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Indice

Reading the City in a Global Digital Age
The Limits of Topographic Representation

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Understanding a city through its built topography is increasingly inadequate when global and digital forces are part of the urban condition. What we might call the topographic moment is a critical and a large component of the representation of cities. But it cannot incorporate the fact of globalization and digitization as part of the representation of the urban. Nor can it critically engage today's dominant accounts about globalization and digitization, accounts which evict place and materiality even though the former are deeply imbricated with the material and the local and hence with that topographic moment. A key analytic move that bridges between these very diverse dimensions is to capture the possibility that particular components of a city's topography can be spatializations of global and digital dynamics and formations; such particular topographic components would then be one site in a multisited circuit or network. Such spatializations destabilize the meaning of the local or the sited, and thereby of the topographic understanding of cities. This holds probably especially for global cities.

My concern in this essay is to distinguish between the topographic representation of key aspects of the city and an interpretation of these same aspects in terms of spatialized global economic, political, and cultural dynamics[1]. This is one analytic path into questions about cities in a global digital age. It brings a particular type of twist to the discus-

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[*] Columbia University.
[1] These are all complex and multifaceted subjects. It is impossible to do full justice to them or to the literatures they have engendered. I have elaborated on both the subjects and the literatures elsewhere (Sassen 2008: chapters 7 and 8).

sion on urban topography and cities since globalization and digitisa-tion are both associated with dispersal and mobility. The effort is then to understand what analytic elements need to be developed in order to compensate for or remedy the limits of topographic representations for making legible the possibility that at least some global and digital components get spatialized in cities. Among such components are both the power projects of major global economic actors but also the political projects of contestatory actors, e.g. electronic activists. A to-pographic representation of rich and poor areas of a city would simply capture the physical conditions of each advantage and disadvantage. It would fail to capture the electronic connectivity possibly marking even poor areas as locations on global circuits. Once this spatialization of various global and digital components is made legible, the richness of topographic analysis can add to our understanding of this process. The challenge is to locate and specify the fact of such spatializations and its variability.

This brings up a second set of issues: topographic representations of the built environment of cities tend to emphasize the distinctiveness of the various socio–economic sectors: the differences between poor and rich neighborhoods, between commercial and manufacturing dis-tricts, and so on. While valid, this type of representation of a city be-comes particularly partial when, as is happening today, a growing share of advanced economic sectors also employ significant numbers of very low–wage workers and subcontract to firms that do not look like they belong in the advanced corporate sector; similarly, the growth of high income professional households has generated a whole new demand for low–wage household workers, connecting expensive residential areas with poorer ones, and placing these professional households on global care–chains that bring–in many of the cleaners, nannies and nurses from poorer countries. In brief, economic restruc-turing is producing multiple interconnections among parts of the city that topographically look like they may have little to do with each other. Given some of the socio–economic, technical, and cultural dy-namics of the current era, topographic representations may well be more partial today than in past phases.

The limitations of topographic representations of the city to capture these types of interconnections — between the global and the urban,

and between socio–economic areas of a city that appear as completely unrelated — calls for analytic tools that allow us to incorporate such interconnections in spatial representations of cities. Some of these interconnections have long existed. What is different today is their multiplication, their intensity, their character. Some elements of topographic representation, such as transport systems and water and sewage pipes, have long captured particular interconnections. What is different today in this regard is the sharpening of non–physical interconnections, such as social and digital interconnections, perhaps also pointing to a deeper transformation in the larger social, economic and physical orders. Topographic representations remain critical, but are increasingly insufficient. One way of addressing these conditions is to uncover the interconnections between urban forms and urban fragments, and between orders — the global and the urban, the digital and the urban — that appear as unconnected. This is one more step for understanding what our large cities are about today and in the near future, and what constitutes their complexity.

1. Spatialized Power Projects

Cities have long been key sites for the spatialization of power projects — whether political, religious, or economic. There are multiple instances that capture this. We can find it in the structures and infrastructures for control and management functions of past colonial empires and of current global firms and markets. We can also find it in the segregation of population groups that can consequently be more easily produced as either cheap labor or surplus people; in the choice of particular built forms used for representing and symbolic cleansing of economic power, as in the preference for "Greek temples" to house stock markets; and we can find it in what we designate today as high–income residential and commercial gentrification, a process that allows cities to accommodate the expanding elite professional classes, with the inevitable displacement of lower income households and firms. Finally, we can see it in the large–scale destruction of natural environments to implant particular forms of urbanization marked by spread rather than density and linked to specific real estate develop-

ment interests, such as the uncontrolled strip–development and subur-
banization that shaped the Los Angeles region.

Yet the particular dynamics and capacities captured by the terms
globalization and digitization signal the possibility of a major trans-
formation in this dynamic of spatialization. The dominant interpreta-
tion posits that digitization entails an absolute disembedding from the
material world. Key concepts in the dominant account about the
global economy — globalization, information economy, and telemat-
ics — all suggest that place no longer matters. And they suggest that
the type of place represented by major cities may have become obso-
lete from the perspective of the economy, particularly for leading sec-
tors, such as information economy sectors and finance, as these have
the best access to, and are the most advanced users of, telematics.
These are accounts that privilege the fact of instantaneous global
transmission over the concentrations of built infrastructure that make
transmission possible; information outputs over the work of producing
those outputs, from specialists to secretaries; and the new transna-
tional corporate culture over the multiplicity of cultural environments,
including re–territorialized immigrant cultures, within which many of
the "other" jobs of the global information economy take place[2].

One consequence of such a representation of the global information
economy as place–less would be that there is no longer a spatialization
of this type of power today: it has supposedly dispersed geographi-
cally and gone partly digital. It is this proposition that I have contested
in much of my work, arguing that this dispersal is only part of the
story and that we see in fact new types of spatializations of power.
How do we reintroduce place in economic analysis? And, how do we
construct a new narrative about economic globalization, one that in-
cludes rather than excludes all the spatial, economic, and cultural ele-
ments that are part of the urban global economy as it is constituted in
cities and the increasingly structured networks of which they are part?
A topographic reading would introduce place yet, in the end, it would

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[2] The eviction of these activities and workers from the dominant representation of the global
information economy, has the effect of excluding the variety of cultural contexts within which
they exist, a cultural diversity that is as much a presence in processes of globalisation as is the
new international corporate culture.

fail to capture the fact that global dynamics might inhabit localized built environments.

2. Analytic Borderlands

As a political economist, addressing these issues has meant working in several systems of representation and constructing spaces of intersection. There are analytic moments when two systems of representation intersect. Such analytic moments are easily experienced as spaces of silence, or of absence. One challenge is to see what happens in those spaces, what operations take place there. In my own work I have had to deal frequently with these spaces of intersection and conceive of them as analytic borderlands — an analytic terrain where discontinuities are constitutive rather than reduced to a dividing line. Thus much of my work on economic globalization and cities has focused on these discontinuities and has sought to reconstitute their articulation analytically as borderlands rather than as dividing lines[3].

Methodologically, the construction of these analytic borderlands pivots on what I call circuits for the distribution and installation of operations; I focus on circuits that cut across what are generally seen as two or more discontinuous "systems", institutional orders, or dynamics. These circuits may be internal to a city's economy or be, perhaps at the other extreme, global. In the latter case, a given city is but one site on a circuit that may contain a few or many other such cities. And the operations that get distributed through these circuits can range widely — they can be economic, political, cultural, subjective.

Circuits internal to a city allow us to follow economic activities into territories that lie outside the increasingly narrow borders of mainstream representations of the urban economy and to negotiate the crossing of discontinuous spaces. For instance, it allows us to locate various components of the informal economy (whether in New York

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[3] This produces a terrain within which these discontinuities can be reconstituted in terms of economic operations whose properties are not merely a function of the spaces on each side (i.e., a reduction to the condition of dividing line) but also, and most centrally, of the discontinuity itself, the argument being that discontinuities are an integral part, a component, of the economic *system*.

or Paris or Mumbay) on circuits that connect it to what are considered advanced industries, such as finance, design or fashion. A topographic representation would capture the enormous discontinuity between the places and built environments of the informal economy and those of the financial or design district in a city, but would fail to capture their complex economic interactions and dependencies.

International and transnational circuits allow us to detect the particular networks that connect specific activities in one city with specific activities in cities in other countries. For instance, if one focuses on futures markets, cities such as London and Frankfurt are joined by Sao Paulo and Kuala Lumpur; if one looks at the gold market, all except London drop out, and Zurich, Johannesburg and Sydney appear. Continuing along these lines, Los Angeles, for example, would appear as located on a variety of global circuits (including bi–national circuits with Mexico) which would be quite different from those of New York or Chicago. And a city like Caracas can be shown to be located on different circuits than those of Bogota.

This brings to the fore a second important issue. We can think of these cities or urban regions as criss–crossed by these circuits and as partial (only partial!) amalgamations of these various circuits. As I discuss later, some of the disadvantaged sectors in major cities today are also forming lateral cross–border connections with similarly placed groups in other cities. These are networks that while global do not run through a vertically organized framing as does, for instance, the network of affiliates of a multinational corporation or the country specific work of the IMF. For the city, these transnational circuits entail a type of fragmentation that may have always existed in major cities but has now been multiplied many times over. Topographic representations would fail to capture much of this spatialization of global economic circuits, except, perhaps, for certain aspects of the distribution/transport routes.

3. Sited Materialities and Global Span

It seems to me that the difficulty analysts and commentators have had in specifying or understanding the impact of digitization on cities

results from two analytic flaws. One of these (especially evident in the U.S.) confines interpretation to a technological reading of the technical capabilities of digital technology. This is fine for engineers. But when one is trying to understand the impacts of a technology, such a reading becomes problematic[4]. A purely technological reading of technical capabilities of digital technology inevitably leads one to a place that is a non–place, where we can announce with certainty the neutralizing of many of the configurations marked by physicality and place–boundedness, including the urban[5].

The second flaw is a continuing reliance on analytical categorizations that were developed under other spatial and historical conditions, that is, conditions preceding the current digital era. Thus the tendency is to conceive of the digital as simply and exclusively digital and the non–digital (whether represented in terms of the physical/material or the actual, all problematic though common conceptions) as simply and exclusively that. These either/or categorizations filter out the possibility of mediating conditions, thereby precluding a more complex reading of the impact of digitization on material and place—bound conditions.

One alternative categorization captures imbrications[6]. Let me illustrate using the case of finance. Finance is certainly a highly digitized activity; yet it cannot simply be thought of as exclusively digital. To have electronic financial markets and digitized financial instruments requires enormous amounts of materiel, not to mention people. This materiel includes conventional infrastructure, buildings, airports, and so on. Much of this materiel is, however, inflected by the digital. Conversely, much of what takes place in cyberspace is deeply inflected by the cultures, the material practices, the imaginaries, that take place

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[4] An additional critical issue is the construct technology. One radical critique can be found in Latour, and his dictum that technology is society 'Made Durable' (Latour, 1991; 1996). My position on how to handle this construct in social science research is developed in Sassen, 2006, ch. 7; 2002. More generally see Mansell and Silverstone, 1998.

[5] Another consequence of this type of reading is to assume that a new technology will ipso facto replace all older technologies that are less efficient, or slower, at executing the tasks the new technology is best at. We know that historically this is not the case. For a variety of critical examinations of the tendency towards technological determinism in much of the social sciences today see Wajcman, 2002; Howard and Jones, 2004; for particular applications that make legible the limits of these technologies in social domains see, e.g. Callon, 1998; Avgerou, Ciborra and Land, 2004; Cederman and Kraus, 2005; for cities in particular see Graham, 2004.

[6] For a full development of this alternative see Sassen, 2006, chapters 7 and 8.

outside cyberspace. Much, though not all, of what we think of when it comes to cyberspace would lack any meaning or referents if we were to exclude the world outside cyberspace. In brief, the digital and the non–digital are not exclusive conditions that stand outside the non–digital. Digital space is embedded in the larger societal, cultural, sub-jective, economic, imaginary structurations of lived experience and the systems within which we exist and operate (Sassen, 1999)[7].

4. Rescaling the Old Hierarchies

The complex imbrications between the digital (as well as the global) and the non–digital brings with it a destabilizing of older hier-archies of scale and often dramatic rescalings. As the national scale loses significance along with the loss of key components of the na-tional state's formal authority over the national scale, other scales gain strategic importance. Most especially among these are sub–national scales such as the global city and supranational scales such as global markets or regional trading zones. There is by now a vast scholarship covering a range of dynamics and formations (e.g. Sun, 1999; Taylor *et al.*, 2002; Taylor, 2004; Futur Anterieur, 1995; Schiffer Ramos, 2002; Barry and Slater, 2002; Ferguson and Jones, 2002; Brenner, 2004; Lebert, 2003; Glasius *et al.*, 2002; Olesen, 2005). Older hierar-chies of scale that emerged in the historical context of the ascendance of the nation–state, continue to operate; they are typically organized in terms of institutional size — from the international, down to the na-tional, the regional, the urban, down to the local. But they are destabi-lized because today's rescaling cuts across institutional size (e.g. Sun, 1999; Yeung, 2002; Urry, 2000; Brenner, 2004) and, through policies such as deregulation and privatization, also cuts across the institu-tional encasements of territory produced by the formation of national states (Ferguson and Jones, 2002). This does not mean that the old hi-

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[7] There is a third variable that needs to be taken account of when addressing the question of digital space and networks, though it is not particularly relevant to the question of the city. It is the transformations in digital networks linked both to certain technical issues and the use of these networks (for critical accounts, see, e.g. Lovink, 2002; Rogers, 2004; MacKenzie and Wajcman, 1999; Mansell and Collins, 2005; Marres and Rogers, 2000).

erarchies disappear, but rather that rescalings emerge alongside the old ones, and that they can often trump the latter.

These transformations entail complex imbrications of the digital and non–digital and between the global and the non–global (Sassen, 2008: chapters 7 and 8; Garcia, 2002; Sack, 2005; Graham, 2004; Taylor, 2004). They can be captured in a variety of instances. For example, much of what we might still experience as the "local" (an office build-ing or a house or an institution right there in our neighborhood or down-town) actually is something I would rather think of as a "microenvi-ronment with global span" insofar as it is deeply internetworked. Such a microenvironment is in many senses a localized entity, something that can be experienced as local, immediate, proximate and hence captured in topographic representations. It is a sited materiality. But it is also part of global digital networks which give it immediate far–flung span. To continue to think of this as simply local is not very useful or adequate. More importantly, the juxtaposition between the condition of being a sited materiality and having global span captures the imbrication of the digital and the non–digital and illustrates the inadequacy of a purely technological reading of the technical capacities associated with digiti-zation. A technological reading would lead us to posit the neutralization of the place–boundedness of precisely that which makes possible the condition of being an entity with global span. And it illustrates the in-adequacy of a purely topographical account.

A second example is the bundle of conditions and dynamics that marks the model of the global city. Just to single out one key dynamic: the more globalized and digitized the operations of firms and markets, the more their central management and coordination functions (and the requisite material structures) become strategic. It is precisely be-cause of digitization that simultaneous worldwide dispersal of opera-tions (whether factories, offices, or service outlets) and system inte-gration can be achieved. And it is precisely this combination which raises the importance of central functions. Global cities are strategic sites for the combination of resources necessary for the production of these central functions[8].

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[8] These economic global city functions are to be distinguished from political global city functions, which might include the politics of contestation by formal and informal political ac-

Much of what is liquefied and circulates in digital networks and is marked by hypermobility remains physical in some of its components. Take, for example, the case of real estate. Financial services firms have invented instruments that liquefy real estate, thereby facilitating investment and circulation of these instruments in global markets. Yet, part of what constitutes real estate remains very physical. At the same time, however, that which remains physical has been transformed by the fact that it is represented by highly liquid instruments that can circulate in global markets. It may look the same, it may involve the same bricks and mortar, it may be new or old, but it is a transformed entity.

We have difficulty capturing this multi–valence through our conventional categories: if it is physical, it is physical; and if it is digital, it is digital. In fact, the partial representation of real estate through liquid financial instruments produces a complex imbrication of the material and the de–materialized moments of that which we continue to call real estate. And it is precisely because of the digital capabilities of the economic sectors represented in global cities that the massive concentrations of material resources in these cities exist and keep expanding.

Hypermobility and de–materialization are usually seen as mere functions of the new technologies. This understanding erases the fact that it takes multiple material conditions to achieve this outcome (e.g. Rutherford, 2004, Graham and Marvin, 2001), and that it takes social networks, not only digital ones (Garcia, 2002; Sack, 2005). Once we recognize that the hypermobility of the instrument, or the de–materialization of the actual piece of real estate, had to be produced, we introduce the imbrication of the digital and the non–digital. It takes capital fixity to produce capital mobility, that is to say, state of the art built–environments, conventional infrastructures — from highways to airports and railways — and well–housed talent. These are all, at least partly, place–bound conditions, even though the nature of their place–boundedness is going to be different from what it was 100 years ago, when place–boundedness was much closer to pure immobility. Today

tors enabled by these economic functions. This particular form of political global city functions is, then, in a dialectical relation (both enabled and in opposition) to the economic functions (see Sassen, 2000; Bartlett, 2001).

it is a place–boundedness that is inflected, and inscribed by the hypermobility of some of its components, products, and outcomes. Both capital fixity and mobility are located in a temporal frame where speed is ascendant and consequential. This type of capital fixity cannot be fully captured in a description of its material and locational features, i.e. in a topographical reading.

Conceptualizing digitization and globalization along these lines creates operational and rhetorical openings for recognizing the ongoing importance of the material world even in the case of some of the most "de–materialized" activities[9].

5. The Spatialities of the Center

Information technologies have not eliminated the importance of massive concentrations of material resources but have, rather, reconfigured the interaction of capital fixity and hypermobility. The complex management of this interaction has given some cities a new competitive advantage (Sassen, 2001). The vast new economic topography that is being implemented through electronic space is one moment, one fragment, of an even vaster economic chain that is in good part embedded in non–electronic spaces. There is today no fully virtualized firm or economic sector. As I suggested earlier, even finance, the most digitized, dematerialized and globalized of all activities has a topography that weaves back and forth between actual and digital space. To different extents in different types of sectors and different types of firms, a firm's tasks now are distributed across these two kinds of spaces. Further, the actual configurations are subject to considerable transformation, as tasks are computerized or standardized, markets are further globalized, and so on.

The combination of the new capabilities for mobility along with patterns of concentration and operational features of the cutting edge sectors of advanced economies suggests that spatial concentration re-

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[9] A critical issue, not addressed here, concerns some of the features of digital networks, notably their governance (e.g. Robinson, 2004; Drake, 2004; Koopmans, 2004; Klein, 2004; Bennett, 2003; Mansell and Collins, 2005). These networks are not neutral technical events (see also the issues raised in footnote 6 above).

mains as a key feature of these sectors. But it is not simply a continuation of older patterns of spatial concentration. Today there is no longer a simple or straightforward relation between centrality and such geographic entities as the downtown or the central business district (CBD). In the past, and up to quite recently in fact, centrality was synonymous with the downtown or the CBD. The new technologies and organizational forms have altered the spatial correlates of centrality[10].

Given the differential impacts of the capabilities of the new information technologies on specific types of firms and of sectors of the economy, the spatial correlates of the "center" can assume several geographic forms, likely to be operating simultaneously at the macro level. Thus the center can be the CBD, as it still is largely for some of the leading sectors, notably finance, or an alternative form of CBD, such as Silicon Valley. Yet even as the CBD in major international business centers remains a strategic site for the leading industries, it is one profoundly reconfigured by technological and economic change (Fainstein, 2001; Ciccolella and Mignaqui, 2002; Schiffer Ramos, 2002) and by long term immigration (e.g. Laguerre, 2000). Further, there are often sharp differences in the patterns assumed by this reconfiguring of the central city in different parts of the world (Marcuse and van Kempen, 2000).

Second, the center can extend into a metropolitan area in the form of a grid of nodes of intense business activity. One might ask whether a spatial organization characterized by dense strategic nodes spread over a broader region does in fact constitute a new form of organizing the territory of the "center", rather than, as in the more conventional view, an instance of suburbanization or geographic dispersal. Insofar as these various nodes are articulated through digital networks, they represent a new geographic correlate of the most advanced type of "center". This is a partly deterritorialized space of centrality (Peraldi and Perrin, 1996; Marcuse and van Kempen, 2000; Graham and Marvin, 2001; Scott, 2001).

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[10] Several of the organizing hypotheses in the global city model concern the conditions for the continuity of centrality in advanced economic systems in the face of major new organizational forms and technologies that maximize the possibility for geographic dispersal. See the new Introduction in the updated edition of *The Global City* (Sassen, 2001). For a variety of perspectives see, e.g. Landrieu *et al.*, 1998; Rutherford, 2004; Abrahamson, 2004.

Third, we are seeing the formation of a transterritorial "center" constituted via intense economic transactions in the network of global cities. These transactions take place partly in digital space and partly through conventional transport and travel. The result is a multiplication of often highly specialized circuits connecting sets of cities (Taylor *et al.*, 2002; Taylor, 2004; Yeung, 2000; Schiffer, 2002; Short, 2005; Harvey In Process); increasingly we see other types of networks built on those circuits, such as transnational migrant networks (Smith and Guarnizo, 2001; Ehrenreich and Hochschild, 2003). These networks of major international business centers constitute new geographies of centrality. The most powerful of these new geographies of centrality at the global level binds the major international financial and business centers: New York, London, Tokyo, Paris, Frankfurt, Zurich, Amsterdam, Los Angeles, Sydney, Hong Kong, among others. But this geography now also includes cities such as Bangkok, Seoul, Taipei, Sao Paulo, Mexico City, Shanghai. In the case of a complex landscape such as Europe's, we see in fact several geographies of centrality, one global, others continental and regional.

Fourth, new forms of centrality are being constituted in electronically generated spaces. For instance, strategic components of the financial industry operate in such spaces. The relation between digital and actual space is complex and varies among different types of economic sectors (Sassen, 2008, chapter 7; Latham and Sassen, 2005), as well as within civil society sectors (Sack, 2005; Pace and Panganiban, 2002; Avgerou, 2002; Bach and Stark, 2005).

6. What Does Local Context Mean in this Setting?

Firms operating partly in actual space and partly in globe–spanning digital space cannot easily be contextualized in terms of their surroundings. Nor can the networked sub–economies they tend to constitute. The orientation of this type of subeconomy is simultaneously towards itself and towards a larger global market. Topographic representations would fail to capture this global orientation.

The intensity of transactions internal to such a sub–economy (whether global finance or cutting edge high–tech sectors) is such that

it overrides all considerations of the broader locality or urban area within which it exists. These firms and subeconomies develop a stronger orientation towards global markets than to their immediately surrounding areas (e.g. Taylor, 2004; Schiffer, 2002; Yeung, 2000). Insofar as they are a significant component of today's cities, this global orientation overrides a key proposition in the urban systems literature, to wit, that cities and urban systems integrate and articulate national territory. Such an integration effect may have been the case during the period when mass manufacturing and mass consumption were the dominant growth machines in developed economies and thrived on national scalings of economic processes. Today, the ascendance of digitized, globalized sectors, such as finance, has diluted that articulation with the larger national economy and the immediate surrounding.

The articulation of these sub–economies with other zones and sectors in their immediate socio–spatial surroundings is of a special sort. To some extent there is connectivity, but it is largely confined to the servicing of the leading sectors, and, further, this connectivity is partly obscured by topographic fragmentation in the case of much of this servicing. The most legible articulation is with the various highly priced services that cater to the workforce, from up–scale restaurants and hotels to luxury shops and cultural institutions, typically part of the socio–spatial order of these new sub–economies. Secondly, there are also various low–priced services that cater to the firms and to the households of the workers and which rarely "look" like they are part of the advanced corporate economy. The demand by firms and households for these services actually links two worlds that we think of as radically distinct and thus unconnected. But it is particularly a third instance that concerns me here, the large portions of the urban surrounding that have little connection to these world–market oriented sub–economies, even though they are physically proximate and might even be architecturally similar. It is the last two which engender a question about the insufficiency of topographic representation.

What then is the meaning of locality under these conditions? The new networked subeconomy occupies a strategic, partly deterritorialized geography that cuts across borders and connects a variety of points on the globe. Its local insertion accounts for only a (variable)

fraction of its total operations, its boundaries are not those of the city within which it is partly located, nor those of the local area where it is sited. This subeconomy interfaces the intensity of the vast concentration of very material resources it needs when it hits the ground and the fact of its global span or cross–border geography. Its interlocutor is not the surrounding context but the fact of the global.

I am not sure what this tearing away of the context and its replacement with the fact of the global could mean for urban practice and theory. But it is clearly problematic from the perspective of urban topography. The analytic operation called for is not the search for its connection with the "surroundings", the context. It is, rather, detecting its installation in a strategic cross–border geography constituted through multiple "locals". The local now transacts directly with the global cross–border structurations that scale at a global level; but the global also inhabits localities and is partly constituted through a multiplicity of local instantiations.

7. Cities as Frontier Zones: The Formation of New Political Actors

A very different type of case can be found in the growth of electronic activism by often poor and rather immobile actors and organizations. Topographic representations that describe fragmentations, particularly the isolation of poor areas, may well obscure the existence of underlying interconnections. What presents itself as segregated or excluded from the mainstream core of a city can actually be part of increasingly complex interactions with other similarly segregated sectors in cities of other countries. There is here, an interesting dynamic where top sectors (the new transnational professional class) and bottom sectors (e.g. immigrant communities or activists in environmental or anti–globalization struggles) partly inhabit a cross–border space that connects particular cities.

> Major cities, especially if global, contain multiple low–income communities many of which develop or access various global networks. Through the Internet, local initiatives become part of a global network of activism without losing the focus on specific local struggles (e.g. Cleaver, 1998; Henshall, 2000; Mele, 1999; Donk *et al.*, 2005; Friedman, 2005). It enables a new type of cross–

border political activism, one centered in multiple localities yet intensely con-
nected digitally. This is in my view one of the key forms of critical politics that
the Internet can make possible: A politics of the local with a big difference —
these are localities that are connected with each other across a region, a coun-
try, or the world[11]. Because the network is global does not mean that it all has
to happen at the global level.

But also inside such cities we see the emergence of specific politi-
cal and subjective dimensions that are difficult to capture through to-
pographic representations (e.g. Lovink and Riemens, 2002; Poster,
2004). Neither the emergence nor the difficulty are new. But I would
argue that there are times where both become sharper — times when
traditional arrangements become unsettled. Today is such a time.
Global cities become a sort of new frontier zone where an enormous
mix of people converge and new forms of politics are possible. Those
who lack power, those who are disadvantaged, outsiders, discrimi-
nated minorities, can gain presence in global cities, presence vis–à–vis
power and presence vis–à–vis each other. This signals, for me, the
possibility of a new type of politics centered in new types of political
actors. It is not simply a matter of having or not having power. There
are new hybrid bases from which to act.

The space of the city is a far more concrete space for politics than
that of the nation. It becomes a place where non–formal political ac-
tors can be part of the political scene in a way that is much more diffi-
cult at the national level. Nationally, politics needs to run through ex-
isting formal systems: whether the electoral political system or the ju-
diciary (taking state agencies to court). Non–formal political actors are
rendered invisible in the space of national politics. The space of the
city accommodates a broad range of political activities — squatting,
demonstrations against police brutality, fighting for the rights of im-
migrants and the homeless, the politics of culture and identity, gay and

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[11] I conceptualize these "alternative" circuits as countergeographies of globalization because
they are deeply imbricated with some of the major dynamics constitutive of the global economy
yet are not part of the formal apparatus or of the objectives of this apparatus. The formation of
global markets, the intensifying of transnational and trans–local business networks, the devel-
opment of communication technologies which easily escape conventional surveillance practices:
all of these produce infrastructures and architectures that can be used for other purposes, whether
money laundering or alternative politics.

lesbian and queer politics. Much of this becomes visible on the street. Much of urban politics is concrete, enacted by people rather than dependent on massive media technologies. Street level politics makes possible the formation of new types of political subjects that do not have to go through the formal political system.

The large city of today, especially the global city, emerges as a strategic site for these new types of operations. It is a strategic site for global corporate capital. But it is also one of the sites where the formation of new claims by informal political actors materializes and assumes concrete forms (Isin, 2000; Torres *et al.*, 1999; Lovink and Riemenes, 2002). The loss of power at the national level produces the possibility for new forms of power and politics at the subnational level [12]. The national as container of social process and power is cracked. This "cracked casing" then opens up possibilities for a geography of politics that links subnational spaces and allows non–formal political actors to engage strategic components of global capital.

Digital networks are contributing to the production of new kinds of interconnections underlying what appear as fragmented topographies, whether at the global or at the local level. Political activists can use digital networks for global or non–local transactions <u>and</u> they can use them for strengthening local communications and transactions inside a city (e.g. Lovink and Riemens, 2002) or rural community (e.g. Cleaver, 1998). Recovering how the new digital technology can serve to support local initiatives and alliances across a city's neighborhoods is extremely important in an age where the notion of the local is often seen as losing ground to global dynamics and actors and digital networks are typically thought of as global. What may appear as separate segregated sectors of a city may well have increasingly strong interconnections through particular networks of individuals and organizations with shared interests (Espinoza, 1999; «The Journal of Urban Technology», 1995; Garcia, 2002). Any large city is today traversed by these "invisible" circuits.

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[12] There are, of course, severe limitations on these possibilities, many having to do with the way in which these technologies have come to be deployed. See Sassen, 1999; Graham and Aurigi, 1997; Hoffman and Novak, 1998; Latham and Sassen, 2005).

8. Conclusion

Economic globalization and digitization produce a spatiality for the urban that pivots on de–territorialized cross–border networks and territorial locations with massive concentrations of resources. This is not a completely new feature. Over the centuries cities have been at the intersection of processes with supra–urban and even intercontinental scalings. What is different today is the intensity, complexity, and global span of these networks, and the extent to which significant portions of economies are now digitized and hence can travel at great speeds through these networks. Also new is the growing use of digital networks by often poor neighborhood organizations to pursue a variety of both intra– and inter–urban political initiatives. All of this has raised the number of cities that are part of cross–border networks operating at often vast geographic scales. Under these conditions, much of what we experience and represent as the local turns out to be a microenvironment with global span.

As cities and urban regions are increasingly traversed by non–local, including notably global circuits, much of what we experience as the local because locally sited, is actually a transformed condition in that it is imbricatd with non–local dynamics or is a localization of global processes. One way of thinking about this is in terms of spatializations of various projects — economic, political, cultural. This produces a specific set of interactions in a city's relation to its topography.

The new urban spatiality thus produced is partial in a double sense: it accounts for only part of what happens in cities and what cities are about, and it inhabits only part of what we might think of as the space of the city, whether this be understood in terms as diverse as those of a city's administrative boundaries or in the sense of the multiple public imaginaries that may be present in different sectors of a city's people. If we consider urban space as productive, as enabling new configurations, then these developments signal multiple possibilities.

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