued spaces and groups, and threatens them with social irrelevance (Mollenkopf and Castells 1991; Castells 1992). I argue that the two processes, informationalization and dualization, are intertwined under the current social, political, and economic conditions in most of the world, certainly including American cities. New information technologies are not the cause of this association between informationalization and sociospatial exclusion. The roots of social exclusion are in the politics of capitalist restructuring that have prevailed in most societies since the 1980s. The power of new information technologies, however, enhances and deepens features present in the social structure and in power relationships. This is why we are at the crossroads of a new urban age. A real possibility exists of evolving toward systemic urban schizophrenia, that is, toward the dissolution of urban civilization in an undifferentiated exurban sprawl through telecommunicated/freeway-connected, discontinuous spaces, leaving behind "black holes" of poverty, dereliction, and ignorance, abandoned to their fate. Yet it does not have to be that way. The promise of information technology may lead to a different, more humane city, in the framework of a new, more intelligent, and more just society. This chapter examines both possibilities on the basis of available evidence and exploratory thinking.

### **Information Technology and the Space of Flows**

In various quarters of futurology, the diffusion of advanced information and communication technologies has prompted prophetic statements about the end of cities. In fact, a review of empirical evidence on the relationship between telecommunications and urban forms (Graham and Marvin 1996) shows a simultaneous process of concentration and decentralization of activities and population to be the prevailing pattern. Throughout the world, directional centers continue to be concentrated in a few selected nodes of major metropolitan areas precisely because telecommunications and information systems allow directional activities to reach out to the entire country, or to the entire world, from their concentrated locations, be it in the old cores or in the new peripheries of metropolitan areas. Research by Moss (1987), Daniels (1993), and Sassen (1991), among others, shows empirical evidence on the pattern of persistent concentration, and presents arguments for the spatial clustering of corporate centers and their ancillary

networks of advanced services: the historical development of a supply base of firms, services, and labor, clustered around corporate centers; the symbolic marking of prestigious space; the face-to-face, secretive interaction required by decision makers at the top; the value of assets invested in prime real estate, precluding a collective flight from business centers that would collapse property values for everybody. Thus, in spite of functional congestion and social problems, most old metropolitan centers continue to thrive, starting with downtown New York, London, and Tokyo; and when new centers are constituted, for example in northern Atlanta or Irvine, they arise in clusters, not along scattered locations on the urban edge.

The geography of innovation, the decisive activity of the informational economy, also shows its spatial clustering in what Peter Hall and I have identified as "milieux of innovation" around the world (Castells and Hall 1994). Innovation may be spurred by synergistic interaction facilitated by territorial complexes of research, design, and production, such as Silicon Valley, Route 128, or Austin in the case of high technology. In Hollywood and San Francisco's South of Market, milieux and innovation arise in the fields of multimedia and computer graphics; on Wall Street in financial products; or in Manhattan or West Los Angeles in fashion design. From these milieux of innovation, telecommunicated information systems ensure the hierarchical diffusion of production, management, and distribution of new products and processes throughout the interconnected nodes of the global system.

The new industrial space reflects this kind of technological/spatial division of labor among centers of innovation, advanced manufacturing, assembly manufacturing, and customized production near the final markets in an asymmetrical set of functional interdependencies. Different locations are selected according to specific characteristics of labor and production inputs, required for each step of the manufacturing process. This changing *spatial* division of labor was first identified in the case of electronics manufacturing and it has been increasingly seen to characterize most industries, as information technology becomes prevalent in all lines of manufacturing, gradually eliminating the old distinction between high-tech and low-tech industries.

Ancillary business activities, such as banking, insurance, and professional services, also follow this "double pattern," concentrating

back offices in new suburban centers while diffusing customer-oriented services, some of them automated, throughout the residential sprawl. Social services also concentrate and diffuse simultaneously. For instance, medical services are clustered around major hospitals, while primary care centers are neighborhood based. The higher the specialization, the higher the concentration in a few locations in the metropolitan area and, to the highest level, in the nation (e.g., the Mayo Clinic complex in Rochester, Minnesota). Residential location is increasingly dispersed in suburbs and exurban edges; yet social segregation by income, education, and race still clusters communities, forming a discontinuous space of internally homogeneous social units, both in the city and in the suburbs.

Thus, in all dimensions of the urban/suburban fabric, we observe the emergence of a new form of space: the space of flows, characterized by simultaneous concentration and decentralization of people and activities. Under the new technological conditions the key feature is the linkage of different spatial locations into a new spatial process that reintegrates the functional unity of different elements in distant locations through information technology. This new spatial logic is present in the location of advanced services centers, in the geography of innovation, in the territorial distribution of services, in the emergence of a new industrial space, and in the variable geometry of residential patterns in the megacities that will characterize third-millennium urbanization (Borja and Castells 1997).

The impact of the space of flows on a highly segregated urban structure deepens segregation and accentuates inequality as a result of several converging processes: (1) traditional manufacturing, based on low-skilled labor, declines in American cities, as it is either automated or relocated to cheaper production sites around the world; (2) large employers of middle- and low-skilled service workers move to the suburbs as back-office complexes escape real estate prices, environmental congestion, and social problems of the central city, following manufacturing's relocation to the suburbs forty years ago; (3) personal and social services also follow the residential sprawl of their users and consumers. Thus most central cities lose their functions and economic base, accelerating the urban decline that took place in the 1960s. But something else is happening. The few nodal functions still located in central cities, around Central Business Districts (CBDs) and high-quality urban spaces, can be bridged to their regional,

national, and global hinterlands via telecommunications, fast transportation, and information systems, without needing to renovate their surrounding urban areas. Thus the central city's islands of prosperity and innovation can further isolate themselves from the city, while integrating into the archipelago of the space of flows and delinking themselves from their social and territorial environments. So the space of flows links up *valued* spaces at the same time that it separates and isolates *devalued* spaces in the inner city, and sometimes in the suburbs, where low-income communities, a significant proportion of ethnic minorities, rundown schools, dilapidated housing, the institutions of the urban welfare state, and the shop floors of the criminal economy remain trapped. Given that these spaces, these populations, and these institutions have a decreasing relevance for functions valuable to the central city's islands of prosperity and innovations, from the point of view of the system logic, there is a self-reinforcing process of spatial marginalization, social exclusion, and functional devaluation in these neglected places, which the information highways of the space of flows have bypassed. Under such conditions traditional patterns of urban segregation are deepened. Informationalization induces dualization and reinforces it in the structure and dynamics of space.

### **The Transformation of Work and Employment**

Along with the transformation of space, a major transformation of social structure is also under way, fundamentally rooted in the transformation of work and working arrangements. As in all periods of rapid technological change, the population-at-large has expressed considerable anxiety concerning prospects for employment. Formidable changes are under way, but not in the form of widespread unemployment as a result of the substitution of machines for labor (Carnoy and Castells 1996; Carnoy, Castells, and Benner 1996). Against the prophecies of uninformed doomsayers, America is not experiencing a job shortage. Between 1979 and 1994, 27 million new jobs were created, 60 percent of which were in the technical and professional occupations, thus significantly upgrading the skill profile of the overall occupational structure. From 1992 to 1996, over 10 million new jobs have been created, so that unemployment remains at about 5.5

percent, a low level by historical standards, in spite of the massive incorporation of women into the labor force in the last three decades. Most regular jobs, however, now require some higher level of education, and college education is becoming a requirement for any decently paying job. So, the mismatch between an embattled educational system and the skill requirements of the expanding sectors of the labor market is growing.

People's heightened anxiety concerning new patterns of employment has a different origin, however. On the one hand, it reflects the decline in real wages for full-time male workers, and more recently stagnant wages for women, in spite of the higher skills content of their jobs. On the other hand, it stems from increasing job insecurity and unpredictability, as the traditional model of a stable, full-time job in a large organization with a predictable career pattern fades away. Both aspects are linked: because jobs are no longer secure, and because labor contracts are increasingly individually negotiated, it follows that a downward spiral of wages and working conditions would result in spite of a higher average level of skills and steady job creation. Job instability and lowering of real wages are linked to major structural changes made possible by information technology: globalization of the economy and decentralization of manufacturing and services and transformation of firms' operations through networking and subcontracting. Under such conditions management has a number of options vis-à-vis labor: automate, relocate production, outsource part of the production, downsize, and network. Usually, a combination of all these strategies is pursued: a highly flexible system which is tantamount to the individualization of labor conditions and to the foreseeable end of collective bargaining, except in public services. Our studies on the United States (with Martin Carnoy and Chris Benner) provide evidence of the growing role of different forms of nonstandard, full-time labor: temporary workers, part-time, self-employment, subcontracting, consulting, networking. This desocialization of labor is happening at all levels of skills, not just at the low end. But unskilled workers are the most vulnerable under such new patterns of management/labor relations, and thus they are forced to accept lower wages, job insecurity, and fewer or no benefits. Ethnic minorities and youth are most frequently subject to the devaluation of their labor conditions. The use of information technologies, although not the cause of such labor practices, allows for its diffusion. On the one

hand, this is because low- and medium-skilled labor can be automated if it becomes too expensive or too rigid for the requirements imposed by relentless, global competition. On the other hand, it is because the use of information technologies makes it possible to keep the coherence of the production process through a network of interaction among spatially distant units. As a result, a major polarization occurs between a core labor force, with high skills, and a mass of disposable labor that can be used or replaced or employed under different statuses, depending on the needs and requirements of the market. Each discontinuity in the work's trajectory could send into oblivion some workers who, by falling in one of the "black holes" of the new socioeconomic structure, will find it difficult to reinstate themselves in the pool of the fully employable. Thus, even though mass unemployment does not exist, there are growing segments of semi-employed, in and out of the labor market, creating a potential danger for some individuals, particularly among minority youth, to join the ranks of the criminal economy. Decreasing cultural skills forbid entry into the informational labor market that increasingly requires the ability of "symbol processing," in Reich's expression.

To these structural factors of the new labor markets, induced by the combination of informationalization and economic restructuring, we must add the crisis of the patriarchal family, and the weakening of the urban welfare state, currently under the assault of neoconservatism. Thus we observe the formation of a growing segment of urban poor that includes fallen workers, marginal youth, and impoverished families, usually headed by females. These social segments continue to concentrate in the devalued spaces constituted by the process of urban dualism. Given that the school system is spatially segregated, public schools in devalued spaces become mechanisms of reproduction of social devaluation, unable to provide the necessary skills for the informational labor market, and becoming instead training grounds for survival in a world of social irrelevance. Then, the criminal economy takes over these devalued spaces, providing the only alternative for many youths. The justice system (including prisons) links up these devalued spaces, providing the social networks and cultural glue, to develop an alternative form of survival, however precarious. Under such conditions, no telecommunications infrastructure or training programs can save people trapped in these "black holes" of the informational city,



as Blakely et al. (1995) have argued in their pioneering study of “the information city and the ghetto” in Los Angeles. Is this self-reproducing process of sociospatial exclusion inevitable and irreversible? Are we creating an Athenian democracy of informational, creative elites while ignoring a derelict mass of slaves and barbarians?

### **Can the New Urban Informational Dualism Be Reversed? Information Technology with a Human Face**

At first sight, the prospect of using the promise of information technology to improve the fate of low-income communities, thus reversing the current trend, appears rather bleak. This is because the informational economy does not have much use for an unskilled, uninformed population, and because the institutional fabric of low-income communities provides scarce opportunity to overcome the vicious cycle of poverty, functional illiteracy, occasional work, social/racial discrimination, and criminalization of misery (Susser 1997). In addition, fashionable neoconservative thinking seems to be ready to give up on inner cities, dooming their dwellers with the dwellings. As George Gilder put it: “The problem with cities today is that they are parasites, and they will have to go off the dole” (1995).

Yet, as Lisa Servon and John Horrigan (1996) argue in their study on urban poverty and information technology in Austin, local governments in several American cities have recorded some successes in enhancing access of low-income communities to information technologies, and putting this access to the benefit of education, job training, and broadening of opportunities to break out of the ghetto, particularly for minority youth. A courageous policy of linking up technological change and social reform is not only possible, albeit difficult, but necessary, not only for moral reasons, but for pragmatic reasons as well. It cannot be seriously argued that a democratic society can live peacefully on the basis of the systemic exclusion of one-quarter to one-third of its people, even confining them spatially in implicit apartheid style. In what follows, I propose some strategic elements of the possible content of a policy using information technology as an additional tool for revitalizing poor communities. These proposals are simply illustrations that should be taken as only hints of what a more detailed, empirically grounded study/design could propose. The basic assumption

is that the diffusion of technology is necessary but not at all sufficient to reverse informational inequality. Thus only 10 percent of African American households have personal computers, in contrast to 50 percent of white households. The real issue, however, is how and what to use these computers for.

In terms of strategic goals, in the new sociotechnological structure, the *key* to fighting self-reproducing marginality is *access both to jobs and to income generation*. For this, *education* is a must: general education, not narrow job training. It is increasingly unlikely that investment in the deprived communities will change their fate. Rather, it is the transformation of the residents of these communities, by finding jobs and earning income outside the community, that will change their character. It is important, however, that individual improvement does not translate into immediate residential mobility to the suburbs, leaving trapped behind the less fortunate. Poor communities must find ways to keep their best residents long enough so that the ripple effects of nonmarginal households will enhance the community by their very presence, bringing up the ladder the borderline households. For this, at the roots of *community improvement*, they have to get rid of the criminal economy, which thrives precisely on the deterioration of the community. Innovative urban design (defensible spaces, street life-oriented design, nonpastiche beautification of the neighborhood, etc.) and an active media policy by the community to fight negative images and project the real life of real people to the city at large can also enhance the community. These *efforts, geared toward jobs, education, and community*, require mobilization of social and political resources. At present, *local governments are the key actors in the process*, but they must rely both on citizen participation via community organizations and on the contribution from socially responsible corporate businesses, through *urban partnerships between business, citizens, and local/state governmental agencies*.

All this, however, is not new. It has been tried in many cities over the last three decades, and the positive outcome has been rather meager. Nonetheless, we must try again, this time using experience and knowledge to correct past mistakes (such as excessive reliance on a bureaucratic, urban welfare state), and perhaps marshaling the power of information technology to help innovative programs that, with the support of corporate business, could contribute to breaking the dualizing logic of the informational city.

Six developmental policy initiatives could help cement the proposed interaction between information technology and urban social reform as we approach the twenty-first century.

The first initiative concerns the necessary spurring of *entrepreneurialism and small business* among low-income communities' residents as the most likely way to break through the structural discrimination of the labor market. Indeed, entrepreneurial immigrants are quickly becoming the driving economic force in many poor communities in New York and Los Angeles, thus following the classic, historical pattern of American cities. Online selling, advertising, and contacting over the Net could ease the difficulty of locating these start-up businesses in the invisible, dangerous areas of the city.

The second initiative refers to the expansion of telework not from home but from *community telecenters* set up jointly by governments and corporations, where workers could be employed on a flexible basis without having to commute, thus reducing costs and saving time. Furthermore, these community-based telecenters would keep jobs in the community, while not requiring physical investment by employers in communities that, at least for some time, might constitute hazardous locations.

Naturally, entrepreneurialism and teleworking require a substantial enhancement in the educational potential of residents in low-income communities, which requires reversing the declining quality of public schools and finding additional sources of learning specific to the characteristics of these residents. Thus the third initiative should be a focus of the corporate-public urban partnerships on revamping the quality of the public school system. With the cooperation of Parent-Teacher Associations, schools should be converted in the evening into community centers, open to the society at large, making them less vulnerable to gangs and more in touch with the community's real problems. Experimental programs of tele-education should be geared toward adult education, starting with computer literacy campaigns, followed (not preceded) by rental/donations of computer equipment. Youth could be recruited, and paid, to educate their families in using computers. University extension programs should go online, with subsidized fees for targeted areas, as part of the universities' contribution to the communities. Furthermore, information technology should be called to the rescue of children's education. It is well known

that one of the key handicaps for poor children in their education is that their parents do not support them in doing their homework, not because of lack of interest, but because their parents lack education and cultural skills. It is in this way that cultural/social inequality reproduces itself. In some California schools teachers supervise and help their students with their homework online. This practice is often limited to predominantly middle-class schools; its real need, however, is among children of poor families. The building of these programs could start reversing the vicious cycle linking poor families and poor education that would continue in spite of improvement in the schools because of the unsupportive family environment for children's learning.

A fourth initiative can also be used to emphasize the potential of information technology for improving the educational chances of poor populations. It is well known that a significant proportion of poor males, particularly among ethnic minorities, spend considerable amounts of time in prison and in the justice system early in their lives. Indeed, to a large extent, prisons appear to be an extension of the community in many ghetto areas. They are often schools of specific criminal trades. To cut another vicious circle between poverty, racism, discrimination, and jails, *information technology could be used to educate and train the prison population*, to provide opportunities for teleworking and to interact with prospective employers while in prison, so that the link with education and jobs is not lost and, as so often happens, replaced by the link of the criminal economy. This strategy would involve the cooperation of the justice system, the educational system, and corporate sponsorship of experimental programs that could be generalized if successful. We must acknowledge the problem of mass imprisonment of the poor in the United States, and introduce mechanisms to reduce it gradually, starting with the nonreproduction of the criminal system through the institutions of punishment. Telecommunications offer the possibility of keeping the minds linked with, and open to, society, even while the bodies suffer incarceration.

Fifth, if we want to reform, not abandon, cities, community enhancement has to proceed in parallel to educational development and individual job opportunities. Two policy areas could be improved. The first area is *community-based media*, particularly cable television and local radio, that could induce social cohesiveness in the community while

projecting its images to broader audiences. The advent of multimedia may help this symbolic interaction, as community-based media could become part of an interactive, electronic hypertext that would broaden the sources of information and images, as well as help citizens to value their own input in the media system. The second area is *urban design in and for poor communities*. The restoration of meaning and culture in communities that have been written off as public spaces for the city implies the search for a new monumentality, for the creation of urban art (e.g., the murals in Latino communities), and for the residents' self-recognition of their public space by being involved in environmental beautification projects. Here information technology is no more than a tool, but an important one, as computer design may considerably help facilitate citizens' participation in the design and redesign of their newly valued space.

None of these policies stands a chance of implementation without the sixth initiative, *revitalizing local governments*. As demonstrated in the 1996 Habitat II United Nations Conference, local governments worldwide are being decisive in improving urban living conditions. Paradoxical as it may seem, in a world dominated by global flows of wealth, information, and power, local governments are as limited in their power as national governments are nowadays, but much more flexible, adaptive, and representative of their constituencies (Castells 1997). When linking up with citizen groups and business partnerships, local governments, under the right political conditions, may become key public entrepreneurs, altering the conditions under which poor communities sink into oblivion. For this, however, they need information and connectivity to compensate for their lower political capacity and financial resources. Information technology provides the tools for local governments to manage in real time the complex interaction between citizens, decentralized public agencies, and business decisions, substituting initiative for bureaucracy through strategic planning and real-time management of multiple initiatives. Furthermore, local governments may network among themselves via shared data banks and online consultations, as is already the case of intermunicipal networks in Europe (Graham 1995). Flexible information systems provide the tools for informed bargaining with corporations and national governments in a resurrection of the vitality of the city-state that characterized the previous period of formation of a world economy in Renaissance Europe. Local

governments aim at anchoring spaceless flows in specific places, reversing the structural logic of uncontrolled globalization, and negotiating on behalf of their citizens the conditions under which flows of information and wealth are distributed in local societies. Thus the current powerlessness of localities vis-à-vis the variable geometry of corporations may be reversed, as networks of local communities gradually take up the role of declining national governments in reestablishing social control over the conditions of economic development.

### **Conclusion: The Politics of Dreams**

As in most prospective elaborations aimed at fighting the harsh realities stemming from structural trends, these initiatives may seem like dreams. I would not dispute this characterization, except to emphasize the extremely general, indicative character of my suggestions as I try to propose a style of policymaking rather than present a finished blueprint. I also want to remind the reader that many of these initiatives are being practiced in cities around the world. Yet the fundamental point to be made, following Gilder's cynical statement, is that to accept the current state of affairs is to give up cities. Thus either we accept the ruin of urban civilization, entrapping its last, unfortunate dwellers, and escape into a telecommunicated exurban sprawl, or we take up our courage, invent, calculate, think, fight, and work to turn the extraordinary opportunity of information technology into the promise of a more humane society, based not on social exclusion but on shared creativity. Yet, to do so, dreams have not just to be blueprinted but fought over, because the information age has not changed the reality that the power of technology still depends on the technology of power.

### **Note**

Throughout this chapter, I refer often to my own publications. I do this to avoid repeating data and sources on the whole range of topics presented here that are covered in detail in these publications. Thus each reference to Castells must be considered as a generic reference to the bibliography and evidence provided in each the books cited. Similarly, Graham and Marvin

(1996), Blakely et al. (1995), Servon and Horrigan (1996), and Susser (1997) are useful bibliographic sources to the vast body of information that should be consulted when analyzing in depth the issues explored in this chapter.

## References

- Blakely, Edward J. et al. 1995. "Information City and the Ghetto—The L.A. Experience." Los Angeles: University of Southern California, Lusk Center Research Institute, Working Paper LCRI-95-10p.
- Borja, Jordi and Manuel Castells. 1997. "Global and Local. The Management of Cities in the Information Age." London: Earthscan.
- Carnoy, Martin and Manuel Castells. 1996. "Sustainable Flexibility: Work, Family, and Community in the Information Age." Paris: OECD Education Division.
- Carnoy, Martin, Manuel Castells, and Chris Benner. 1996. "Flexible Work and Labor Markets in Information Age America." Research report. New York: Russell Sage Foundation.
- Castells, Manuel. 1989. *The Informational City: Information Technology, Economic Restructuring, and the Urban-Regional Process*. Oxford: Blackwell.
- Castells, Manuel. 1996. *The Information Age: Economy, Society, and Culture. Volume 1: The Rise of the Network Society*. Oxford: Blackwell.
- Castells, Manuel. 1997. *The Information Age: Economy, Society, and Culture. Volume 2: The Power of Identity*. Oxford: Blackwell.
- Castells, Manuel and Peter Hall. 1994. *Technopoles of the World: The Making of 21st Century Industrial Complexes*. London: Routledge.
- Daniels, P. W. 1993. *Service Industries in the World Economy*. Oxford: Blackwell.
- Gilder, George. 1995. "City vs. Country: Tom Peters and George Gilder Debate the Impact of Technology on Location." *Forbes* ASAP, 27 February, p. 56.
- Graham, Stephen. 1995. "From Urban Competition to Urban Collaboration? The Development of Interurban Telematics Networks." *Environment and Planning C* 13: 503–524.
- Graham, Stephen and Simon Marvin. 1996. *Telecommunications and the City: Electronic Spaces, Urban Places*. London: Routledge.
- Mollenkopf, John and Manuel Castells, eds. 1991. *Dual City: Restructuring New York*. New York: Russell Sage Foundation.
- Moss, Mitchell. 1987. "Telecommunications, World Cities, and Urban Policy." *Urban Studies* 24: 534–546.
- Sassen, Saskia. 1991. *The Global City*. Princeton: Princeton University Press.
- Servon, Lisa and John Horrigan. 1996. "Urban Poverty and Access to Information Technology: A Role for Local Government." Paper delivered at the Annual Meeting

of the American Association of Collegiate Schools of Planning. Toronto. 26 July.  
Unpublished.

Susser, Ida. 1997. "The Construction of Urban Poverty and Homelessness in the New  
Global Economy." *Annual Reviews of Anthropology*, forthcoming.