



Governing the Sick City: Urban Governance in the Age of Emerging Infectious Disease

Roger Keil and Harris Ali

York University, Toronto, Canada;
rkeil@yorku.ca and hali@yorku.ca

Abstract: Based on a case study of the 2003 severe acute respiratory syndrome (SARS) outbreak in Toronto, Canada, this article suggests that we may have to rethink our common perception of what urban governance entails. Rather than operating solely in the conceptual proximity of social cohesion and economic competitiveness, urban governance may soon prove to be more centrally concerned with questions of widespread disease, life and death and the construction of new internal boundaries and regulations just at the time that globalization seems to suggest the breakdown of some traditional scalar incisions such as national boundaries in a post-Westphalian environment. We argue that urban governance must face the new (or reemerging) challenge of dealing with infectious disease in the context of the “new normal” and that global health governance may be better off by taking the possibilities that rest in metropolitan governance more seriously.

Keywords: urban governance, infectious disease, global cities, Toronto, SARS

Introduction

Avian flu has begun to capture the imagination of world publics in recent years as the H5N1 virus spread from its perceived origin in East and Southeast Asia to Turkey and potentially to Western Europe (Davis 2005). Newspapers and television corporations have discovered the pandemic as a topic of interest. Governments, businesses, and civic organizations at all scales have drawn up preparedness plans. This newfound interest in the threat from emerging infectious disease has a recent precedent. In the spring of 2003 many parts of the world experienced an outbreak of severe acute respiratory syndrome (SARS).¹ In many ways, the SARS outbreak is now being read as a stage rehearsal for what many public health experts believe will be a much larger epidemic once the H5N1 virus, which has so far only spread from infected birds to humans, mutates and leads to direct human-to-human infection. SARS, a previously unknown disease, is much different from H5N1 but the way it was handled by health authorities around the globe can potentially teach us some lessons about future pandemic preparedness. This article looks at the urban governance aspect of these

lessons. We rely on the rich and productive output in urban governance studies but will argue that this literature has had a particular blind spot: the relationship of urban governance restructuring to emerging infectious disease (EID). Urban governance must be prepared to deal with infectious disease. At the same time, global health governance overall may be improved by realizing the possibilities that rest in metropolitan governance. A new “post-Westphalian” constellation of post-national state power (Fidler 2004) poses previously unknown demands on the governance of urban regions in the area of infectious disease control. While there has been much attention in recent years on the significance of global city regions in the new world economy (Brenner and Keil 2006) and while the governance and regulation of these regions has captured the imagination of academics and policymakers alike (Buck et al 2005; Harding 2005; Heinelt and Kübler 2005; Kantor and Savitch 2005; Scott 2001), little has been said specifically about the growing pressures posed by the potential threat of infectious disease through the global network on urban governance. Rather than operating solely in between the often contradictory challenges of social cohesion and economic competitiveness, urban governance may soon have to be more centrally concerned with questions of widespread disease, life and death (Agamben 1998) and the construction of new internal boundaries and regulations just at the time that globalization seems to suggest the breakdown of some traditional scalar incisions such as national boundaries. In making connections between the traditional discussion of public service provision between competitiveness and cohesion and the more dramatic and urgent questions about disease and health, life and death, we also consult work that has—in a Foucauldian manner—more directly engaged with issues of (bio)power and governmentality (Osborne and Rose 1999; Rose 1999).²

For the area of urban planning and governance a more or less critical literature has begun to explore the spaces that cities have to maneuver in the rather open field of infectious disease preparedness planning and public health since the onset of the “new normal” after the attacks of 9/11 (Ali et al 2006; Malizia 2006; Matthew and Macdonald 2006). Some work has explored the historical precedents of variations in how cities have fought infectious disease in order “to help us plan for the battles against disease that will be part of our future” (Leavitt 2003:192). Howard Markel has put forward the observation that “[n]othing less than a cooperative partnership of nations, healthcare professionals, researchers, public health specialists, concerned corporations, philanthropies, and individuals will suffice to safeguard the world against the many public health problems we face today” (2004:211–212). Still, we believe more specific work needs to be done clarifying and determining the role municipal institutions of health governance can play in the global system of health governance.

It is possible to view the SARS outbreak of 2003 as a direct consequence of increased connectivity due to globalization in general and advances in transportation technologies in particular (Brockmann, Hufnagel and Geisel 2005; Guimera et al 2005). In order to understand the effects of connectivity in the global city system on the health of people in these cities, it is necessary to develop new and innovative ways of thinking about what is connected in what ways in that system (Ali and Keil 2006). There is a strong and growing consensus in the literature on globalization and health/disease that realities in a post-Westphalian world need a rethinking of governance structures on a variety of scales between the global and the local (Ali and Keil forthcoming; Fidler 2004; Gandy 2005b; Harris and Seid 2004a; Knobler et al 2004; Lee 2002; Markel 2004; McLean et al 2005; Whiteford and Manderson 2000). In this article, we ask what the consequences of the connectivity for health governance will be. Although public health policy delivery has always been an intensely local process, the “Westphalian” state system had defined health policies in national containers ordered and segmented among others by World Health Organization guidelines but mostly under the sovereign jurisdiction of nation-states. Public health was *national* health and health policy was *national* health policy under this regime. WHO interventions had to occur in the framework of national sovereignties, whose concern was with both popular health and economic welfare—not necessarily in this order (Fidler 2004; Heymann 2005; Heymann interview, Geneva 27 September 2005). When SARS hit major metropolitan regions in Asia and North America the need to rethink both global and sub-national health governance was exposed. The reliance on the hierarchical and hermetic system of nationally based health policy was put to the test as the WHO attempted to carve out a novel activist role in protecting global health beyond national interests and as sub-national governments, economic and civil society players moved to react to a localized global health crisis with coordinated action of their own (Abraham 2004; Fidler 2004). At both ends of the redefinition of international health governance—the local and the global—an “institutional void” (Hajer 2003) existed which could not be filled automatically by traditional, national health governance institutions and their international affiliates.

We posit that urban governance will increasingly have to deal with questions of vulnerability and risk related to EIDs. Vulnerability to EIDs is perhaps more pronounced in urban areas, where the majority of us live. Urbanization increases the statistical odds that microbes are being spread (Pennington 2003). The aggregation of human populations into high-density urban “islands” has important effects in providing the host reservoirs for maintaining infection chains (Haggett 1994). Accelerated land use changes in and around urban areas have heightened the vulnerability of urban populations to infectious disease (Patz et al 2004). Vulnerability

is a notion which in close proximity to other “essentializing” western discourses such as tropicity and development (Bankoff 2001). It refers to a state outside of the west. Yet, the notion of vulnerability has taken on renewed significance after September 11, particularly in the USA, as the “sense of security of many American citizens” was punctured (Simon 2004:41). It has particular relevance to the case of SARS which shattered the local public health and hospital systems of Toronto, Hong Kong and Singapore and the public perception of their safety. These cities’ “globality” means that an infectious disease cannot be contained by a purely exclusive “local” strategy of public health. Most vulnerability reduction policies tend to be largely limited to making safety modifications to key buildings and critical infrastructures, but the SARS case illustrates that the human/cultural dimension must also be considered in the effective management of disease outbreaks in the contemporary global city. Thus, isolation and quarantine did appear effective in fighting the outbreak, but what more could be done to prepare such containment strategies in case of future outbreaks in the global city? It is clear that we need to better understand the interactions of local modes of healthcare regulation in a globalized urban environment and the specific dimensions of urban vulnerability to public health threats in the global city setting (D’Cunha 2003, 2004).

Global Cities and Infectious Disease

Global cities are usually considered a specific category of urban centres. They often have more to do with each other than with their immediate hinterlands and regions, and they tend to be more like other global cities than like other cities in their national networks (for an overview of the literature, see Brenner and Keil 2006). As the case of SARS demonstrated, global cities are not just switching stations for flows of capital and labour allegedly ordered in a tight network of privilege and command functions. They also are transfer stations of various and contradictory dynamics of the globalized economy. Among them are city–country relations, connections between the developed and the developing world, even human–animal interrelations (Brenner and Keil 2006; Sassen 2002; Taylor 2004). The SARS virus is said to have travelled to Toronto from Hong Kong through a chain of connectivities—or to use another term, an *actor network*—that includes the civet cat, live (“wet”) animal markets, cross-border commuters across the spectrum of the labour market, hotels, transnational travellers, airports, healthcare workers, hospitals, etc. Contributing factors were faulty or badly maintained aeration and plumbing systems in high-rise buildings, air travel in hermetically closed airplanes, hospital systems, diasporic relations among relatives, and so forth. At each link of this rather disparate chain, sub-connectivities are present, which we have

called the *capillaries* of the global system: family relationships, small and parochial religious communities, more or less isolated (and even criminalized) food-handling practices, hospital hygiene codes, etc, all sub-realities of a larger global network of relationships. These sub-realities are often not accounted for in descriptions of global cityness although they seem to be central to our understanding of certain consequences of globalization, such as the spread of EIDs. They are not just the micro versions of larger macro processes constituted elsewhere: they are co-constitutive of the global realities themselves. Insofar as they belong to the larger processes of metabolism, these sub-realities are part of the ecological substrate of the global city system. We argue that it is exactly the dialectics of fixed infrastructures, built environments, institutional arrangements, reliable legal constructs, functioning hospitals (and their governance arrangements) of global cities on one hand and the unfixed, mobile, constantly re-articulated flows of people, non-human organisms, information and things that move through them, on the other.³ Recognizing this dialectic also implies the critique of functionalistic and technological images of global connectivity in fixed network nodes. We rather postulate the topological, agency-founded co-constitution of such nodes (Ali and Keil 2006; Gandy 2005a; Smith 2003).

Urban Governance and EID

Urban governance has become a standard phrase in urban political studies. Following Jon Pierre, urban governance can be defined as “the pursuit of collective goals through an inclusive strategy of resource mobilization” (2005:449). As the focus of urban scholars has moved from “the comparative study of constitutions and city charters” to decision-making processes that involve state, market and civil society actors in all areas (Gissendanner 2003:663), a broad spectrum of urban governance research has now been produced with case studies, comparisons and further theoretical developments (see, for example, Brenner 2004; Elwood 2004; Harding 2005, forthcoming; Heinelt and Kübler 2005; Kantor and Savitch 2005; Kaufmann, Léautier and Mastruzzi 2005; Pierre 2005; Sellers 2005). North-America-centred work on urban regimes, which continues to produce excellent case and comparative studies (for a recent summary of this literature see Stone 2005) is complemented by a strong European-centred body of work of mostly comparative nature (Brenner 2004; Buck et al 2005; LeGales 2002). In some of the literature, the shift to governance has been discussed in relation to the globalization and neoliberalization of cities, processes which in many cases have been seen as causative of this shift (Brenner and Theodore 2002), while other authors have emphasized the role governance has itself played in facilitating these

processes in turn. The comparative literature on urban governance restructuring has various intersections with the rescaling of the “political pathology” of infectious disease containment (Fidler 2004) as the global and neoliberal contexts of current restructuring at the urban scale have been the focus of much theoretical and conceptual work. Of these intersections, the new focus of metropolitanization deserves our specific attention. Brenner’s central concern, for example, is with the ways in which “urban governance has served as a major catalyst, medium, and arena of state rescaling processes” (2004:174). New collective action at the city-regional level in the many traditional (e.g. economic development and social welfare) and emerging (e.g. environmental, (multi-)cultural) policy fields can be discerned in metropolitan areas around the world. Public policymaking increasingly occurs at the metropolitan level as municipal and regional elites deliberately nurture this scale as the basis for international competition (Boudreau et al forthcoming; Brenner 2004). Yet, there is also an emerging political space at the metropolitan scale, where collective action and claims for local democracy unfold. Metropolitanization can mean an internal reconstitution of the political sphere and its articulation with civil society: “There is a diversification of local responsibilities and activities, from the production of local services to, among other things, a proactive role in economic development” (Boudreau et al forthcoming). Among these responsibilities and activities may also be health governance at the urban scale.

There is ample scholarship on the historical relationship between municipal government and disease both historically and on recent developments, such as the reemergence of TB, the role of urban poverty and diversity vis-à-vis disease or the ravages of AIDS (see, for example, Craddock 2000; Gandy and Zumla 2003; Raphael 2004; Shah 1997). Yet despite an increased interest in the relationship of globalization and disease (McMurray and Smith 2001), there has not been much attention on the specific urban governance aspects of EIDs in a world characterized by globalizing and global cities. We will argue accordingly that in the face of new threats to the health of urban dwellers caused both by increased technological, economic, cultural and ecological connectivity (globalization) and healthcare restructuring (neoliberalization), we need a renewed focus on the city as a place of potential or real disease and inversely as a place of health. An exception to the dearth of work conceptualizing health and disease as part of the overall governance of world cities has been the research of Victor Rodwin and Michael Gusmano (2002) on public health infrastructure⁴ in New York, London, Paris and Tokyo. While not explicitly locating their work in the governance literature, Rodwin and Gusmano (2002:445) have noted: “Urban health evokes contrasting images: the city as a center of disease, poor health, and enduring poverty versus the

city as a cradle of historical public health interventions, innovative medical cures, and healthy lifestyles for the well-to-do". Studying "urban health, particularly the evolution and current organization of public health infrastructure and the health status and quality of life in these cities" and the "important links between local, subnational, and central or federal authorities" (ibid:446) sounds familiar to students of urban governance. Rodwin and Gusmano have shown the impact of global cityness on localized health governance mechanisms and systems. In their work on New York, London, Paris, and Tokyo, Rodwin and Gusmano (2002:446) have examined the impacts of "world cities—their health system and neighborhood characteristics—on two outcomes: the use of health services and health status". They found, not surprisingly perhaps, great diversity in which health is factored into the overall global city formation in these four leading global urban centres. Their ongoing studies on various aspects of the public health system in these cities reveal the connections between common structural inequalities and social problems in global cities with their health systems. This work fills a void in the research on global cities generally and specifically adds to our understanding of the impact of globally induced social inequality—ie global city formation—on health. It also has the added benefit of being able to help us differentiate between the various health governance systems in cities as diverse as London, Paris, New York and Tokyo both in their centres and peripheries. Rodwin and Gusmano have identified four distinct "onerous health risks", which global cities such as Toronto, Hong Kong and Singapore confront: the re-emergence of infectious diseases; rising inequalities among social groups; barriers in access to quality healthcare by ethnic minorities and/or the poor; and terrorism and bioterrorism (2002:449). All four themes stretch the notion of the city as a defined territorialized place. They point to cities as sites of topological relations that articulate activities and dynamics at various scales (Amin and Thrift 2002). They define, to a large degree, the agenda of global city health governance. Yet, as much as Rodwin and Gusmano's own research sheds light on the place-related aspects of health, it does not itself deal with the *network*-related aspects of health which is the aspect emphasized in the current article.

We suggest adding two important dimensions of the analysis which we believe increase our understanding of the role of urban health governance in the fight against EIDs. First, the governance of cities today is unimaginable without the modern constitution of the "bacteriological city" at its base (Gandy 2005a, forthcoming), which created managerial processes of a technological, engineering and scientific nature to guarantee public health and to lay the foundation of an economic development and demographic growth ostensibly unencumbered by the incalculable onset of disease outbreaks, which had wrecked urban populations and their economies until the twentieth

century in Europe and North America. It is on the basis of this century-old history that we now need to rethink urban health governance. A historical process of purification separated the modern city from its natural environments through a set of infrastructures and mechanized metabolic processes such as water and sewer infrastructure, garbage collection and processing, etc (Kaika 2004). The “bacteriological city” as Matthew Gandy (2004, 2005a, forthcoming) has called the city of the twentieth century, was based on an entirely human-centred purified science, which “othered” animals, externalized disease and—in extreme cases—eliminated “less-than-human” humans through technical ingenuity and government biopolitics (Foucault 1999). The bacteriological city kept the germs in check and allowed for new types of socially cohesive urban relations to take shape: “The emerging ‘bacteriological city’ involved a medley of different social, political, economic and environmental goals set within the context of a movement away from fragmentary and laissez-faire approaches to urban governance” (Gandy 2004:367). This rationalization of urban governance via technologically reliable networks was based on a universalist interest in public health advances. The currently popular “neorganicist” view of the city, of which the materialist notion of the cyborg city is a critical extension, puts a new spin on the tradition of the bacteriological city. It has been strongly associated with a transhumanist view of our urban reality, in which, as Bruce Braun observes, “‘barely human’ others (Iraqis, Rwandans, Muslims), and ‘almost human’ companions (monkeys, dogs and cats), are discussed alongside accounts of ‘inter-species’ exchange (bird flu, SARS) in which the boundaries of the human are suddenly porous and mobile” (2004:269). Such mixing clearly has consequences for governance as the carefully guarded distinctions between people and germs, materialized in the modern bacteriological city, are now being challenged unexpectedly. As a consequence, we now need to figure out collectively where to draw the kinds of regulative boundaries, which we humans may need to survive the imagined or real onslaught of the germs. And such defensiveness is most likely tied up with the regulation of bodies—human and nonhuman—that carry or are suspected to carry the disease. Technically, while not necessarily ethically, the sacrifice of millions of ducks or cattle as a reactive of preventative public health measure, is the same kind of measure as airport screening for foot and mouth disease and SARS and quarantine of suspected bodies in cities. Braun challenges us to think that it is:

possible to understand cities, for example as “posthuman” assemblages in ways that both vastly expand our understanding of the actors shaping the urban experience, and that confound our usual understandings of the space and time of urban life . . . Writing the SARS virus into a “posthuman” Toronto explodes the time–space of the city, folding

people and animals in China and Thailand into bodies on Queen Street, and revealing time to be multiple and rhythmic—the time of circulation of people and capital but also molecules (2004:273).

Lastly, disease and health have important impacts on the rearrangement of the governance of public/private space. Hospitals, quarantine, cultural spaces are fundamentally reassessed and their place in the order of public and private everyday lives and official geographies is recalibrated: what is acceptable in terms of use of space by various bodies in cities? Our argument is that while purification and biopolitics were the characteristics associated with the hygienic city of the last century, we have now entered a phase in which the potential reemergence of infectious disease at a mass scale forces us to rethink the relationship of our built environments, our institutional arrangements and our practices as urban dwellers. This has to do as much with the changing nature of cities as basing points of the global economy—to use quite a conventional concept from global cities theory—as with the kinds of reemerging diseases we now have to deal with.

Second, it is necessary to extend our view beyond the national institutional level when looking at the governance of EIDs in cities, as extra-national organizations such as the Atlanta Centers for Disease Control (CDC) and supra-national organizations such as the World Health Organization (WHO) exert significant influence on urban health governance in any country, sometimes not even mediated through national policy or institutions (Fidler 2004; Heymann 2005). In a global perspective Maarten Hajer has noted a particular “institutional void”:

[M]ore than before, solutions for pressing problems cannot be found within the boundaries of sovereign polities. As established institutional arrangements often lack the power to deliver the required or requested policy results on their own, they take part in transnational, polycentric networks of governance in which power is dispersed. The weakening of the state here goes hand in hand with the international growth of civil society, the emergence of new citizen-actors and new forms of mobilization (2003:175).

Municipal public health policy emerges in a context of larger-scale dynamics over which it has little control. Global cities and city-states such as Toronto, Hong Kong and even Singapore are burdened with responsibilities due to their rising integration into world city networks on one hand and continued lack of self-determined decision-making powers for their complex jurisdictions on the other. In addition, cities like Toronto are tied into an increasingly diverse global network of diaspora and migrant cultures at the base of their hybrid globality (Goonewardena and Kipfer 2005). The connection between the globalizing political economy and the cultural and demographic changes it brings with it are crucial to understanding the everyday practices and socio-cultural

interactions that characterize today's world and more specifically the everydayness of global cities. Toronto—like other cities in the global city network and elsewhere—has taken on far-reaching responsibilities for the settlement of immigrants. This has become a central concern of metropolitan governance now. As in past waves of immigration, cities have become the actual border points for new immigrants. It is important to remember, as Nicholas King has reminded us, that under these circumstances, “researchers and public health officials would do well to think in *transnational* as well as *international* terms. This means focusing less on the transgression of borders by individuals, and more on the formation of transnational connections between spaces and populations once thought to be disconnected or insulated from one another” (2003:53).

Of course, urban governance is just a fraction of an overall system of health governance, which in the words of Fidler (2003) now has to deal with SARS as the “first post-Westphalian pathogen”.⁵ Fidler also reminds us that as SARS represents new problems for public health and creates the need to develop diagnostics, treatments and vaccines in the context of globalization, it breaks down both the sub-national and international framework in which public health has been governed for more than 100 years. In particular, the SARS outbreak posed a threat to commonly held views of national sovereignty which allowed nation-states to deal—vertically—with their own health systems internally while negotiating (ideally) at par—horizontally—with other nation-states internationally. The experience with SARS points to an interesting dialectics: the existing system is both corroded and withstands the onslaught of the virus. Speaking about the US, Fidler states, “Federalism constructs political borders between federal and state governments. Germs no more recognize these borders than they recognize international borders. Federalism does not, however, disappear as an influence on public health governance simply because germs do not recognize the boundaries it creates” (2003:486). Fidler’s “political pathology” is pivotal for the understanding of the parameters of health governance today. He carefully charts the landscape of international and now global health governance since the nineteenth century, when the first International Sanitary Regulations were drawn up among the great powers of the world.⁶ These efforts eventually led to the creation of a world health agency, the WHO, which has operated on a set of tenuous global regulations such as the International Health Regulations, which have recently undergone redrafting to reflect the specific challenges posed by the fight against SARS (Fidler 2004). The weakness of Fidler’s otherwise sharp analysis is that it focuses only on one direction of the rescaling of international health governance towards the global level. In answering the question “how to manage borderless bugs in a borderless world”, Fidler concentrates on the role of new global institutions as well

as new non-state actors in the health field. Both, he correctly states, narrow the traditional sovereign spaces of health policymaking, even of large states such as China which—begrudgingly—ceded some of its authority to the WHO during the SARS crisis after initially lying to the world about the severity of the disease in its provinces and in the nation's capital. The WHO emerged as a stronger and more recognized player from the SARS crisis and established, for the first time and if only briefly, a global community of EID management (Fidler 2004:126; Heymann 2005; Preiser 2005). Fidler does not engage with other forms of the rescaling of the Westphalian state system such as the one Brenner has defined as “metropolitanization” (Brenner 2004). We have been arguing throughout this article that this *metropolitan* scale of governance deserves more attention in the regulation of an urban-based global reality. In fact, as the former Director General of the WHO underlined, “WHO officials every day deal with local communities and officials, around the world” (Brundtland, email interview 1 November 2005).

Rethinking urban health governance in the face of EID

Although, in the past, cities have often been directly blamed or linked to disease (Gandy 2003:18), this pattern was supposed to have been superseded by the modernity of the cities themselves. Until not too long ago, cities in the West were considered free of catastrophic disease of the traditional epidemic kind. Thomas Osborne and Nikolas Rose noted only as recently as 1999 that we could observe a shift from a focus on disease to a focus on health in the governance of cities:

The city has long been imagined in terms of sickness and health. But in recent decades a new image of the healthy city has emerged: the city as a network of living practices of well-being . . . The very idea of disease in the city has been transformed. It is no longer imagined in epidemic form—the invasion of the urban milieu by cholera or typhus putting its inhabitants at risk of infection. Rather, disease and ill health more generally, is imagined in terms of activities (diet and coronary heart disease . . .) and relationships (unsafe sex and HIV . . .). We no longer have the sick on the one side of a division, the healthy on the other—we are all, actually or potentially, sick, and health is not a state to be striven for only when one falls ill, it is something to be maintained by what we do at every moment of our everyday lives (1999:752–753).

Recent developments in the wake of SARS but also scenarios following a potential outbreak of an epidemic of either a new flu strain or a human form of the avian flu have belied the disappearance of epidemic disease from the urban experience as expressed in this quote. Not only is it not true for most cities in the world where people keep being threatened by infectious disease pandemics of all kinds, it is also not

true for western cities anymore as SARS has shown in utmost clarity. We do agree with Osborne and Rose, though, when they point out that the governmentality that regulates disease has shifted from the collective to the individual.⁷ This is a major biopolitical shift which is mostly played out on the level of urban governance. This interpretation coincides with other work on the changing nature of public health (Petersen and Lupton 1996), which argues that health and disease have been recast as individual responsibilities rather than social ones in the contemporary period [see also Sanford and Ali (2005) for an elaboration of this argument with respect to SARS]. It is exactly this—neoliberal—governmentality of individualized notions of health and sickness which existed when SARS arrived. It is in this framework that we have to understand the new thinking and agency around infectious disease in the city. It adds to the general shift in the current city from traditional notions of control in favour of a more clearly orchestrated mix of state and market interventions. Public health governance in the age of SARS has—at least potentially—moved to a bundle of strategies that fit well into the overall securitization of urban society which includes “enhanced forms of social control through a mix of architectural, ideological and intelligence-gathering processes” (Gandy 2005a:33). In addition to these developments towards a new governmentality of public health, the SARS crisis occurred in a very specific environment, which had been created by the events that followed the attacks on Washington and New York City on September 11, 2001.

The Urban Governance of the New Normal

Shortly after September 11, 2001, American Vice President Dick Cheney was reflecting on what he called a “new normalcy”, a notion that was used widely at the time to legitimize changes to long-held understandings of the social and legal makeup of American society (Lawyers Committee for Human Rights 2003). Legal scholars and practitioners as well as political pundits and activists of all stripes pondered the meaning of the “new normal” and pointed to the deterioration of basic human and civil rights in the aftermath of the September 11 and subsequent war-related events. “Living” in the “new normal” became an object of serious study (Simon 2004). A legal study examined such changes in the areas of “government openness; personal privacy; immigration; security-related detention; and the effect of US actions on human rights standards around the world” (ibid). While admitting to the necessity of some government action in the wake of 9/11, the report notes “dramatic changes in the relationship between the US government and the people it serves” and voices many grave concerns about the deterioration of civic and individual liberties. Beyond its immediate denotation with respect to the changing times after 9/11, the term has since thrived as a powerful (if

somewhat clichéd) metaphor that has been bandied about in all kinds of contexts. And despite the clearly problematic context in which “the new normal” was introduced into the political and vernacular vocabulary—or perhaps precisely because of the implications of this context—the term found a wide use in Toronto’s SARS outbreak of 2003. During the crisis politics of the day, particularly in the healthcare system itself and among the politicians involved, “the new normal” quickly became the buzzword for an overall state of emergency that gave policy actors and decision-makers license to make unprecedented changes and to call for reform of major threads of the social fabric, particularly in the area of public health. The “new normal” became the umbrella term for a situation in which thousands were put into quarantine (or if they resisted into isolation), and nurses—many of whom were infected themselves—were missing from understaffed hospitals, at a time when the overall system of healthcare delivery was admittedly about to “snap” (Boyle 2003). One of the main users of the concept was the ultra-conservative Minister of Health for Ontario, Tony Clement, who, for a moment, surfed on the popular wave of the Giuliani-brand “roll-up-your-sleeve” and “open-shirt-collar” politics of emergency, which swept him into the public spotlight in the spring of 2003. Clement became the public face of a social crisis which had repercussions for much more than health policy per se, and touched on issues involving labour relations, “race” relations, multiculturalism and much more. The “new normal” soon became the yardstick for all these types of issues. For instance, in a dispute with nurses about the lack of full-time positions and the potential change to the funding formula, Clement said on 6 May 2003: “In the ‘new normal’ those kinds of things would have to be reviewed through the prism of infection control”.⁸ Around the same time, Clement’s Ministry issued a “Backgrounder” in which the “new normal” was “characterized by high standards of practice that reflect a heightened awareness of emerging infectious diseases including SARS” and where there is mention of a “‘new normal’ environment”, in which healthcare workers are meant to operate.⁹ One set of directions for the Faculty of Medicine at the University of Toronto dated 2 June 2003, stated self-reflexively:

The term “*new normal*” has already become a bit hackneyed in the face of a second wave of SARS in Toronto. Nonetheless, it is a useful term to encapsulate the change in thinking that may be necessary if we are to achieve longer-term containment of SARS and any similar illnesses that may come at us in the future (<http://www.library.utoronto.ca/medicine/sars/SARSUpdate.pdf>; emphasis in the original).

At other scales, a Toronto family doctor, for example, used the term in a “SARS diary” she published in a professional journal and concludes, after relating her ordeals of operating under conditions of quarantine:

“I guess this is the new normal I’ve been hearing about” (Greiver 2003). Yet another voice was the Director of the reputed American Centers for Disease Control in Atlanta, Julie Geberding, who referred to diseases like SARS and monkeypox as the “new normal” while addressing a meeting of the American Medical Association in Chicago in 2003.¹⁰

The connection of the “new normal” to state protocol in its dealing with citizens in an anti-terrorist effort is neither surprising nor unintended by those who make the link. The very notion of the “new normal” signifies the intrusion of unusual measures in our everyday lives, in which leaders have to be cut slack in making decisions about political rule, when regular law and understandings of rights become irregular or *non-normal*. The invocation of legitimized state violence—be it in anti-terrorist war or in imposing quarantine on groups within an urban community—through the concept “new normal” is itself becoming an accepted part of what we consider tolerable. The “new normal” changed both the horizon of expectation, which citizens, users of the healthcare system, travellers, etc may have had and the potential range of action for governments in dealing with the crisis. It has led, at a remarkable rate, to a lowering of democratic potential in the making and practice of policy, in this case health. The rights of both patients and healthcare workers were considerably cut back during the Toronto SARS crisis. This is true precisely because the crisis transformed a group of previously relatively obscure public health officials and politicians into a group of well-known leadership personalities—Donald Low, Marcia Taylor, Doris Greenspun, Colin D’Cunha, Sheila Basrur, Tony Clement, James Young—who took care of democracy while it was dormant in the shadow of the “new normal”. This “decisionism with a populist face” was an interesting development not in tune with the *zeitgeist* of moving from government to governance. It was, however, very much in line with the notion of “performativity”,¹¹ as SARS and the crisis it brought to urban society, was “performed” by more or less media savvy actors, who were always only minutes ahead of the general public and the press as the epidemic progressed and ultimately subsided. At the other end of the spectrum of agents “performing” the SARS crisis was the ill-fated and pompous appearance of Toronto Mayor Mel Lastman on CNN at the occasion of the WHO’s travel advisory against Toronto. Lastman, ignorant of the context of global health governance in which “his” city found itself and apparently unfamiliar with the WHO, spouted out venom against the UN organization which, in his eyes, unduly interfered with Toronto’s self-governance.¹² These actors/agents were put on stage by the arrival of the virus and they played “crisis” and invented a new mode of governance as they went along. While they were by no means unprepared for the epidemic, public officials joined regular citizens in performing a disease that no one yet knew. Through the ways citizens

and experts in Toronto (and Singapore and Hong Kong and elsewhere) performed the disease, the world learned about SARS.

It seems that the “institutional void” Hajer (2003) sees emerging in this context was filled, at least on an ad-hoc basis, by rapid policy change in an emergency situation created by the potentially catastrophic threat posed by SARS. The ideological precepts of the “new normal” enabled the state to reassert itself as an active participant in public life after neoliberal reforms in Ontario had stripped its involvement in many areas of public welfare to the bare minimum and to reinsert itself with some legitimacy in a policy community which had learned to not trust a government that had de-funded public institutions such as healthcare and education at an unprecedented scale (Keil 2002). This kept the Ontario government “in the game” at a critical time—at least until such measures were challenged by the general public, healthcare workers’ associations, patients and their relatives and the press.¹³ The loss of clear boundaries for jurisdictions is, of course, a direct outgrowth of global city formation and the growing incapacity of the (local) state in particular to deal with crises visited upon an urban region by its growing internationalization (Friedmann [1986] 1995). The growing challenge presented by global city formation to the fiscal and institutional capacity of the local state is exacerbated by the processes invoked by Hajer but also by the ongoing re-scaling of political spaces in a rapidly changing world. Specifically with respect to global cities, it has been noted that conceptually and pragmatically the business of municipal politics as well as the conduct of everyday life has been both de-localized in profound ways through economic and cultural globalizations, and re-localized through the idiosyncracies of topologies, which bring together the myriad social connectivities in the microcosms of the world’s urban centres (Smith 2003).

Toronto Health Governance and the Impact of SARS¹⁴

Urban health governance is embedded in a larger system of urban governance with its vertical and horizontal ties to other levels of government and into civil society and the private sector. Urban governance in Toronto had been characterized by the city’s forced amalgamation in 1997, which initially changed the landscape of public policy significantly towards a more competitive, coercive and stratified environment. This coincided with fundamental changes to municipal politics and internal governance processes as the city has been trying to establish a sense of harmonized “good government” and civic engagement after amalgamation. The outcome of these processes was contradictory: on the one hand hardcore neoliberal reforms were rolled out and downloaded by the Tory provincial government between 1995 and 2003 and often followed through by a conservative and boosterist mayor Mel Lastman who was unapologetically the spokesperson of an

aggressive business lobby and particularly the development industry; on the other hand, progressive politicians at the municipal level with the support of a continuously active social and environmental movement sector, the public sector unions and an electorate which had not forgiven the Tories for their attack on Toronto political traditions. The result of these contradictions was that urban governance in Toronto at the time of the SARS outbreak was split as continued reform in the municipal administration, and certain “forgotten” policy areas such as food, homelessness the environment—and public health—competed with neoliberal development mantra of a business elite which began to use the newly amalgamated city as their strategic terrain for interurban competition. Inside the municipal administration, departmental restructuring and harmonization had led to insecurity, at least temporarily, as to the procedures and substance of urban policy when political cultures of suburban jurisdictions were melded with the downtown’s more progressive, democratic traditions, which had led to more sustained rights claims of more diverse populations. This progressive city/conservative suburb split in the geography of Toronto’s urban governance was challenged by the new immigration and settlement patterns, which made suburbs more diverse than the inner city and the inner city potentially less dynamic politically than the multiculturally invigorated suburbs. During the time of the SARS outbreak, this shift complicated matters significantly as the crisis was played out in geographic and social areas of the city—Scarborough and North York—which remained largely *terrae incognitae* to the old Toronto elite.

The SARS crisis intersected with business as usual in urban governance in as far as it was recast quickly from a health crisis to an economic crisis once the worst of the outbreak was over. The worry among Toronto politicians and business people over lost business in tourism and entertainment fell in line with the usual propensity of urban officials and civic leaders to heave their city above its competitors in economic development, cultural creation and tourist attraction. In this sense, the SARS crisis interfered with the strategic goals of the governing regime of Toronto and the governing institutions that had created their success. The peculiar balance of social, economic, environmental and state interests in elite and popular circles that made up the governing coalition of the urban region was threatened by SARS, which was contextualized in a series of setbacks for the region’s economic progress and civic self-esteem, the loss of the bid for the 2008 Olympic Games to Beijing in particular. The question was how these changes contextualized health governance in a time of crisis.

The Institute on Governance defines health governance in Canada as follows:

In Canada, the governance of healthcare is built on intergovernmental cooperation, reflecting a formal division of powers regarding healthcare as outlined in the Canadian Constitution and the Charter of Rights and Freedoms. In addition, governance of healthcare also takes place outside the governmental sphere. This complexity requires organizations, sectors, regions, First Nations communities and governments to forge capacities to govern (http://www.iog.ca/knowledge_areas.asp?pageID=23, accessed 1 November 2005).

The Institute proceeds to define the most pressing healthcare challenges in Canada as follows:

- Critically assessing the alignment of health governance structures and processes with best practices.
- Reframing the understanding of governance as expanded beyond an individual institution to include mutual accountabilities among providers.
- Building ways for health providers to share information and work in a complementary way.
- Strengthening boards of directors, particularly in hospital governance.
- Building stronger relationships between voluntary sector organizations and government and between the various levels of government, including First Nations (ibid).

While clearly open to the complexity and multi-scalarity of health governance, this list of priorities is also characterized by a glaring absence of any reference to the role of cities in health governance. This absence is two-fold. There is, on one hand, the traditional obscurity that municipal politics suffers in the Canadian state architecture (Keil and Young forthcoming); on the other hand, there is a more general eclipse at work here which disregards or even dismisses the role of urban governance in the management of societal matters in a post-Westphalian world. We believe, though, that urban public health authorities and their associates in local hospitals, urban non-state actors in the health field as well as workers in urban medical settings have played an important role in the detection, identification, monitoring and fight against EIDs in particular (interviews July to December 2005: Toronto Public Health official, Associate Medical Officer of Health—Toronto, University Hospital Network official, Microbiologist-In-Chief—Toronto Hospital, Ontario Nursing Association official, Public Safety and Emergency Preparedness Canada official). They have provided the core responsibilities of public health—assessment, policy development, assurance—often without support and sometimes in conflict with and in contradistinction to higher level health authorities (Rodwin and Gusmano 2002:446 fn). One analysis revealed about the

Ontario situation during SARS:

The province of Ontario was ill-prepared to deal with an infectious disease threat on such a scale. In Canada, the provision of healthcare, including public health, is a provincial responsibility. However, *the financial and operational responsibility for public health had increasingly been shifted to municipalities* such that, at the time of the SARS outbreak, funding was shared equally between the two levels of government. This funding shift created a decentralised public-health system, with the province's 37 public-health units operating quite independently of each other (Lim et al 2004:697, emphasis added).

Sanford and Ali (2005) have documented aspects of “new public health hegemony” in the response to SARS in Toronto. They specifically argue that there has been a mix of old and new measures at various scales that was pervasive and that overall a new hegemony around new epidemiological techniques, risk management, morality and security took shape. Extending this work to the specific context of *urban* governance, a number of preliminary observations can now be made in order to characterize the urban health governance challenges identified in Toronto during and after the SARS outbreaks of 2003. The urban health governance system experienced a very specific set of pressures, which spoke to the kinds of fundamental decisions that have to be made by urban-scaled and municipal authorities in a moment of epidemic disease. Affonso, Andrews and Jeffs (2004:573–574) have perceptively identified three sets of paradoxes that led to three sets of dilemmas in the governance of the SARS outbreak. These paradoxes/dilemmas were, first, that healthcare workers became sources of transmission and active sustainers of the SARS case matrix (leading to the dilemma to be forced to decide whose safety gets priority: patients or caregivers?). Second, hospitals were sources of SARS infection in the community, breaking down the boundaries of medical care and community in threatening ways (leading to the question of how far do providers of healthcare have to go to provide safe spaces?). Third, a culturally and ethnically diverse city may be particularly vulnerable to infectious diseases (prompting the question about the relationship of civil liberties and disease control). In terms of urban governance, these three couples of paradoxes and dilemmas denote spatio-institutional uncertainties of a new kind, which challenge traditional modes of integration and regulation of economic institutions (labour markets/work places), specialized functional spaces (hospitals), public institutions (public health agencies), codified private behaviours (patient versus citizen rights), etc. In an urban governance model, questions need to be directed at the particular ways through which state action (public health, security, etc), private sector involvement (providers of masks, medical equipment, drugs, etc.) and civic organizations (ethnic initiatives against racism, protection of workers' rights, etc)

and individual civil rights claims (patients, quarantined individuals, travellers, etc) are coordinated by whom, at what scale and with what procedural democratic means. Affonso, Andrews and Jeffs (2004) make a number of incisive and plausible recommendations as to how to improve health governance in future outbreaks of the kind endured in 2003 which centre around patient safety and workforce safety, spatial profiling and risk assessment, as well as community mobilization (2004: 574–577).

It is important to note in the context of the question of urban governance before us that each of these intended measures would have a tangible impact on the day-to-day business of governing cities through democratic political rather than managerial–administrative processes at the municipal level. The core dilemmas these processes would face in the reality of current Canadian municipalism is first the lack of autonomy local agencies have in the face of an unreformed federalism, which sees cities (and their institutions) as mere units of the administrative state (of the province and Canada) and not as political decision-makers on their own terms; and second the tremendous weakening of lower state and governance structures—often despite rhetorical statements to the contrary on the effect of devolution and subsidiarity—in the face of the globalization and neoliberalization of the Canadian state, including the increasing porosity towards supra-national institutions such as the WHO.

We have some evidence on how the local state institutions in Toronto themselves saw the crisis and what lessons they suggested to draw from it. The former provincial medical officer of health, Colin D’Cunha¹⁵ (2004), detailed the various lessons learned from the outbreak, mostly through the lens of health reporting. The provincial scale is extremely important in the Canadian system where municipalities are dependent on upper level policy frameworks and financing without much autonomy for local agencies and institutions. Urban governance is severely constricted and clearly defined by this situation. While the municipal state may also be the most politicized of the three levels of government, it remains under the tight supervision of the province in particular and while state expenditures have risen consistently since the 1950s in the federal and provincial governments, municipal funds have not kept pace with the demands placed on them through decades of downloading and devolution (Villeneuve and Séguin, 2000). D’Cunha, whose provincial agency was responsible for 37 local health units in Ontario, notes in particular that the Reportable Disease Information System in place when SARS hit, had been introduced in the 1980s. A new system of reporting, the Integrated Public Health Information System (IPHIS), although available since early in the century, was only to be implemented in the spring of 2003 and was further delayed through SARS. The provincial level system of surveillance was tied in with the Global Public Health

Intelligence Network (GPHIN). The provincial *Health Protection and Promotion Act* (HPPA) makes mandatory disease reporting and control. It was amended after the SARS crisis to empower the province to facilitate isolation of infected individuals (D’Cunha 2004). D’Cunha’s office was also left in dire straits in the wake of serious de-funding of public health institutions at the provincial level under a Tory government after 1995. The provincial health authority appeared very much like an empty shell which had coordinating functions of local authorities but could not muster the resources to do a good job giving direction and provide credible leadership to municipal and regional agencies (interview, Associate Medical Officer of Health—Toronto, October 2005).

In the context of this legal and institutional framework, local-scale health agencies do their work.¹⁶ Sheila Basrur, the former municipal officer of health, and co-authors have noted that the main roles of Toronto public health during the outbreak were case investigation and management, identification and quarantine of contacts, disease surveillance and reporting, health risk assessment and infection control advice to health institutions and other community settings (Basrur et al 2004:22). The SARS crisis posed a significant stress on the already severely compromised public health system of Toronto as other public health services were cut or reduced to “essential services only” (ibid:23–24). The kinds of measures under the responsibility of the municipal public health hegemony reflect the temporally layered and overlapping traditions stemming from the “bacteriological city”, updated and redefined through more recent developments. The point to note in this respect is the often confusing unevenness in measures from various periods, phases, and moments of urban governance, which were haphazardly re-grouped into a recombinant mix of place-specific sets of trials and errors. While the coercive and enabling qualities of an existing municipal public health system were tested daily with unexpected twists in the proliferation of the disease, a new administrative reality emerged in the shadow of the successes and failures of an iterative policy process. Cases of temporal unevenness were, for example, the deployment of quarantine and isolation orders for the first time in 50 years (with no living administrative memory of and hence no experiential knowledge with such measures in the system) and the much younger (but failing) 14-year-old provincially authorized surveillance system (which had not kept pace with both technological advances and procedural necessities that had occurred since its inception) (Basrur et al 2004). The unevenness here related in both cases to the fact that two measures at two ends of a developmental scale in public health measures—the rather traditional and rather blunt tool of the quarantine, and the biopolitical, yet informationalized surveillance—were potentially at odds with the constituencies and clientele they

were meant to protect (and whose general rights sensibilities were a far cry from the mid-twentieth century)¹⁷ and, in the case of the failed surveillance, certainly not up to the challenge that the SARS outbreak posed.

One influential way to understand the local state is to see it as a sphere of influence of both the state and civil society (Kirby 1993; Magnusson 1996). Civil society is dramatically redefined in the context of the “new normal”. In the immediate crisis in the spring of 2003, it became rapidly clear that the “new normal” was not just a rewriting of a few hospital protocols and ministry directives. In true fashion of creating a new “governmentality” through new “technologies of power” in the Foucauldian sense (Osborne and Rose 1999), the “new normal” became a new standard of societal interaction overall, accepted and even disseminated by the “normalized” everyday actions of urban residents, and the yardstick of urban governance. As we are writing this, Toronto is going through Emergency Preparedness Week, which calls on everyone to do their part in putting obstacles in the way of harm. The event organizers are clear that they expect citizens to do their part when taking in exhibits under “the theme ‘What are your reasons for being prepared?’ The City’s exhibits will help Toronto residents increase their awareness of emergency-preparedness issues and answer this question for themselves. Residents will have the chance to speak with representatives from the City’s co-ordinated emergency response teams, view emergency equipment, and pick up important personal emergency preparedness literature” (<http://www.toronto.ca/wes/techservices/oem/index.htm>, accessed 8 May 2007). While civic duty is part of the overall deal, awareness of the possible pitfalls of running a society on an emergency mindset are also part of the public debate.

Conclusion

Gro Harlem Brundtland’s powerful statement that “with globalization, a single microbial sea washes all of human kind” (quoted in Harris and Seid 2004b:13) stands as a starting point of our considerations here. Like Brundtland, who was the Director General of the WHO during the SARS crisis, “hundreds of thousands of men and women around the world devote their working lives and intellectual creativity to protecting our health” (Markel 2004:210). That they do this in a wide variety of institutions—state and non-state; private sector and civil society based—and that they are crossing boundaries of disciplines and professional practice all the time, is an important insight: the crisis of the nation-state-based system does not lead to a simple replacement of the international by an elusive global system of health governance. Instead, it is the conviction that undergirds this article that certain re-territorializations are key to the reworking of health governance globally. Leading science

journalist Laurie Garrett wrote in her prescient *Betrayal of Public Trust* (2000:567) that “[s]afety . . . is as much a local as international issue. In public health terms every city is a ‘sister city’ with every other metropolis on earth”. Particularly “metropolitanization” is of great consequence as urban areas have been in the centre of re-emerging diseases such as SARS and TB. On the basis of evidence from the 2003 SARS outbreak in Toronto, Canada, we have argued in this article that more attention needs to be paid to the changing relationships of urban governance and (re-)emerging infectious disease. Towards that end, we specifically looked at two dimensions of urban governance during the SARS crisis. First, the way the legacy of the “bacteriological city” was reinterpreted in the SARS crisis; second, the way in which the local health governance was embedded in a “post-Westphalian” order of health governance. Through reading these two dimensions against one another, we have discussed how urban governance—under potentially lasting conditions of the “new normal”—must face the new (or reemerging) challenge of dealing with infectious disease and that global health governance may be better off by taking the possibilities that lie in metropolitan governance more seriously.

The Toronto case study has revealed a rich casebook of evidence on how state institutions at various scales from the global to the local—in constant interaction with civil society and economic actors—have shaped a new *modus operandi* in how to deal with infectious disease threats in a globalizing environment. Not only have cities played a major role as sites and conduits of disease, they have also picked up their share of participating in new forms of governance that brings the (local) state back in. Having said that, however, we also showed that both concepts—city and state—are becoming perforated as the “institutional void” around emerging infectious disease corrodes firm boundaries between jurisdictional responsibilities of territorial states and city regions. While SARS pricked the skin of the global city system and showed the relative permeability of the Westphalian nation-state order by germs, it reconfirmed a certain rigidity of borders (both external and internal) for human mobility. As global health governance made airports biopolitical switching stations and public health officials reverted to quarantine and other measures of sequestration, the state reaffirmed its power in no uncertain terms. As in the early days of the bacteriological city, when municipal administrations created a physical and social infrastructure of hygiene in the struggle against epidemics, urban governance gets assigned new responsibilities ranging from flu preparedness to surveillance once again. But the city is not what it used to be. In an age of heightened urban unboundedness our image of cities is recast “as nodes that gather flow and juxtapose diversity, as places of overlapping—but not necessarily connected—relational networks, as perforated entities with connections that stretch far back in time and

space and resulting from all of this, as spatial formations of continuously changing composition, character and reach” (Amin 2004:34). The new politics of place that Amin sees on the horizon in this new world of perforated urban spaces now also has to take into account the politics of infectious disease we have discussed in this article.

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Endnotes

¹ SARS is caused by a coronavirus, which is assumed to have moved through zoonotic infection from civet cats in southern China to rural and urban human populations there, and subsequently to urban populations in several large, globalizing cities around the world, with Beijing, Guangzhou, Hong Kong, Singapore and Toronto among the ones that were affected most. In the Canadian metropolis Toronto SARS claimed 44 lives in two consecutive outbreaks, as 213 people were confirmed infected cases, and thousands were quarantined. The economic fallout of the outbreak was tremendous as entire economic sectors—tourism, film, etc—suffered huge losses from which they have just begun to recover two years later (Abraham 2004; Ali and Keil 2006; Fidler 2004; McLean et al 2005).

² We have discussed these connections in greater detail in Keil and Ali (2006) where we have brought Foucault’s work to bear on an analysis of racialization of the SARS outbreak in Toronto; see also Sarasin (forthcoming) on this subject.

³ This dialectics is different from but related to the one that Gandy refers to when he points out the “devastating disparities between the mobility of capital and labour that condemn much of humanity to economic serfdom” which exist in the shadow of the “connections, networks and flows” which some see as characteristic of our current society (Gandy 2005a:32–33).

⁴ Defined as “the capacity of local officials to perform the core functions of public health”: assessment, policy development, assurance (Rodwin and Gusmano 2002:446 fn)

⁵ “‘Westphalian’ refers to the governance framework that defined international public health activities from the mid-nineteenth century” based on the political logic of sovereign nation-states that had come into existence after the 30 years war (Fidler 2003:485–486).

⁶ We are grateful to one of the reviewers who correctly pointed out that concentrations of disease in pre-industrial port cities had already led to internationally agreed-upon practices of disease control such as quarantine. We have reviewed this history in Ali and Keil (forthcoming).

⁷ In Canada, the healthcare system has long been seen as a major area of neoliberalization. We have seen the privatization of healthcare delivery that has potentially damaging effects on the model of social solidarity which underlies that country’s medicare system. At the demand end of the neoliberalization and privatization of healthcare, individuals are now more likely to be held responsible for their health and to pay for services needed to address health issues. There is a large critical literature on this in the public domain, of which these are good examples: “Canada needs a public health care system” (*Canadian Dimension* 30 August 2005) and Gindin et al (2005).

⁸ http://www.ctv.ca/servlet/ArticleNews/print?brand=generic&archive=CTVNews&date=20030506&slug=clement_sars_030506&subhub=PrintStory&articleURL=http%3A//www.ctv.ca/servlet/ArticleNews/story/CTVNews/1052243842695_164%3Fs_name%3D%26no_ads%3D, accessed 25 February 2004.

⁹ http://www.health.gov.on.ca/english/providers/program/pubhealth/sars/docs/new_normal/dir_bg077_051803.pdf, accessed 25 February 2004). Such measures were, for example, publicized widely on the website of the University Health Network, <http://www.uhn.ca/home/sars/>.

¹⁰ CDC director warns SARS, monkeypox are the “new normal”, reported on WANE-TV, <http://www.wane.com/Global/story.asp?S=1326536>, accessed 25 February 2004. She also was paraphrased as saying that “world travel has become common” that “anti-terrorism efforts have helped public health officials prepare for the infectious disease threat” and called “SARS a very sobering reminder of the global community people share”. Geberding made similar comments on CBS Television’s *Early Show* on 17 June 2003, http://www.cbsnews.com/stories/2003/06/17/earlyshow/health/health_news/main558986.shtml, accessed 25 February 2004.

¹¹ “Performativity” is inspired by the definition of “performance/name of action” proposed by Bruno Latour (1999:308), meaning that an “actor does not yet have an essence. It is defined only as a list of effects—or performances—in a laboratory. Only later does one deduce from these performances a competence, that is, a substance that explains why the actor behaves as it does”.

¹² Mayor Lastman was interviewed on CNN by Aaron Brown on 24 April 2003 and displayed stunning ignorance of the WHO, its purpose and powers (*The Globe and Mail* 2003:A8).

¹³ A similar chain of events occurred when the Ontario government, after making much noise about privatizing electricity supply and provision, stepped into the blackout crisis of 14 August 2003. After having lost all credibility earlier that year in questions of electricity, the ensuing crisis mode allowed Premier Ernie Eves to appear on newspaper front pages as a strong leader who gets things done and problems under control.

¹⁴ This section is based on Boudreau et al (forthcoming), Keil (2002), Keil and Boudreau (2005), Keil and Young (forthcoming), Kipfer and Keil (2002). Our research in Toronto benefited greatly from interviews with the following experts: Bannerji A, Toronto, 8 March 2005; Booth C, Toronto, 17 January 2005; Finkelstein M, Toronto, 28 October 2005; Gardam M, Toronto, 4 November 2005; Low D, Toronto, 11 November 2005; Macdonald V, Toronto, 16 September 2005; Young J, Toronto, 9 December 2005.

¹⁵ D’Cunha was removed from the position he held during the crisis because many considered his performance during the crisis as incompetent and insufficient. He was replaced on 16 February 2004 by Sheila Basrur.

¹⁶ For a comparative Chinese perspective, see Hongyi (2004).

¹⁷ It must be noted, however, that Canadians on the whole are less civil liberties conscious than most Americans. Collective necessity and public security often trumps concerns over individual freedoms in Canada. Whether it was the *War Measures Act* during the October crisis of the 1970s when tanks rolled in Montreal or in current public opinion about stricter security measures in the “war on terrorism”, Canadian pollsters have consistently found strong support for “stability and security” (Clark 2005).

References

- Abraham T (2004) *Twenty-First Century Plague: The Story of SARS*. Baltimore: Johns Hopkins University Press
- Affonso D D, Andrews G J, Jeffs L (2004) The urban geography of SARS: Paradoxes and dilemmas in Toronto’s health care. *Journal of Advanced Nursing* 45(6):568–578
- Agamben G (1998) *Homo Sacer: Sovereign Power and Bare Life*. Translated by D Heller Roazen. Stanford: Stanford University Press

- Ali H and Keil R (2006) Global cities and the spread of infectious disease: The case of severe acute respiratory syndrome (SARS) in Toronto, Canada. *Urban Studies* 43(3): 491–509
- Ali H and Keil R (forthcoming) Contagious cities. *Geography Compass*
- Ali S H, Keil R, Major C and Van Wagner E (2006) Pandemics, place, and planning: Learning from SARS. *Plan Canada* 43(3):491–509
- Amin A (2004) Regions unbound: Towards a new politics of place. *Geografiska Annaler* 86 B(1):33–44
- Amin A and Thrift N (2002) *Cities: Reimagining the Urban*. Cambridge: Polity Press
- Bankoff G (2001) Rendering the world unsafe: “Vulnerability” as western discourse. *Disasters* 25(1):19–35
- Basrur S V, Yaffe B and Henry B (2004) SARS: A local public health perspective. *Canadian Journal of Public Health* 95(1):22–24
- Boudreau J-A, Hamel P, Jouve B and Keil R (2007) New state spaces in Canada: Metropolitanization in Montreal and Toronto compared. *Urban Geography* 28(1):30–53
- Boyle T (2003) Clement feared system may snap. *The Toronto Star* 13 June:A6
- Braun B (2004) Querying posthumanisms. *Geoforum* 35:269–273
- Brenner N (2004) *New State Spaces: Urban Governance and the Rescaling of Statehood*. Oxford: Oxford University Press
- Brenner N and Keil R (eds) (2006) *The Global Cities Reader*. London and New York: Routledge
- Brenner N and Theodore N (eds) (2002) *Spaces of Neoliberalism: Urban Restructuring in Western Europe and North America*. Oxford: Blackwell
- Brockmann D, Hufnagel L and Geisel T (2005) Dynamics of modern epidemics. In A R McLean, R M May, J Pattison and R A Weiss (eds) *SARS: A Case Study in Emerging Infections* (pp 81–91). Oxford: Oxford University Press
- Buck N, Gordon I, Harding A and Turok I (eds) (2005) *Changing Cities: Rethinking Urban Competitiveness, Cohesion and Governance*. Houndsmith and New York: Palgrave
- Canada needs a public health care system (2005) *Canadian Dimension* 30 August, <http://www.canadiandimension.com/articles/2005/08/30/46> Accessed 8 May 2007
- Clark C (2005) Canadians want strict security, poll finds. *The Globe and Mail* 11 August:A1–A5
- Craddock S (2000) *City of Plagues: Disease, Poverty and Deviance in San Francisco*. Minneapolis: University of Minnesota Press
- Davis M (2005) *The Monster at Our Door: The Global Threat of Avian Flu*. New York and London: The New Press
- D’Cunha C (2003) The SARS experience in Ontario, Canada. Presentation to Ontario SARS Commission (“Campbell Commission”), Toronto, 29 September
- D’Cunha C (2004) SARS: Lessons learned from a provincial perspective. *Canadian Journal of Public Health* 95(1):25–26
- Elwood S (2004) Partnerships and participation: Reconfiguring urban governance in different state contexts. *Urban Geography* 25(8):755–770
- Fidler D P (2003) SARS: Political pathology of the first Post-Westphalian Pathogen. *The Journal of Law, Medicine & Ethics* 31(4):485–505
- Fidler D P (2004) *SARS, Governance and the Globalization of Disease*. Hounds, Basingstoke: Palgrave Macmillan
- Foucault M (1999) *In Verteidigung der Gesellschaft*. Frankfurt: Suhrkamp
- Friedmann J ([1986] 1995) *The World City Hypothesis*. In P L Knox and P J Taylor (eds) *World Cities in a World-System* (pp. 318–331) New York: Cambridge University Press.

- Gandy M (2003) Life without germs: Contested episodes in the history of tuberculosis. In M Gandy and A Zumla (eds) *The Return of the White Plague: Global Poverty and the "New" Tuberculosis* (pp 15–38). London: Verso
- Gandy M (2004) Rethinking urban metabolism: Water, space and the modern city. *City* 8(3):363–379
- Gandy M (2005a) Cyborg urbanization: Complexity and monstrosity in the contemporary city. *International Journal of Urban and Regional Research* 29(1):26–49
- Gandy M (2005b) Deadly alliances: Death, disease and the global politics of public health. *PLoS Medicine* 2(1):e4
- Gandy M (forthcoming) The bacteriological city and its discontents. *Historical Geography*
- Gandy M and Zumla A (eds) (2003) *The Return of the White Plague: Global Poverty and the "New" Tuberculosis*. London: Verso
- Garrett L (2000) *Betrayal of Trust: The Collapse of Global Public Health*. New York: Hyperion
- Gindin S et al (2005) http://www.ctv.ca/servlet/ArticleNews/print?brand=generic&archive=CTVNews&date=20030506&slug=clement_sars_030506&subhub=PrintStory&articleURL=http%3A//www.ctv.ca/servlet/ArticleNews/story/CTVNews/1052243842695_164%3Fs_name%3D%26no_ads%3D accessed 25 February 2004.
- Gissendanner S (2003) Methodology problems in urban governance studies. *Environment and Planning C: Government and Policy* 21:663–685
- Goonewardena K and Kipfer S (2005) Spaces of difference: Reflections from Toronto on multiculturalism, bourgeois urbanism and the possibility of radical urban politics. *International Journal of Urban and Regional Research* 29(3):670–678
- Greiver M (2003) The new normal: A SARS diary. *CMAJ* 169(12):1283
- Guimera R, Mossa S, Turttschi A and Amaral L A N (2005) The worldwide air transportation network: Anomalous centrality, community structure, and cities' global roles. *Proceedings of the National Academy of Sciences* 102:7794–7799
- Haggett P (1994) Geographical aspects of the emergence of infectious diseases. *Geografiska Annaler* 76(2):91–104
- Hajer M (2003) Policy without polity? Policy analysis and the institutional void. *Policy Sciences* 36:175–195
- Harding A (2005) Background note on urban governance. European Science Foundation: "Forward look on urban science", final conference, Helsinki, 26–28 May
- Harris R L and Seid M (ed) (2004a) *Globalization and Health*. Leiden and Boston: Brill
- Harris R L and Seid M (2004b) Globalization and health: In the new millennium. In R L Harris and M Seid (ed) *Globalization and Health* (pp. 1–46). Leiden and Boston: Brill
- Heinelt H and Kübler D (eds) (2005) *Metropolitan Governance in the 21st Century: Governing Capacity, Democracy and the Dynamics of Place*. Milton Park: Routledge
- Heymann D L (2005) The international response to the outbreak of SARS, 2003. In A R McLean, R M May, J Pattison and R A Weiss (eds) *SARS: A Case Study in Emerging Infections* (pp 61–81). Oxford: Oxford University Press
- Hongyi L (2004) Local management of SARS in China. In J Wong and Z Yongnian (eds) *The SARS Epidemic: Challenges to China's Crisis Management*. New Jersey: World Scientific Publishing
- Kaika K (2004) *City of Flows: Modernity, Nature and the City*. Cultural Spaces Series. New York: Routledge.
- Kantor P and Savitch H (2005) How to study comparative urban development politics: A research note. *International Journal of Urban and Regional Research* 29(1):135–151
- Kaufmann D, Léautier F and Mastruzzi M (2005) Governance and the city: An empirical exploration into global determinants of urban performance. World Bank Policy Research Paper 3712 (September)

- Keil R (2002) "Common-sense" neoliberalism: Progressive conservative urbanism in Toronto, Canada. In N Brenner and N Theodore (eds) *Spaces of Neoliberalism: Urban Restructuring in Western Europe and North America* (pp 230–253). Oxford: Blackwell
- Keil R and Ali S H (2006) Multiculturalism, racism and infectious disease in the global city: The experience of the 2003 SARS outbreak in Toronto. *Topia: Canadian Journal of Cultural Studies* (16):23–49
- Keil R and Boudreau J-A (2005) Is there regionalism after municipal amalgamation in Toronto? *City* 9(1):9–22
- King N B (2003) Immigration, race and geographies of difference in the tuberculosis pandemic. In M Gandy and A Zumla (eds) (2003) *The Return of the White Plague: Global Poverty and the "New" Tuberculosis* (pp 39–54). London: Verso
- Kipfer S and Keil R (2002) Toronto inc.? Planning the competitive city in the new Toronto. *Antipode* 34(2):227–269
- Kirby A (2003) *Power/Resistance: Local Politics and the Chaotic State*. Bloomington: Indiana University Press
- Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L and Oberholtzer K (eds) (2004) *Learning from SARS: Preparing for the Next Disease Outbreak*. Workshop Summary. Washington: The National Academies Press
- Latour B (1999) *Pandora's Hope. Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press
- Lawyers Committee for Human Rights (2003) *Assessing the New Normal: Liberty and Security for the Post-September 11 United States*, <http://64.233.167.104/custom?cache.8YCVdZPRp2gJ.www.humanrightsfirst.org/pubs/descriptions/Assessing/Ch5.pdf+new+normal&hl=on&ct=clnk&cd=4> (last accessed 7 September 2007)
- Leavitt J W (2003) Public resistance or cooperation? A tale of smallpox in two cities. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 1(3):185–192
- Lee K (ed) (2002) *Health Impacts of Globalization: Towards Global Governance*. Houndmills Basingstoke: Palgrave Macmillan
- LeGales P (2002) *European Cities: Social Conflicts and Governance*. Oxford: Oxford University Press
- Lim S, Closson T, Howard G and Gardam M (2004) Collateral damage: The unforeseen effects of emergency outbreak policies. *The Lancet Infectious Diseases* 4:697–703
- Magnusson W (1996) *The Search for Political Space*. Toronto: University of Toronto Press
- Malizia E E (2006) Planning and public health: Research options for an emerging field. *Journal of Planning Education and Research* 25:428–432
- Markel H (2004) *When Germs Travel*. New York: Pantheon Books
- Matthew R A and McDonald B (2006) Cities under siege: Urban planning and the threat of infectious disease. *Journal of the American Planning Association* 72(1):109–117
- Mayor Lastman (2003) SARS according to Mel. *The Globe and Mail* 26 April 2003:A8
- McLean A R, May R M, Pattison J and Weiss R A (2005) *SARS: A Case Study in Emerging Infections*. Oxford: Oxford University Press
- McMurray C and Smith R (2001) *Diseases of Globalization: Socioeconomic Transitions and Health*. London and Sterling, VA: Earthscan
- Osborne T and Rose N (1999) Governing cities: Notes on the spatialisation of virtue. *Environment and Planning D: Society and Space* 17(6):737–760
- Patz J A, Daszak P, Tabor G M, Aguirre A A, Pearl M, Epstein J, Wolfe N D, Kilpatrick A M, Foutopoulos J, Molyneux D, Bradley D J and Members of the Working Group on Land Use Change and Disease Emergence (2004) Unhealthy landscapes: Policy recommendations on land use change and infectious disease emergence. *Environmental Health Perspectives* 112(10):1092–1098

- Pennington H (2003) Too much fuss? Hugh Pennington on the SARS virus. *London Review of Books* 5 June:30–32
- Petersen A R and Lupton D (1996) *The New Public Health: Health and Self in the Age of Risk*. Thousand Oaks: Sage
- Pierre J (2005) Comparative urban governance: Uncovering complex causalities. *Urban Affairs Review* 40(4):446–462
- Preiser W (2005) Presentation at conference “Invisible Enemies”, Zurich, September
- Raphael D (ed) (2004) *Social Determinants of Health. Canadian Perspectives*. Toronto: Canadian Scholars’ Press
- Rodwin V G and Gusmano M G (2002) The World Cities Project: Rationale, organization, and design for comparison of megacity health systems. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 79(4):445–463
- Rose N (1999) *Powers of Freedom: Reframing Political Thought*. New York: Cambridge University Press
- Sanford S and Ali S H (2005) The new public health hegemony: Response to severe acute respiratory syndrome (SARS) in Toronto. *Social Theory & Health* 3:105–125
- Sarasin P (forthcoming) Vapours, viruses, resistance(s). The trace of infection in the work of Michel Foucault. In S H Ali and R Keil (eds) *Networked Disease*. Oxford: Blackwell
- Sassen S (2002) *The Global City: New York, London, Tokyo*. 2nd ed. Princeton, NJ: Princeton University Press
- Scott A J (ed) (2001) *Global City-regions*. New York: Oxford University Press
- Sellers J M (2005) Re-placing the nation: An agenda for comparative urban politics. *Urban Affairs Review* 40(4):419–445
- Shah G (1997) *Public Health and Urban Development: The Plague in Surat*. New Delhi: Sage
- Simon N (2004) Living in the “new normal”. *Journal of Emergency Management* 2(2):41–46
- Smith R G (2003) World city topologies. *Progress in Human Geography* 27(5):561–582
- Stone C N (2005) Looking back to look forward: Reflections on urban regime analysis. *Urban Affairs Review* 40(3):309–341
- Taylor P J (2004) *World City Network: A Global Urban Analysis*. London and New York: Routledge
- Villeneuve P and Seguin A-M (2000) Power and decision-making in the city: Political perspectives. In T Bunting and P Filion (eds) *Canadian Cities in Transition* (pp 544–564). 2nd ed. Oxford and New York: Oxford University Press.
- Whiteford L M and Manderson L (eds) (2000) *Global Health Policy, Local Realities: The Fallacy of the Level Playing Field*. Boulder and London: Lynne Rienner Publishers