

The liquid city of Megalopolis

John Rennie Short

University of Maryland. Department of Public Policy
1000 Hilltop Circle. Baltimore MD 21250 (USA)
jrs@umbc.edu

Data de recepció: maig de 2009

Data d'acceptació definitiva: juliol de 2009

Abstract

Large city-regions around the world are the principal hubs of economic and cultural globalization. In the United States, for example, 10 megapolitan regions, defined as clustered networks of metropolitan regions, have been identified. Using the criterion of contiguous metropolitan counties, in this paper I propose a definition of US Megalopolis that consists of 52,310 square miles stretching across 12 states, one district (District of Columbia), 124 counties, 13 metropolitan areas and the four major metro regions of Boston, New York, Philadelphia and Washington-Baltimore. In the rest of the paper, I discuss, in turn, the environmental impacts, the economic restructuring and the political entity of Megalopolis.

Key words: world city-regions, Megalopolis, environmental impacts, economic restructuring, political entities, USA.

Resum. *La ciutat líquida de Megalòpoli*

Les grans ciutats regió del món constitueixen els nodes principals de la globalització econòmica i cultural. Als EUA, per exemple, s'han identificat 10 grans regions metropolitanes definides com a xarxes agrupades de grans àrees metropolitanes. En aquest article, hi proposo una definició de Megalòpoli, que comprèn 53.310 milles quadrades i s'estén per 12 estats, un districte federal (Districte de Columbia), 124 comtats, 13 àrees metropolitanes i 4 grans regions metropolitanes (Boston, Nova York, Filadèlfia i Washington-Baltimore). A la resta del treball, s'hi examinen els impactes ambientals, la reestructuració econòmica i l'entitat política de Megalòpoli.

Paraules clau: ciutats regió mundials, Megalòpoli, impactes ambientals, reestructuració econòmica, entitats polítiques, EUA.

Resumen. *La ciudad líquida de Megalópolis*

Las grandes ciudades regiones del mundo constituyen los principales nodos de la globalización económica y cultural. En los EEUU, por ejemplo, se han identificado 10 regiones metrópolis definidas como redes agrupadas de grandes áreas metropolitanas. En este artículo, propongo una definición de Megalópolis, que comprende 53.310 millas cuadradas y se extiende por 12 estados, 1 distrito federal (el Distrito de Columbia), 124 condados, 13

áreas metropolitanas y 4 grandes regiones metropolitanas (Boston, Nueva York, Filadelfia y Washington-Baltimore). En el resto del trabajo, se examinan los impactos ambientales, la reestructuración económica y la entidad política de Megalópolis.

Palabras clave: ciudades región mundiales, Megalópolis, impactos ambientales, reestructuración económica, entidades políticas, EEUU.

Résumé. *La ville liquide de Mégalopole*

Les grandes villes régions du monde constituent les principaux noyaux de la globalisation économique et culturelle. Aux USA, par exemple, on a identifié 10 régions métropoles définies comme des réseaux de grandes aires métropolitaines. Dans cet article, je propose une définition de Mégalopole, qui comprend 53.310 milles carrés et s'étend par douze états, un district fédéral (le District de Columbia), 124 comtés, 13 aires métropolitaines et 4 grandes régions métropolitaines (Boston, New York, Philadelphie et Washington-Baltimore). Dans le reste du travail, on examine les impacts environnementaux, la restructuration économique et l'entité politique de Mégalopole.

Mots clé: villes région mondiales, Mégalopole, impacts environnementaux, restructuration économique, entités politiques, USA.

Summary

Introduction	The revalorization of Megalopolis
Population change in Megalopolis	Megalopolis as political entity
Environmental impacts	Conclusion: Megalopolis revisited
Economic restructuring in Megalopolis	References

Introduction

Large city regions around the world are the principal hubs of economic and cultural globalization (Short, 2004). In the US, for example, 10 megapolitan regions, defined as clustered networks of metropolitan regions, have been identified (table 1).

Collectively these large city regions constitute only 19.8 percent of the nations' land surface yet comprise 67.4 percent of the population, and approximately three quarters of all predicted growth in population and construction from 2010 to 2040. The Northeast area identified in this study, Megalopolis to use a term coined by Jean Gottmann (1961) is the largest of these regions in the country, responsible for 20% of the nation's Gross Domestic Product.

The US Census identifies metropolitan counties that are functionally linked to a city through levels of commuting, population density and population growth. Using the criterion of contiguous metropolitan counties I created a definition of Megalopolis that consists of 52,310 square miles stretching across 12 states, one district (District of Columbia), 124 counties, 13 metropolitan

Table 1. Megalopolitan regions in the US.

Name	Largest Metro	2000 Population (mill.)
Southland	Los Angeles	20.96
Valley of The Sun	Phoenix	4.09
NorCal	San Francisco	11.56
Peninsula	Miami	12.83
Megalopolis	New York	49.18
Cascadia	Seattle	7.11
Gulf Coast	Houston	11.53
I-35 Corridor	Dallas	14.46
Midwest	Chicago	39.48
Piedmont	Atlanta	18.39

Source: after Lang and Dhavale, 2005.

areas and the four major metro regions of Boston, New York, Philadelphia and Washington-Baltimore. Megalopolis spans 600 miles from north of Richmond in Virginia to just north of Portland in Maine and from the shores of the Northern Atlantic to the Appalachians. along interstate I-95. The area covers an area of 53.310 square miles and contains almost 50 million people, Megalopolis is the densest urban agglomeration in the US, one of the largest city regions in the world, and an important element of the national and global economy. This paper is a condensed version of a larger study (Short, 2007) and a more detailed analysis (Vicino *et al.*, 2007), and a continuation of the theorizing provided by Hanlon *et al.* (2009). The display of data for such a large area creates difficulties within the confines of a single text. Hence, the reader is directed to the electronic atlas of Megalopolis at http://www.umbc.edu/ges/student_projects/digital_atlas/instructions.htm where more than 60 maps of social and economic data are displayed. The data display and analyses complements and contextualizes the discussion presented here.

Population change in Megalopolis

In 1950 Megalopolis had a population of almost 32 million people. One in four of all US residents lived in this region. By 2000 the population had increased to over 49 million, 1 in 6 of the US population. Megalopolis is still the largest single concentration of population in the US. While there are almost 80 people per square mile in the US, there are almost 930 people per square mile in Megalopolis.

In 1950 the population of Megalopolis was concentrated in the urban cores: over one in every two of the total population lived in the central cities. By 2000 much of the population and vitality of the region had shifted to the

Table 2. Areas of population loss in Megalopolis.

	Population		
	1950	2000	Percent change
Baltimore	949,708	651,154	-31
Boston	801,444	589,141	-26
Philadelphia	2,071,605	1,517,550	-27
Washington DC	802,178	572,059	-29

Source: US Census.

Table 3. Areas of population growth in Megalopolis.

	Population		
	1950	2000	Percent change
Prince William Co., VA	22,612	280,812	1,142
Howard Co., MD	23,119	247,842	972
Fairfax Co., VA	98,557	969,749	884
Ocean Co., NJ	56,622	510,916	802
Loudoun Co., VA	21,147	169,599	702

Source: US Census.

suburban counties. The region changed from a big city population to a much more fully suburbanized agglomeration. Two out of every three people now live in suburban counties. Table 2 highlights the loss in selected big cities and Table 3 indicates the levels of suburban county growth.

It is important to note that the traditional «city-suburb divide» no longer suffices as a standard measure of comparison (see table 4).

Puentes and Warren (2006) identify what they call «first suburbs», defined as counties that were metropolitan counties adjacent to a metro core in 1950. These inner ring suburbs grew very quickly from 1950 to 1970, leveling off after 1990. Since the 1980s many of these suburbs have become suburbs in crisis as they loose population and experience declines in tax base and house prices (Hanlon, 2009). The devalorization of these inner ring suburbs is defining characteristic of what has been termed suburban gothic (Short *et al.*, 2007).

While the 50-year data range shows decline in central city areas, since 1990 there has been a small but significant rebound in certain cities. Between 1990 and 2000 central city areas in New York such as the Bronx and Queens increased their populations by respectively 10.7% and 14.2%, representing absolute increases of 128, 861 and 277,781. Boston increased its population from 562,994 in 1980 to 590,763 in 2006. New York and Boston because of their growth in producer services and immigration flows are experiencing a

Table 4. Suburban places in Megalopolis.

	Demographics	Income	Education and employment	Housing	Examples
Affluent places	Mostly white; married parents.	Very high income; low poverty.	College graduates; management occupations.	Newer, large housing stock; high homeownership rates.	Scarsdale, NY; Chevy Chase, MD.
Underclass places	Black; Hispanic; single parent families.	High poverty; low income.	High school drop-outs.	High rental; older housing stock.	Camden, PA; Asbury Park, NJ.
Black middle class places	Mostly black; some single-parent families.	Middle income; low poverty.	College graduates; high public sector employment.	Built after 1970s; high homeownership rates.	Bowie, MD; Mitchellville, MD.
Immigrant gateway places	A quarter foreign born; Hispanic and other races high; mostly married couples with children.	Low to middle income; some poverty.	College graduates; some high school drop-outs; varied education levels.	High rental; low homeownership rates.	Hoboken, NJ; Tysons Corner, VA.
Middle America places	Mostly white, married families; «1950s image» of suburbia.	Low to middle income; low poverty.	High school graduates; some college.	Mostly homeowners; postwar bedroom communities.	Levittown, NY; Dundalk, MD.

Source: after Vicino et al., 2007.

small population growth. Cities such as Philadelphia and Baltimore with less buoyant economies saw declined decline. In both cities the remaining population was proportionately more poor and black.

The racial mix of the Megalopolis population has changed. Whites have redistributed from the central cities to the suburbs. In 1960, 83.8 percent of the population of the central cities was white, but by 2000 this had declined to 42.4 percent. The whites became less urban and more of a suburban population. White flight left proportionately more blacks in the central cities and especially in the cities experiencing greatest economic difficulties. Blacks have doubled in population from 1960 to 2000 and now constitute 16.8 percent of the region's population. In 1960, blacks constituted 15.7 percent of the central city population, by 2000 this figure had increased to 27.4 percent. They have become the majority population especially in cities that have witnessed job and population loss. But there also black suburbanization. In 1960, there were 773,160 blacks in the suburbs of Megalopolis but by 2000 this number had climbed to almost 3 million. Prince George's in Maryland, for example, a suburban county that borders Washington DC has a majority black population. It is home to over half a million blacks who constitute two out of every three people in the county.

The Asian population has increased in numbers from a relatively insignificant 87,000 to over 2.3 million. Asians are found in the central cities as well as the suburbs. There are now almost 6 million Hispanics in Megalopolis constituting 12 percent of the total population. Three fifths of Hispanics live in the central cities, and the remainder in the suburbs. The growth is particularly marked in the major metro areas of New York, Washington DC and Boston. In selected cities and counties the Hispanic population has been the major driver of demographic growth.

Environmental impacts

The US population leaves a heavy footprint on the earth. In Megalopolis there are now nearly 50 million people living at relatively low densities and consuming large amounts of energy. Compared to 1950 there are more people driving more cars to more places; more people running dishwashers, flushing toilets and showers; more people in more and ever bigger houses. Whatever the measure used—automobile usage, water consumption or waster generation—it is a similar story of increasing population growth in association with increased affluence and spiraling consumption producing a greater environmental footprint and increased strain on the natural systems that sustain and nurture life. As more population crams into the region, an incredible environmental transformation t is wrought. Close to 50 million people, with the greatest environmental impact per head in the history of the world, now live in Megalopolis.

Economic restructuring in Megalopolis

Over the past fifty years a major economic change has been the decline of manufacturing, the growth of services and the growing importance of government. Manufacturing has long played an important role in the life of the region as a significant employer and major source of revenue. In 1900, Megalopolis had almost 1 in 2 of all manufacturing workers in the entire country. By 1950, this number had fallen to 1 in 3. By 1997, the numbers had fallen to 1,498,706, only 12.3 percent of the national total. There was a significant deindustrialization of the region in both absolute and relative terms. The region has lost over 1.5 million manufacturing jobs since 1958 and is no longer the manufacturing powerhouse of the US economy.

The region retains its primacy in selected producer services. Over 1 in every 2 workers in the nation in the important sector of finance and insurance workers are located in Megalopolis with 1 in every 10 workers are based in the New York metro area. The figures are even higher for the subcategory of Securities Intermediation, 81 percent of all workers in the US in this category are employed in Megalopolis, with 33 percent located in the New York metro area. Although Megalopolis shed its manufacturing jobs, it is home to information processing sectors. Megalopolis contains 55 percent of all workers in the

category of Professional, Scientific & Technical. It is the analysis of information rather than the manipulation of metal that is now the defining economic characteristic and leading economic sector in Megalopolis.

Economic growth is heavily dependent on the role of government not only at the local and state level but especially at the federal level. Government spending influences private market decisions. The location of public highways, for example, has guided the form and level of private investment in suburban areas. The edge cities of out-of-town shopping malls and bedroom communities are as much creations of public spending, as they are functions of private investment. Public investment provides an important container for private investment. Government spending also plays a role in the location of fixed-asset investments such as military bases and research centers. One of the fastest growing counties in Megalopolis is Montgomery County in Maryland. Its population grew from 164,401 in 1950 to 950,680 in 2008; a 578 percent increase while the increase for Megalopolis as a whole was only 53%. The county has a concentration of federal research laboratories and regulatory agencies that in turn attract high technology companies, service industries and vendors. Montgomery County is home to nineteen major federal research and development and regulatory agencies, including the National Institute of Standards and Technology, the National Institutes of Health, National Oceanic and Atmospheric Administration, Naval Medical Center, Nuclear Regulatory Commission, the Food and Drug Administration, the Department of Energy, Walter Reed Army Medical Center, U.S. Army Diamond Labs, and the Consumer Products Safety Commission. The National Institute of Health in Bethesda, for example houses 12 research institutes employing 20,000 workers and a budget of \$28 billion. The National Institute of Standards and Technology employs 2,600 scientists at its primary site at Gaithersburg in Montgomery developing measurement standards necessary to commercialize for industry. The Food and Drug Administration (FDA), headquartered in Rockville in Montgomery employs 4,500 people. With this steady injection of federal dollars and the creation of secure and well-paid employment in the scientific research sector, it comes as no surprise that Montgomery ranks as the ninth most affluent county in Megalopolis with a median household income in 2007 of \$92,440. The average for the nation was \$50,740.

In the past fifty years Megalopolis has undergone a profound economic transformation that includes a decline in the amount of land devoted to agriculture, a marked loss of manufacturing employment, the growth of services, the rise of government as a powerful economic motor, the suburbanization of retail and the overall shift of jobs from cities to suburbs. Each of these trends have distinct redistributive consequences including the decline of blue collar jobs and a weakening of organized labor, the rise of female employment participation rates and the restriction of job opportunities for those trapped in the inner city by limited transport as more jobs suburbanize.

The revalorization of Megalopolis

What underlies and embodies these population and economic trends is a profound revalorization of metropolitan space. Capitalism is a system always in motion. In their 1848 *Communist Manifesto*, Marx and Engels referred to the «Constant revolutionizing of production, uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation [...] All that is solid melts into air». Almost a hundred years later, in 1942, Joseph Schumpeter referred to the creative destruction at the heart of the capitalist system. Megalopolis is both a primary container and important vehicle for such dynamism. The immediate post World War II saw massive public and private investment in the suburban fringes. Capital reinvestment was fixed into the suburban landscapes in the form of houses, roads, factories, stores and infrastructure. But, since the 1970s, there has been a revalorization that has remade Megalopolis into a new metropolitan form marked by growth and decline, expansion and contraction. From 1950 to around the mid 1970s, the primary dynamic of the US metropolis was a suburban shift. Since then, the picture has become more complex with at least four investment/disinvestment waves.

First, there has been a reinvestment in the central city. Downtown business interests responded to the postwar suburbanization of business and customers by initially promoting and supporting urban renewal programs as a way to maintain the commercial viability of downtown. Urban renewal programs of the 1950s and 1960s were attempts to stem the tide of decentralization and preserve downtown property values. The attempted solution not only failed, it exacerbated decline as downtowns became filled with unattractive, sterile, unusable spaces and a depressing collection of dead zones beneath elevated highways and busy intersections. A new strategy emerged in the 1970s and 1980s that focused more on building than demolition, on entertainment rather than production and on public-private partnerships rather than reliance on only either private risk-taking or on federal programs. Alliances of civic leaders, investors and developers in cities across the nation sought to construct a new iconography of theme retail districts, cultural centers, conventions centers, stadiums, festival malls all in a reimagined downtown. The goal was to halt the devaluation of the downtown through its promotion as a place of fun, frivolity, shopping and spectacle. The new downtown was imagined as a festival setting and was promoted as a cultural centrality in a splintering metropolis. In order to secure this new writing of the downtown, public money had to underwrite private projects and citizens had to be convinced that the benefits would ripple through the rest of the urban economy. A classic example is Baltimore's Inner Harbor. By the 1950s, much of the old port, right in the heart of the city, had become an abandoned space. A cluster of developments built between 1977 and 1981 made the Inner Harbor a festival setting: the World Trade Center and Maryland Science Center were built with state and federal funding; the Convention Center was funded with \$35 million from state funds; Harborplace, built by the Rouse Corporation, provided retail and restaurants

in two large pavilions. The National Aquarium was built with \$21 million from the city council. The Hyatt Hotel provided a downtown anchor after a \$12 million public grant was made to Hyatt. There was a public underwriting of the whole redevelopment.

A second, and very much related to the first trend, there has been the return of people and capital to selected parts of the city, often given the general name of gentrification. The original definition of gentrification referred to housing that passed from lower to higher income households. It has now taken on a number of different meanings to include the general sense of displacement of lower income households and the arrival of new single person and non child households, the yuppies of popular discourse, either in new or refurbished dwellings.

The move back to the city has been explained by number of factors, including, on the demand side, the persistence of high income jobs in central city locations, new forms of household formation with smaller households, more single person households and non-child households who place less emphasis on city school systems and more emphasis on accessibility to employment and urban recreation. On the supply side, Smith (1996) identifies an investment opportunity created by the difference between the land value and the potential land value of an accessible inner city location given the changes in demand that we just outlined. This rent gap, as he terms the difference between existing and potential value, creates new opportunities for investment. In a detailed study of New York's Lower East Side he identifies turning points in the housing investment change that occurred slowly first around 1976 and reaching its greatest extent in 1979-80. Gentrification often comes with displacement. Newman and Wyly (2006), for example, found that between 8,300 and 11,600 households are displaced each year in NYC. There was also reinvestment in the city that was unconnected to gentrification. Wyly and Hamel (2004) report that redlining, the practice of not lending to inner city neighborhoods, was replaced by subprime mortgage lending to inner city residents. This was the background to the subprime collapse and subsequent economic meltdown of late 2008.

New York is home to a number of gentrifying projects. Major construction projects such as Towers on the Park, which opened in 1988, and individual households buying up brownstone dwellings led to a distinct form of gentrification along the western corridor of central Harlem. In 1994 Harlem became a Federal Empowerment Zone in 1994 that provided tax credits, and federal and state monies. A large indoor mall opened in 2000 with chains such as Disney, Old Navy and HMV that previously ignored Harlem.

Just across the Hudson River from Lower Manhattan sits the small, formerly working-class city of Hoboken, just a quick ferry ride across from New York City's financial district. The process of gentrification began around 1980. Controls that maintained the presence of lower income households such as tenant protection and rent control became more lax. The housing stock was effectively emptied of lower income residents in favor of the higher-income

households. As the bull market of the 1990s expanded the amount and remuneration of financial service workers in Manhattan, the process of gentrification accelerated in Hoboken and extended further out into such places as Newark and Jersey City.

Broad cycles of gentrification coincide with the cycles of the market, especially the rise and fall of business services that require downtown locations. The recession of the early 1990s saw limited gentrification in selected cities, the economic upturn of the late 1990s saw another cycle of gentrification, while the downturn of 2008 will no doubt see a curtailment of speculative growth.

Third, there is an effective disinvestment from the inner ring of selected working class and middle class suburban neighborhoods as the demand for many of these neighborhoods have shrunk. Many of the small, single-family house suburbs that were constructed and grew in population from 1950 to 1970 have been devalorized. The suburbs in crisis are most prevalent in metro areas where postindustrial contraction was not offset by an increase in well paying service employment's.

Fourth, the suburbs are also places of the wealthy, where new rounds of housing investment, brought about by the increasing wealth of the already wealthy, reinforce old established landscapes of privilege as well creating new landscapes of consumption and exclusion. Affluent suburbs are home to the established wealthy as well as the new wealthy, to the understated rich as well as the conspicuously rich.

The net effect of these changes is places with very divergent experiences. Table 4 lists the five types of suburban places identified by principal components analysis and consequent grouping of component scores (Vicino *et al.*, 2007): affluent, underclass, black middle class, immigrant gateways as well as the traditional suburbs, often termed Middle America. The affluent category included such places as Scarsdale New York which had a median household income of \$182,792 in 2000, almost four and a half times the median household income of the New York metropolitan area. The population of Scarsdale is highly educated with 80 percent of the population college graduates. Many members of the workforce in Scarsdale are managers and professionals with 20 percent employed in Finance, Information and Real Estate (FIRE), and 26 percent employed in the health and educational fields.

Camden, New Jersey, is example of an urban place that experienced tremendous industrial growth in the early twentieth century and subsequent marked decline. The gramophone was invented in the Nipper Building, home of the Victor Talking Machine Company, later the Radio Corporation of America (RCA). At its peak in the 1950s, RCA employed over 20,000 people in the city spread over 50 buildings. By the 1960s the decline set in as manufacturing employment disappeared. The city lost jobs and population. Retail and the middle class moved out to suburban New Jersey. From a total of 125,00 in 1950, this city now has a population of almost 80,000 people. Almost half of the population is black, and 40 percent is Hispanic. The poverty rate

increased from 20 percent in 1970 to 35 percent in 2000 and the median household income was \$23,421 in 2000, less than half the median household income of the metropolitan area. Almost half the population did not graduate from high school.

Megalopolis is home to significant amounts of immigration from overseas. The foreign born population has increased from 10 percent in 1960 to 20 percent in 2000, almost double the national average. Migrants are found in both central cities and in suburban areas; particular concentrations can be identified as immigrant gateways. One example is Tyson's Corner VA an archetypal edge city located off the Washington DC Beltway. The population of Tyson's Corner is 18,540 with almost 35 percent foreign-born, and 70 percent have four-year university degrees.

This briefest of snapshots indicates the growing diversity of Megalopolis. As inequalities have widened the difference between rich and poor places has increased. The suburbs, for example, are no longer just the preserve of the middle class; they contain rich and poor, black as well as white. And the increased levels of immigration have also created clusters of immigration gateways. Compared to the more homogenous suburbs of the 1950s the revalorization of residential space, in association with increased immigration and marked inequality creates a more complex residential mosaic.

Megalopolis as political entity

Marx made a distinction between a *class in itself* and a *class for itself*. A *class in itself* is shaped by economic and historic conditions, but, for a *class for itself* to emerge, there needs to be to a conscious sense of similar identity and an appreciation of a shared fate. Similarly we can identify a megalopolis that is an urban region in itself and for itself. While economic forces are creating Megalopolis as an urban region in itself, as housing and job markets extend out from one metro area to another in an increasingly interconnected network, many things operate in the political and cultural realms to inhibit the creation of the wider regional consciousness of an urban region for itself. The major cities of Megalopolis, for example, have separate regional news stations and different sports teams. Local school districts, different states and counties, metro TV markets and fierce sport rivalries all work to suppress the creation of an urban regional consciousness. Megalopolis is a region in itself but not a region for itself.

Megalopolis is one of the most important urban regions in the US and indeed in the world. Its internal coherence has deepened as lengthening journeys to work, widening regional job markets and dispersing housing markets effectively link the separate metros into overlapping fields of influence and interconnecting flows of people and goods. The region has become a region in itself. Whether it will become a region for itself, is a more debatable issue. Identities, allegiance and political realities all work to balkanize Megalopolis.

There are some, public choice theorists being the most vocal, who would argue political fragmentation is a healthy state of affairs. A large number of

different municipalities allow residents to choose a variety of tax loads, school districts and forms of government. However, there are also problems associated with this fragmentation. We can consider two.

The first is a central city-suburban fiscal disparity. Central cities, especially those with shrinking populations, have a declining tax base and lower income population while the suburbs have an expanded tax base and a relatively affluent population. Cities have relied on the property tax as a source of revenue. With declining population and an out movement of businesses and higher-income households, the tax base shrinks while the concentration of poorer people places greater demand on service provision such as police, welfare and social services. The older cities also have an ageing infrastructure that is expensive to maintain and replace. Central cities have to deal with the politics of economic decline while many suburbs contend with the management of growth. Municipal fragmentation that separates out poor cities from affluent suburbs reinforces the inequalities in US society.

A second related problem is public education. In the US, the federal government has a very limited role in providing funding and resources to public schools. School funding is dominated by state and municipal sources. States provide on average 50 percent of total school budgets, local districts around 45 percent, based on local property taxes, while the federal government only constitutes 5 percent. At the school district level disparities in wealth feed directly into educational standards and performance. Poor school districts cannot afford to spend the same as richer school districts. The result is a range of school districts, some, more often in the affluent suburbs, platforms for success while others, especially in the cash strapped central cities, are funnels of failure. The political fragmentation of the region into a large number of local governments has profound social outcomes.

Conclusion: Megalopolis revisited

Gottmann's original Megalopolis, based on analysis of 1950 data, was the manufacturing hub of the national economy, with substantial central city populations, few foreign born and marked racial-ethnic segregation. The most significant changes in the intervening years include the relative shift of population from the central cities to the suburban counties, the loss of manufacturing jobs especially in the central cities, the growth of services, and the increase in the foreign-born population especially in the selected central cities, although suburban counties also witnessed the absolute and relative increase in the foreign-born. Despite all these changes, racial segregation remains a stubborn fact of life in the nation's largest urban region.

Zygmunt Bauman (2005) describes the precarious life lived under conditions of constant uncertainty as *liquid life*. He uses the term to refer to time and the question of identity in a rapidly changing world. I think it is appropriate to use *liquid city* with reference to the spatial incoherence of this built environment. Recent growth in Megalopolis has a liquid quality; it is constantly

moving over the landscape, here in torrents, there in rivulets, elsewhere in steady drips, but always in the viscous manner of a semi-solid, semi-liquid, half-permanent, yet constantly changing phenomenon. Megalopolis possesses an unstable quality that flows over political boundaries, seeps across borders and transcends tight spatial demarcations; it is a process not a culmination, always in motion, rarely at rest.

The changes have wider cultural implications. Bauman (1992) also writes of a postmodern condition marked by a loss of certainty about conduct, the unpredictability of change, a lack of centeredness, the decline of grand narratives. The recent evolution of Megalopolis embodies this shift. As rapid changes restructure our cities, as more of our lives take place in a decentered metropolis, as city centers decline, as we follow space-time paths through the metropolis seemingly disconnected from our fellow citizens and as our truly public spaces shrivel to a series of highly segmented places, then the oppressive and unsettling sense of continual change is made very real, the loss of grand narratives is made palpable and the lack of center to social life is made visible. The postmodern condition thrives in Megalopolis.

In 1927, Patrick Geddes saw megalopolis, the idea, as a latter stage in an inexorable decline. In 1961, Gottmann, in contrast, saw Megalopolis, the place, as a harbinger of a new way of life. Which is correct, the gloomy formulation of Geddes or the sunnier claim of Gottmann? The answer rests on whether we can build livable humane cities that provide employment, hope and sustainable futures. Megalopolis poses problems, major problems no doubt, but the forward edge of history lies in the collective and shared fate of such giant city regions as Megalopolis.

References

- BAUMAN, Z. (1992). *Intimations of postmodernity*. London: Routledge.
 — (2005). *Liquid life*. Cambridge: Polity.
- GOTTMANN, J. (1961). *Megalopolis*. New York: Twentieth Century Fund.
- HANLON, B. (2009). *Once the American dream: Inner-ring suburbs in the metropolitan United States*. Philadelphia: Temple University Press.
- HANLON, B.; SHORT, J. R.; VICINO, T. (2009). *Cities and suburbs: New metropolitan realities in the US*. London and New York: Routledge.
- LANG, R.; DHAVALA, D. (2005). «America's Megapolitan Areas». *Land Lines*, 17(3), p. 1-5.
- NEWMAN, K.; WYLY, E. (2006). «The right to stay put, revisited: gentrification and resistance to displacement in New York city». *Urban Studies*, 43, p. 23-57.
- PUNTES, R.; WARREN, D. (2006). *One-fifth of America: A comprehensive guide to America's first suburbs*. Washington DC: Brookings Institution Press.
- SHORT, J. R. (2004). *Global metropolitan*. London and New York: Routledge.
 — (2007). *Liquid city: Megalopolis and the contemporary northeast*. Washington DC: Resources for the Future.
- SHORT, J. R.; HANLON, B.; VICINO, T. (2007). «The decline of inner suburbs: The new suburban gothic in the US». *Geography Compass*, 1, p. 641-656.

- SMITH, N. (1996). *The new urban frontier: Gentrification and the revanchist city*. London: Routledge.
- VICINO, T. J.; HANLON, B.; SHORT, J. R. (2007). «Megalopolis 50 years on: the transformation of a city region». *International Journal of Urban and Regional Research*, 31, p. 344-367.
- WYLY, E.; HAMMEL, J. (2004). «Gentrification, segregation and discrimination in the American urban system». *Environment and Planning A*, 36, p. 1215-1241.