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Intra-metropolitan health disparities in Canada: Studying how and why globalization matters, and what to do about it

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1. Introduction

This paper describes the background and offers a provisional conceptual framework for an innovative transdisciplinary research initiative designed to identify and anticipate the effects of globalization on health and the social determinants of health (SDH) in Canada's three largest metropolitan areas: Toronto, Montréal and Vancouver.² These areas account for one third of Canada's population, and are growing much more rapidly than the country as a whole, partly because they receive ~ 80 percent of the country's recent immigrants (Good, 2005). Our research program is distinctive in several ways. First, it focuses on social determinants of health (SDH) in the context of urban/metropolitan systems and health, which provide "mosaics of risk

¹ Although this paper has only one identified author (because of time pressures surrounding its preparation), it reflects an valuable ongoing collaboration with a large number of leading Canadian researchers in the Globalization and the Health of Canadians project (principal investigator: Ronald Labonté). They are not identified here because they have not had a chance to comment on this text, and to shield them from blame for the errors and omissions that it no doubt contains. Comments on an earlier draft by Kirsten Stoebenau were extremely helpful. For updates on our work, go to http://www.globalhealthequity.ca/projects/proj_health_cnds/index.shtml.

² Census Metropolitan Areas (CMAs) are units used by the national statistical agency, Statistics Canada, for aggregating data from large numbers of smaller units known as census tracts, which are the basic units for organizing census data for urban and rural areas alike. CMAs include numerous municipalities as well as substantial rural areas of very low population density; some of these municipalities are mid-sized cities in their own right. The city of Mississauga (west of downtown Toronto and with the largest of several suburban downtowns that have developed within the Toronto CMA), for example, had a population of 668,000 in 2006, making it Ontario's third largest city, behind only Toronto itself and Ottawa. Conversely, the Toronto CMA does not include some cities that arguably should be considered part of the Toronto metropolitan system – for example, Burlington and Oshawa -- because substantial numbers of people commute from them to jobs in the Toronto CMA and because they are part of a single metropolitan land and housing market. A larger planning region with a total population of 5.5 million, the Greater Toronto Area (or GTA), consists of the City of Toronto (formerly Metropolitan Toronto) and the surrounding regional municipalities of Peel, York, Halton and Durham; these include the previously mentioned cities and a number of others.

and protection” (Fitzpatrick & LaGory, 2003) that cannot be reduced to a few variables or statistical relations. Second, it identifies globalization as the contextual element of primary interest. Third, our research program is future-oriented and emphasizes policy-relevance: we will generate a heightened understanding of how the health consequences of globalization are likely to play out, and the range of possible policy influences, notably by way of constructing scenarios of intra-metropolitan social and economic conditions and health disparities in the year 2025.

The paper is written both for an external audience (participants in the Mapping Global Inequalities conference, from whom comment is actively invited but who should take into account the tentative nature of many observations made here) and to stimulate discussion among members of the research team. The structure of the paper is follows. Section 2 presents an overview of the concept of social determinants of health, with specific reference to metropolitan areas and questions of place. Section 3, the core of the paper, describes key channels of influence leading from globalization to health outcomes and social determinants of health, with specific reference to the Canadian metropolitan context but with examples drawn from elsewhere as relevant. Section 4, which is more exploratory, describes and invites comment about mapping and scenario construction as ways of studying globalization and metropolitan health and, perhaps more importantly, as vehicles for knowledge transfer and assessment of future policy directions.

2. Social determinants of health

Social determinants of health, broadly stated, are conditions in which people live and work that affect their opportunities to lead healthy lives. Beyond this, the concept has neither an authoritative definition nor a clear genealogy. Although roots can be found *inter alia* in the work of Virchow, nineteenth-century English sanitary reformers, and Bertolt Brecht,³ one of the most widely cited contemporary sources is Evans and Stoddart’s (1990) analysis of how and why access to health care is only one influence, among many, on the health of populations in a given society. The implication was and is that at some level of health care expenditure, societies may actually getting less return by concentrating on health care rather than on those factors associated with exposure to the causes of illness, since “the expansion of health care draws resources away from other uses which may also have health effects” (p. 1360) -- an observation that was consistent with the neoliberal turn in North American political discourse then and now, although

³ In “A Worker’s Speech to a Doctor” (1938), Brecht wrote: “The pain in our shoulder comes / You say, from the damp; and this is also the reason / For the stain on the wall of our flat. / So tell us: / Where does the damp come from? // Too much work and too little food / Make us feeble and thin; / Your prescription says: / Put on more weight. / You might as well tell a bulrush / Not to get wet.”

the consistency was not at all intended by the authors.⁴ Subsequently, SDH have become the focus of increased policy attention, at least at the level of rhetoric. For example, in 2005 the World Health Organization (WHO) established a multinational Commission on Social Determinants of Health, and in 2006 the theme of Finland's presidency of the European Union was "Health in all Policies" (Ståhl et al., eds., 2006), reflecting an understanding that policies adopted by departments or agencies of government with no institutional connection to health will may have important health consequences. That understanding is indispensable to any effort to take SDH seriously in framing public policy.

From an analytical or research design perspective, a more immediate problem is the lack of an authoritative list or inventory of social determinants of health. The European Office of the World Health Organization (Wilkinson & Marmot, eds., 2003), for instance, enumerates SDH under topic headings including the social gradient of (dis)advantage, early childhood environment, social exclusion, social support, work, unemployment, food and transport. Although the scope of this inventory is impressive, it mixes categories and levels of analysis. For example working conditions, unemployment and access to transport all have effects on health. At the same time, these effects are inseparable from the affected individual's or household's situation within a society. WHO Europe further confuse the issue by including stress and addiction in their list, although the former arguably constitutes a pathway through which SDH affect physiology and the latter a response to characteristics of the social environment (including not only characteristics of the household's position within what may be a rapidly changing social order but also widespread state and corporate promotion of tobacco, alcohol, and gambling). The WHO Europe list is perhaps most useful for its indirect demonstration of how a variety of superficially unconnected SDH share a connection to the way a society organizes the provision and distribution of economic resources.

Societies rich and poor alike are characterized by social or socioeconomic gradients in which most health outcomes are better (i.e. life expectancy is higher, the percentage of children who die before the age of 5 is lower, the prevalence of particular serious illnesses is lower) for those higher up the economic scale, often as defined by personal or household income quintile. The slope of the gradient may be more or less steep, depending on the society and the outcome of concern, but exceptions to the generalization are few and only highlight the pervasive applicability of the rule. A detailed description of socioeconomic gradients in Canada as of 1996, defined with reference to the proportion of households in each metropolitan census tract living below Statistics Canada's Low-Income Cutoff (LICO)⁵ and a variety of health outcomes,

⁴ Indeed, Evans has subsequently become one of the most perceptive critics of the negative distributional consequences of Canada's retreat from a commitment to universal public health insurance and to public social expenditure more generally (Evans et al., 2000; Evans, 2003; Evans, 2006).

⁵ The LICO is an income threshold below which families are presumed to devote an excessively high share of income to the necessities of food, shelter and clothing. It is adjusted for family size and (annually) for community size, but not for actual living costs in a specific area. Statistics Canada insists

is provided by Wilkins et al. (2002). One way of describing the gradient in life expectancy is that “[i]t took the poorest fifth of urban Canadians until the mid-1990s to reach the life expectancy experienced by the richest fifth 25 years earlier” (Canadian Population Health Initiative, 2004: 25). Similar gradients were evident with respect to mortality from a variety of specific conditions. In the city of Montréal, which has long published the most effectively presented Canadian data on the spatial dimensions of the social gradient, life expectancy for men in one of the 29 health districts with the highest prevalence of low income (close to 50 percent) is 13 years less than in the health district with the lowest prevalence (Agence de la santé et des services sociaux de Montréal, 2007) – comparable to the difference in national average life expectancy between Canada and El Salvador, Nicaragua or Thailand.

Social gradients can be observed not only within but also among metropolitan areas. A study of mortality among the working age (25-64) population in 528 metropolitan areas in Canada, the US, Australia, Sweden and Britain found a clear association between intra-metropolitan income inequality (as measured by median share of household income) and higher levels of mortality for the sample as a whole, and for cities in the US and Britain, the two countries with the most unequal distributions of income, but not for those in the other countries (Ross et al., 2005b). One of the implications of the study is that something other than income inequality *per se* may be operating, since the association exists even for those US metropolitan areas within which income inequality is comparable to the Canadian cities (Ross et al., 2005a: p. 220). Leaving aside how researchers’ choice of indicators and populations may substantially understate the effects of economic inequality,⁶ this finding suggests at least three explanations, not mutually exclusive. The first, which is intuitively persuasive, involves the contrast between Canada’s universal public health insurance and the fragmented and market-oriented basis for access to health care in the US; this explanation is supported by a national study showing major reductions in rich-poor differences in mortality during the 1971-1996 period (the first 25 years of national access to comprehensive public health insurance) from conditions that are most amenable to medical treatment; conversely, “there was little change in income-related disparities in mortality from causes amenable to public health interventions” (James et al., 2007). A second involves inter-country differences in the inequality of market incomes and in the operation of tax and transfer mechanisms, which historically have been more effective in compensating for inequalities in market incomes in Canada (indeed in many other high-income countries) than in the US, although it cannot be assumed that this pattern will persist in the future. The third

that it is not a ‘poverty line,’ but in much Canadian research (as here, except where noted) the terms are frequently interchanged. The before-tax LICO for 2005, the most recent year for which the figure has been published, was \$31,801 for a family of three persons in a city of >500,000 population like Montréal, Toronto or Vancouver.

⁶ Mortality is an exceptionally crude indicator of health status. In this instance, restricting the study to the working age population excludes from consideration such phenomena as high mortality among those aged <25 from homicide and accidental injuries, which may well be related to income inequality at the metropolitan level in some jurisdictions.

involves urban structure: “something about the character of the place people live ... is the key influence” (Ross et al., 2005a: 223-4).

What might the something(s) be? As background, two complementary approaches are useful here. First, Diderichsen et al. (2001) explained social disparities in health by distinguishing among the influences of social stratification, differential exposure, differential vulnerability and differential consequences (of ill health). Stratification itself may contribute to ill health (e.g. by generating stresses associated with perception of inferiority within a social hierarchy). It is probably more important as an influence on the incidence of exposures (e.g. to hazardous working conditions), vulnerabilities (e.g. to economic insecurity and its corollaries), and consequences (e.g., of illness that leads into a “medical poverty trap” because of a lack of savings, health insurance, or both).⁷ Crucially, in discussing stratification Diderichsen and colleagues identify the importance of “those central engines in society that generate and distribute power, wealth and risks” (p. 16)

Second, with specific reference to the effects of globalization Cornia et al. (2007) identify five “pathways” that lead from social conditions to changes in health outcomes: material deprivation (itself comprising nine distinct mechanisms), progress in health technology, acute psychosocial stress (e.g., resulting from loss of employment), unhealthy lifestyles,⁸ and high levels of income inequality (which have various implications for both individual well being, e.g., by way of chronic stress, and societal capacity). This inventory was developed in the first instance without spatial referents, but is nevertheless central to understanding how changing social conditions within a metropolitan area may contribute to (ill) health. The identified pathways originate from the “central engines” referred to by Diderichsen et al., but operate by way of relatively well understood physiological mechanisms. As an aside, one may think material deprivation of limited relevance to a study of high income countries, but this is not the case. For instance, a recent study found that 12% of all households in Montréal experienced food insecurity; province-wide, in census tracts that ranked in the highest (i.e. most deprived)

⁷ The term “medical poverty trap” was originated by Whitehead et al. (2001) with specific reference to developing countries, but it has application to societies as poor as Vietnam (where marketization of the domestic economy, the associated increases in income inequality and declines in access to publicly provided health services have pushed literally millions of households into poverty in some recent years) and as rich as the United States (where > 40 million people lack health insurance coverage and illness-related impoverishment is widespread, although researchers disagree about the exact figures).

⁸ A focus on lifestyles can easily lend itself to individualized and behaviourally oriented explanations and intervention designs, but inference does not necessarily follow. Thus, for instance, an expanding literature links increases in overweight and obesity in developing countries to their rapid integration into the global economy (Hawkes, 2002; Hawkes, 2005; Hawkes, 2006; Chopra & Darnton-Hill, 2004). Alcohol and tobacco billboards have been found to be concentrated in predominantly African-American areas of US cities, as have liquor stores (Kwate, 2007; Kwate et al., 2007; Kwate & Lee, 2007; Hackbarth et al., 1995; Hackbarth et al., 2001). A recent study of diabetes prevalence in Toronto (Glazier et al., eds., 2007), discussed later in the paper, identified many of the city’s low-income neighbourhoods, characterized by numerous impediments to routine physical activity, as those where diabetes was most common.

quintile on both a material and a social deprivation index developed by (Pampalon & Raymond, 2000), nearly one-quarter of all households experienced food insecurity (Dubois, 2005). Relatedly, and underscoring the importance of understanding lifestyles in context, an expanding literature describes ‘food deserts’: (usually) low-income areas where the lack of full service grocery stores combines with other access and affordability problems to compound the difficulty of eating healthily on a limited budget.⁹

At a smaller scale than that of the city or metropolitan area, numerous epidemiological studies have identified neighbourhood or area influences on health – that is, statistical associations with health outcomes that exist even after individual characteristics have been controlled for; other studies fail to find these associations. As a non-epidemiologist, I cannot assess the value of individual studies, but can make several observations. First, in many of the studies reviewed by Pickett & Pearl (2001), so-called neighbourhood measures were simply aggregates of the characteristics of individuals or households living in the neighbourhood. This is important information, and the background assumption that the aggregated characteristics of individuals or households contribute to the character of the neighbourhood in a way that may or may not be linear may well be valid, but it is no substitute for true area characteristics such as violent crime rates, accessibility of public transportation, pedestrian traffic injury rates, number of billboards advertising alcohol or outlets selling alcohol and tobacco, existence of ‘food deserts’, or – as in the case of a recent study of Montréal (Coen & Ross, 2006) -- quality of parks and other public spaces. Second, as a rule only a limited number of health outcomes or health status indicators were studied. Third, as in most other epidemiological study designs, even if the appropriate variables are identified, and geographical units of analysis defined appropriately,¹⁰ the statistical power of the study design to detect an effect at the specified, normally high, level of statistical confidence may be limited. This is a special problem in studies of neighbourhood effects because “their statistical power and findings depend on there being people within each neighbourhood who are not typical of the neighbourhood, as heterogeneity is needed to distinguish between individual level and neighbourhood effects” (Pickett & Pearl, 2001: 120; see also Stafford & Marmot, 2003: 364).

⁹ For illustrative examples see Curtis (1995); Eisenhauer (2001); Morland et al. (2006); Whelan et al. (2002); Zenk et al. (2005). Other authors have questioned the strength of the evidence for treating food deserts as a significant public health issue; see e.g. Cummins & Macintyre (2002). However, ‘negative’ findings may be influenced by definitions that pay insufficient attention to contextual issues (e.g. by looking only at mapped distances and not at travel time, transport costs or physical obstacles such as the need to cross major arterial roads). The existence and health importance of food deserts is taken very seriously by knowledgeable community-level actors engaged in health promotion (see e.g. Carter, 2004; Sloane et al., 2003).

¹⁰ On the difficulties of defining neighbourhoods for purposes of research on SDH, see Gauvin et al., (2007) – and for an alternative view that suggests the value of trying to identify ‘natural’ neighbourhoods as an alternative to simply using data at the census tract level (the level at which census data are usually presented by Statistics Canada) may be limited, see Ross et al. (2004b).

The preceding discussion is no substitute for intensive literature reviews that will need to be located, conducted and updated as our research progresses. It does demonstrate (a) clear support for the view that place matters to an understanding of SDH at the metropolitan level; (b) the need for a transdisciplinary approach to identifying and describing those effects, which (c) recognizes the limitations of biostatistical methods and the need to complement them with, e.g., residents' own descriptions of neighbourhood characteristics (Warr et al., 2007) and findings from field research in neighbourhoods characterized by high levels of poverty or social dislocation arising from large-scale economic change (Abraham, 1994; Fullilove, 2001; Bourgois, 1995; Tourigny, 2001; Robertson, 2007). These and other categories of qualitative evidence are in general widely undervalued by researchers in the health sciences. The transdisciplinary approach advocated here must, in turn, be informed by an understanding of how stratification and the cumulation of exposures and vulnerabilities (in the terms used by Diderichsen et al.) are increasingly shaped by globalization.

3. Globalization and metropolitan health: Channels of influence

Definitions of globalization are sometimes contested, especially by those safely insulated from its adverse consequences. Here globalization is defined as “a process of greater integration within the world economy through movements of goods and services, capital, technology and (to a lesser extent) labour, which lead increasingly to economic decisions being influenced by global conditions” (Jenkins, 2004: 1) – in other words, the emergence of a global marketplace. This is also the definition used by the Globalization Knowledge Network of the WHO Commission on Social Determinants of Health (Labonte et al., 2007). ‘Global’ in this context need not mean literally worldwide, since in many cases transnational economic integration operates on a regional scale. At the same time, such phenomena as the transnational reorganization of production, exemplified by the rise of China as a location for manufacturing and of Wal-Mart as a dominant actor in a variety of value chains, and the origins and consequences of financial crises made possible only by the global hypermobility of capital show that the “engines” identified by Diderichsen and colleagues now routinely operate, if not on a truly global scale, then at least across multiple national borders.

In the Globalization and World Cities (GAWC) study group hierarchy of world cities, Toronto is classified as a Beta world city, Montreal as a Gamma world city, and Vancouver as a city that shows some evidence of world city formation (Taylor et al., 2002). However, status in this or any other hierarchy of world cities does not reliably indicate the depth, pervasiveness or distinctive characteristics of globalization's impact on a metropolitan area and its residents. For example, some North American cities most severely affected by loss of manufacturing jobs as a consequence of deindustrialization, such as Philadelphia, Cleveland and Detroit, are well down in the GAWC hierarchy ... and the devastating loss of manufacturing jobs in Chicago was not causally related to its status as an Alpha world city. Conversely, the explosive recent economic

and population growth of Calgary, in the bottom tier of the hierarchy, must be understood in the context of the continentalization of North American oil and gas markets and prices that are determined by events on the global stage ... and the populations of many cities too small to figure in most discussions of world cities (*cf.* McCann, 2004 on Lexington, Kentucky) nevertheless are caught up in global economic dynamics. The point here is simply that understanding the effects of globalization on the social determinants of health requires a rigorous analysis of the dynamics of globalization, while at the same time taking care to ensure that the analysis does not drown out inferences from the data on specific metropolitan contexts. The following stylized list of influences provides a starting point.

(a) Some of globalization's most conspicuous effects involve *labour market outcomes*, such as the deindustrialization that characterized many US cities starting in the 1970s, with some losing half or more of their manufacturing jobs over a quarter-century.¹¹ Several forces have contributed to deindustrialization, most notably the interaction of technological change and expanded opportunities for production in low-wage jurisdictions, and the proportional decline of manufacturing employment is evident throughout the high-income countries (see e.g. Nickell & Bell, 1995). Here as elsewhere, Canadian researchers must not be too quick to draw parallels with US experience. Until recently, Canada was almost alone among OECD countries in *not* seeing a major decline in the importance of manufacturing employment. Indeed between 1976 and 1997, manufacturing employment the number of production workers employed in manufacturing increased by 70,000 in the Toronto "city-region" (a geographical construct very similar to, but not identical with, the CMA) and 15,000 in Vancouver (which has a very small manufacturing sector), although the numbers declined by almost 40,000 in Montréal (Vinodrai, 2001). These figures tell us nothing, of course, about earnings levels or the nature of the employment relationship. More recent reports indicate losses of manufacturing jobs in Ontario and Québec during the period 2002-2005 (Ferrao, 2006), a trend that can be expected to continue at least in the short run because of the high Canadian dollar. Indeed, in July 2007 it was reported that Canada had lost 103,000 manufacturing jobs in the past year, and the Governor of the Bank of Canada was warning that more such losses would follow and would probably be permanent (Beauchesne, 2007).

Conversely, at least in North America the collapse of demand for manufacturing workers has been accompanied by rising earnings at the top end of the income scale: the rise of the

¹¹ As illustrations: the city of Chicago lost more than a quarter million manufacturing jobs, or 46 percent of the total, between 1967 and 1982, and a further 90,000 between 1982 and 1992 (Abu-Lughod, 1999: 323-4). The city of Philadelphia lost 76.3 percent of its 257,000 manufacturing jobs, and the Philadelphia metropolitan area lost 47.7 percent of its 565,000 manufacturing jobs, between 1970 and 1997 (Hodos, 2002: 365). Figures that do not distinguish among kinds of jobs nevertheless show a similarly dramatic pattern: the number of employed residents of Detroit fell by 41 percent between 1970 and 2000, of Gary, Indiana (the home of US Steel) by 42.7 percent, and Cleveland by 37 percent (Savitch, 2003: 592).

“working rich”¹² and, more broadly if less spectacularly, the top decile of the income distribution. At the risk of greatly oversimplifying Sassen’s discussion of global cities, it is clear that one of their defining characteristics is the concentration of high-income employment in the financial industry and in information-intensive “producer services” that are central to the global coordination of production and investment (Sassen, 2001: chapters 4-5); this is also likely to be true of some ‘globalized’ sectors in other cities (e.g. financial services in Toronto). However, the professional and managerial providers of these services tend to create a parallel demand for a new class of mostly low-paid service sector workers who drive the taxis, clean the buildings¹³ and provide a variety of personal services, leading to an increasingly polarized earnings structure (Sassen, 2001: chapter 8; Sassen, 2006: chapter 6). The interaction of this dynamic with deindustrialization was captured in 1981 by the authors of an ill fated strategy for the reindustrialization of Detroit with the comment that “the family of the unemployed auto worker is not saved by employing one daughter as a file clerk at the Renaissance Center or one son as a security guard at Riverfront West,” two of the heavily subsidized centrepieces of Detroit’s early efforts at reinventing itself (Luria & Russell, 1981: 5) More recently, “[f]or every high-paying job added in the [New York] region” during the first half of the 1990s, “there have been a dozen added at the lowest service ranks” (Abu-Lughod, 1999: 292; see also Donaldson, 2000).

These phenomena, which suggest the need for a thorough review of evidence of comparable patterns in Canadian cities, are selected for special attention as two conspicuously place-specific elements of a broader pattern of rising inequality of market incomes throughout much of the industrialized and developing world (see e.g. Cornia et al., 2004), and accepted as an element of the economic future for most of the developing world by no less an authority than the World Bank (2007). In Canada, inequalities in market incomes have increased substantially since the mid-1970s (Heisz, 2007), driven partly by a precipitous drop in the market incomes of the bottom fifth of the population (in terms of income), but also by a rapid increase in incomes of high-earning households (Yalnizyan, 1998; Yalnizyan, 2007). A related trend, again widespread elsewhere as well, is the growth of non-standard or precarious employment (Burke & Shields, 2000) -- a trend that may not be reflected in household earnings statistics, but is important in terms e.g. of the stresses associated with insecure incomes, multiple job-holding, and reduced access to benefits (Lewchuk et al., 2006) as well as the increased exposure to hazardous working conditions that is strongly associated with precarious employment (Quinlan, 1999; Quinlan et al., 2001a; Quinlan et al., 2001b).

¹² A term used by Duménil & Lévy (2004). The research of Saez (2005) confirms that the recent trend in both Canada and the United States is primarily attributable to increases in wage and salary, rather than capital income.

¹³ An excellent set of comparative case studies, including one on the cleaning industry in Ontario and British Columbia (Aguiar, 2006), is provided in a special issue of the journal *Antipode* on “The Dirty Work of Neoliberalism: Cleaners in the Global Economy” (vol. 38, no. 3).

Canada's system of taxes and government transfers continues to have a substantial effect in improving the economic situation of those at the low end of the income scale (Yalnizyan, 2007). However, a recent Statistics Canada study notes a marked change in the overall redistributive effect of taxes and transfers since 1979, noting that "redistribution grew enough in the 1980s to offset 130% of the growth in family market-income inequality -- more than enough to keep after-tax income inequality stable. However, in the 1990-to-2004 period, redistribution did not grow at the same pace as market-income inequality and offset only 19% of the increase in family market-income inequality" (Heisz, 2007). At least for families raising children, the gap between the top and bottom of the income distribution after taxes and transfers is the widest in thirty years (Yalnizyan, 2007). Similar reductions in the impact of redistributive policies have been observed throughout the industrialized world (Kenworthy & Pontusson, 2005).

Although such trends are not intrinsically place-related, they have important spatial manifestations because income inequality and segregation are already important features of metropolitan life, in Canada as elsewhere. The proportion of children living below the LICO in the core cities of each CMA is substantially higher than the Canadian average: the 2001 census found that Canada-wide, 18.2 percent of children under 17 lived in low-income households. For the city of Toronto, the figure was 29.1 percent; for Montréal, 34.2 percent; and for Vancouver, 30.5 percent (Statistics Canada, 2003). Not only is low income more prevalent in cities, but also economic segregation (the concentration both of poverty and of affluence) has been increasing in Canadian metropolitan areas (Caryl Arundel and Associates, 2003; Ross et al., 2004a) as elsewhere (see e.g. Massey, 1996). In the Toronto CMA, 2001 census data show that "the rising income gap between high and low-income families was mirrored by a rising gap between high and low-income neighbourhoods. In Toronto, median family before-tax income in the poorest 10% of neighbourhoods rose 0.2% from 1980. In the richest 10%, it was up 23.3% ... This increasing difference was observed in all larger CMAs. This steady rise in the income of high-income neighbourhoods suggests a widening gap between the rich and poor that is not only seen in income polarization but also in terms of spatial polarization" (Heisz, 2006: 11). Ross (2004: 11) notes that economic segregation may affect health outcomes by way of three processes, once again not mutually exclusive: social isolation within the metropolitan area; social isolation of households within the neighbourhood; and the lack of "health-enhancing public goods" (broadly defined).¹⁴ Canadian cities do not, according to one recent analysis, yet have ghettos of a kind evident in US cities; they do, however, have concentrations of high-rise rental housing occupied by low-income households, which coincide with high proportions of visible minorities (Walks & Bourne, 2006). Another study has identified concentrations of "housing affordability stress" (defined in terms of tenant households that allocate 50 percent or more of their income to rent) in many Canadian CMAs, although in most CMAs these do not correlate strongly with high

¹⁴ These are all genuine neighbourhood characteristics, in theory amenable to both quantitative and qualitative research assessments, although the first two may defy quantitative assessment in practice because of data and financing constraints.

concentrations of other indicators of social disadvantage (Bunting et al., 2004). If current trends in incomes and the structure of metropolitan property markets continue, the crisis of housing affordability is likely to become more severe and widespread. This is one reason among many for exploring how:

(b) Globalization's actual or perceived imperatives may generate far-reaching *changes in the policy landscape*, many of which are likely to magnify (or to reduce the ability of public institutions to attenuate) increases in economic inequality associated with globalization. In the developing world, an especially striking manifestation involves constraints on social and economic policy associated with disinvestment and capital flight – the effects of which, in the words of a former Managing Director of the International Monetary Fund, can be “swift, brutal and destabilizing” (Camdessus, 1995). Mosley (2006) points out that high-income countries generally are not comparably constrained by the operations of financial markets. Globalization does, however, generate pressures from both domestic and external constituencies to restructure public policy around the vision of a “competition state,” focused on “promotion of economic activities, whether at home or abroad, which will make firms and sectors located within the territory of the state competitive in international markets” (Cerny, 2000: 136).

Canada provides numerous examples, starting with the advocacy of free trade with the United States by a strongly business-oriented Royal Commission on economic policy in 1985 (Bradford, 2000). This proposal was embraced by the newly elected Conservative government of Brian Mulroney as the Canada-US Free Trade Agreement, later expanded as the North American Free Trade Agreement (NAFTA) to include Mexico. Mulroney would later call this trade policy “part of the whole that includes the GST [Goods and Services Tax], deregulation, privatization, and a concerted effort to reduce deficits, inflation and interest rates” (Mulroney, 2001).¹⁵ Then and later, retrenchments of the welfare state that account in large measure for the reduction in redistribution identified here included a retreat by the national government from federal-provincial cost sharing and a drastic reduction in the percentage of the workforce eligible for Employment Insurance (EI) benefits;¹⁶ these were motivated both by the imperative of eliminating the fiscal deficit¹⁷ and, arguably, by a desire to increase labour market ‘flexibility’; almost certainly, they have had the latter effect.¹⁸ Equally conspicuous illustrations

¹⁵ The GST, a value-added tax on almost all products and services, replaced a higher Manufacturers Sales Tax “which, as a buried tax, was a disincentive to Canadian exports. But the GST comes off at the border, making Canadian exports that much more competitive,” as Mulroney explained.

¹⁶ Between 1993 and 2001, the percentage of unemployed workers eligible for EI benefits declined from 83 percent to 38 percent (figures cited by De Wolff, 2006).

¹⁷ Since 1995 the Canadian government has now accumulated \$54 billion more in EI premiums from workers and employers than it has paid out in benefits (Canadian Institute of Actuaries, 2007) – making this payroll tax, which is neutral in its incidence at the low end of the income scale and regressive once the maximum value of insurable earnings has been reached, a major contributor to successive national budget surpluses.

¹⁸ For a detailed account of national social policy retrenchment through the late 1990s, see Rice & Prince (2000). As illustration of the trend toward increasing labour market flexibility, it has been calculated that

of competition state policies occur at the provincial government level – especially important in Canada’s highly decentralized variant of federalism. Courchene (2001) makes a strong argument that much of the early agenda of the Conservative government in Ontario (1995-2003) was aimed at improving the competitiveness of the Toronto city-region as it integrated into the eastern North American economy in the context of continental trade liberalization. Key elements of that agenda included provincial income tax cuts, a 21-percent reduction in income support (welfare) levels along with ‘workfare’ requirements, devolution of financial responsibility for many services to municipalities, and the legalization of the 60-hour work week.¹⁹ Similar policy changes were enacted by the Liberal government in British Columbia following its election in 2001. The incidence of taxation has decreased in progressivity nationwide, as the tax burden of the highest-income households has been substantially reduced (Lee, 2007).²⁰

These are only highlights, and – as is often the case – it can be difficult to distinguish the extent to which these changes were responses to globalization from the role of support from vocal and aggressive domestic constituencies and the diffusion of neoliberal economic ideas (itself a manifestation of globalization). In terms of anticipating the future, this may also be unnecessary. One of the most durable and intractable consequences of globalization, albeit one that is difficult to assess statistically, may be the shift in political allegiances that follows from the distribution of its gains and losses (consider, as just two recent examples, the rise of the working rich and the decline of the industrial, unionized working class), undermining political constituencies for resistance and mitigative policy measures.²¹ Political allegiances, of course, also have a distinctive geography that is familiar from the phenomenon of ‘white flight’ to the suburbs (or, in economic terms, the “secession of the successful” described by Robert Reich) in the United States.

(c) Moving to more place-specific phenomena, increasing economic inequalities associated with globalization may be implicated in *changes in metropolitan land and housing markets*,

the real value of the minimum wage in all jurisdictions has eroded relative to the levels of the mid-1970s, by amounts ranging from \$0.96 in Ontario to \$2.47 in New Brunswick (Murray & Mackenzie, 2007).

¹⁹ Immediately after the defeat of the Conservatives, the law firm of Ogilvy Renault responded to the newly elected Liberal government’s cautious proposals for labour law reform that: “Putting an end to the 60-hour work week means that employers across Ontario would lose flexibility in engaging skilled staff willing to work extended hours. Depending on what regime is to replace the current 60-hour week, staffing could become a real issue. Further, employees who rely on the added income resulting from working extended hours each week may be forced to seek supplementary employment”

(<http://www.ogilvyrenault.com/en/ResourceCenter/ResourceCenterDetails.aspx?id=106&pId=29>, accessed November 15, 2007). A clearer statement of the neoliberal rationale and justification for flexibilization is hard to imagine.

²⁰ This analysis does not include the impact of several governments’ increased reliance on lottery and gambling revenues; these amount to a tax on desperation and have important distributional consequences both across the population and spatially (Gilliland & Ross, 2005)

²¹ Citing the rapid increase in Canadian income inequality and the associated concentration of wealth, Robert Evans (co-author of the 1990 article on SDH cited earlier in this paper) wonders: “If we are back to a pre-war income distribution, how much of our post-war social policies can survive?” (Evans, 2006)

which “are very effective sociospatial sorting mechanisms” (Dunn et al., 2005: 260). One element of that sorting involves gentrification’s contribution to crises in housing affordability, by way of rising prices and rents and the stimulation of conversions from rental units to luxury housing, sometimes by way of what amount to forced evictions. Establishing clear links with globalization may be difficult: certainly, the high incomes of globalization’s winners give them a clear advantage in the bidding contest for desirable urban residential locations, and more generally for the use of urban land for purposes that will yield the highest returns on investment. Thus, “[s]pace is a class issue” (Moody, 2007: 241; see also Sassen, 2001: chapter 9), and contests over urban space are linked with how globalization changes distributions of resources. Further, gentrification represents a newly important form of what Harvey has called accumulation through dispossession, as booming property markets create a ‘new class’ of real estate capitalists with a distinctive set of allegiances. In an important critique of revitalization plans for parts of downtown Vancouver, Blomley (2004) notes the powerful exclusionary dynamic associated with “a planning regime ... that encourages owners to enhance the value of their properties through acts of exclusion and policing of the urban poor” (p. 81; see also Figure 1). In Canada, housing problems arising from growing inequality of incomes have been exacerbated by the retreat of the national government and many provincial governments from providing or financing affordable housing (Bryant, 2003; Bunting et al., 2004) and, at least in Ontario, by the partial elimination of rent controls and changes to landlord-tenant law that made eviction of tenants for delayed payment of rent much easier.

Gentrification is one of several high-value land uses sought out through urban ‘revitalization’ initiatives in which cities, often with the support of senior levels of government, seek to reinvent themselves as destinations through opportunities for consumption²² such as downtown shopping malls, sports stadiums, and expensive cultural infrastructure and convention facilities. More and more of the urban environment becomes a marketed commodity. Globalization is implicated because the decline of industrial employment can lead to a quest for new sources of tax and business revenue and the establishment of new growth coalitions,²³ but also because the distinctive locational flexibility of new kinds of economic activity, reliant on a supply of ‘knowledge workers,’ has been held to mean “that the role of government will change to an attractor of people rather than an attractor of firms” (Blakeley, 2001). In other words, urban revitalization can be understood as a manifestation of the competition state. An especially striking example of the relations among gentrification, globalization, displacement and new growth strategies comes from Britain, where the Thatcher government created the London

²² Including, at least in the US context, consumption by households that have left the city for the suburbs in response to declining employment and deteriorating services, taking much of the tax base with them (Eisinger, 2000).

²³ For case studies of Detroit and Baltimore, see (Hall & Hall, 1993; Levine, 2000; Levine, 1987). Declining industrial employment is not the only driver of this process: governmental initiatives aimed at creating a competition state, like the Harris government’s ‘downloading’ of services to municipalities, can create similar pressures. Globalization is a factor in either event.

Docklands Development Corporation to bypass a local council whose “priorities were to preserve traditional land uses and activities employing the existing working-class population; LDDC, however, saw the future in terms of an international economy and was determined to attract jobs in activities serving this and to build homes for the predominantly middle-class people who would work in it” (Buck et al., 2002: 64). Levine, writing about Montréal’s experience, makes the further point that cutbacks in services that are of special importance to the poor and otherwise marginalized may result from the fiscal crisis that follows money-losing municipal “investments” in infrastructure the gains from which are privatized while the costs are socialized (Levine, 2003) The domestic attractiveness of this distinctive form of accumulation may explain why, despite Montréal’s disastrous financial experience with the 1976 Olympic games, Vancouver and the province of British Columbia are repeating the Olympic quest for 2010.

Suburbanization has a range of direct health effects,²⁴ for example in relation to physical activity, as well as potential indirect health effects related (for example) to exclusionary patterns of auto-centred transportation. One mechanism of exclusion widely cited in the US context but also of possible importance in Britain (Houston, 2005) is the ‘spatial mismatch’ of employment locations and residence that results when jobs and higher-income households move to the suburbs, as has been the pattern, while lower-income (especially African-American) households remain in core cities with limited access to mobility.²⁵ Relevance to Canada is uncertain, since at least in our study areas poverty tends to be concentrated in multiple areas not all of which are in the urban core, but as in other respects US evidence at least may raise a warning flag about the future. Another area that is intuitively important, but does not appear to have been the topic of much recent research, has to do with the gender- and class-specific stresses experienced by women in households with limited access to automobiles, who often must juggle employment, child care and other domestic responsibilities. It will therefore be important to review evidence on the extent to which globalization can be considered a past or future contributor to suburbanization in Canada, above and beyond its role in generating cost pressures and housing conversion patterns that force residents out of core cities.

(d) A further dimension of globalization’s effects, which is especially important in the context of metropolitan health, involves *migration*. The borders of high-income countries are not nearly as permeable to immigration (with the exception of highly credentialled managers and professionals and, in many jurisdictions, so-called immigrant investors) as they are to movements of goods and capital. Canada has in recent years substantially increased the number of immigrants admitted – most of whom, as noted earlier, settle in one of the country’s three major urban areas. In addition to ‘pull’ factors, Sassen argues that “the growing immiseration of

²⁴ For illustrative discussions see Ewing et al. (2006); Frumkin et al. (2004); Savitch (2003); McCarthy (2005)

²⁵ Useful overviews of the spatial mismatch hypothesis and the evidence in support of it are provided by Gobillon et al. (2007) and Blumenberg & Manville (2004).

governments and whole economies in the global South” (Sassen, 2006: 190) is a powerful ‘push factor’ contributing to the creation of “survival circuits,” both legal and illegal, in which women migrate to high-income countries, sometimes voluntarily (in the formal sense) and at other times in a context of fraud or coercion. Often these circuits terminate in global cities where, as noted earlier, an abundant demand exists for low-wage service work – as it does, more generally, in contexts characterized by concentrations of affluence (see e.g. Maher, 2003). Rieff (1993) has pointed out that ‘middle class’ Los Angeles could not exist without a largely invisible sector of Hispanic domestic workers (nannies, maids, gardeners, pool cleaners) and a provocative recent article (Flanagan, 2004) suggests that, at least with respect to child care, much the same is true of the North American professional-managerial class as a whole.

Survival circuits may be an extreme example, but they underscore that migration in the context of contemporary globalization often involves highly unequal power relations and a high degree of vulnerability for migrants. Recent immigrants are more than three times as likely as native-born Canadians to experience poverty during their first year in Canada, and more than twice as likely to experience chronic poverty (poverty during four of their first five years in Canada) as the native-born: this despite changes in immigration policy that drastically increased the educational qualification of immigrants (Picot et al., 2007). In Vancouver, between 1980 and 2000 “[v]irtually all the increase in low income in Vancouver was concentrated in the population of recent immigrants. In 2000, 37.2% of all recent immigrants were in low income (before-tax), which is more than double the proportion of 16.3% two decades earlier” (Heisz, 2006: 21). In all three of our study areas, immigrants aged 25-54 are less likely to be employed than Canadian-born residents (Heisz, 2006) and in Toronto at least, immigrants are likely to end up in precarious employment and even prepared for that option by employment and training counselors (De Wolff, 2006). For some sub-populations, economic vulnerability is even higher: in 1996, about 70 percent of the children of African immigrants in the City of Toronto lived on incomes below the LICO (Ornstein, 2000). The direct and indirect health consequences of these patterns, which can only be understood in conjunction with changes in employment opportunities and housing affordability, require thoughtful assessment.

(e) *Institutions and political choices matter (a lot)*. For purposes of analytical simplicity, the preceding discussion has either treated governments as passive responders to the context provided by globalization (in the case of their embrace of the competition state) or ignored them. In fact, political choices (by all levels of government) matter, and the influences of globalization are mediated by the way political institutions structure conflict and create or foreclose opportunities for response and resistance.

On the first point, consider the fact that the prevalence of child poverty²⁶ in Norway (like Canada a small, open, resource-rich economy) is about one-fifth the level in Canada, and one-

²⁶ Assessed using a standardized measure (household income <50 percent of the national median, adjusted for household size) developed by the Luxembourg Income Study for purposes of cross-national comparisons.

tenth the level in the United States (UNICEF, 2005), which is far less exposed to many kinds of external influence. Conversely the social and economic implosion of many US metropolitan areas must be understood with reference to three interacting sets of policy choices. Long standing “stealth urban policies” (Dreier et al., 2005) included federal subsidies for interstate highway construction, the deductibility of mortgage interest for income tax purposes, and federal mortgage subsidy programs that favoured suburban neighbourhoods (see also Jackson, 1985: 190-218). (At least the first two of these were not part of the Canadian policy context.) The national government’s retreat from an explicit urban policy under Reagan and his successors (Caraley, 1992; Caraley, 1996; Judd, 1999) magnified the impacts of deindustrialization rather than attenuating them, and intensified competition among jurisdictions for investment and local tax revenue. Further, defence procurement decisions shifted economic activity toward the south and west (“the gunbelt”) and away from the traditional industrial heartland (Markusen et al., 1991; Kirby, 1992). At the metropolitan level, an extraordinary research program has demonstrated how a policy of “planned shrinkage” of services (specifically fire protection) in New York City starting in the 1970s resulted in a housing destruction that displaced an estimated two million people within a decade, according to the authors leading (by way of poverty, economic insecurity and intra-metropolitan migration) to epidemics of substance abuse, violence, tuberculosis and HIV/AIDS – the last of which eventually diffused to the suburbs.²⁷

On the second point, consider the fact that the combination of multiple parties and a single-member plurality (SMP) electoral system means that Canada is at this writing governed by a Conservative Party that failed to elect a single member in the core cities of our three study metropolitan areas. The Conservatives hold only a minority of seats in Parliament, but their need to form coalitions is constrained by the parliamentary convention that any defeat on a vote of confidence (as determined by the governing party) will lead to a new election. Further, Canadian municipalities are in large measure creatures of the provincial governments, with great flexibility in expenditure but serious limitations in the range of revenue sources available to them and the options for regulating economic activity. The decentralized nature of Canadian federalism largely precludes overt national government intervention in municipal affairs, apart from cost-shared contributions to capital expenditure, even if the political will existed to support such intervention. (Interventions that indirectly affect life in metropolitan areas, for instance through income redistribution, are quite another matter, although the incidence of such benefits, e.g. as between cities and suburbs, would be scrutinized very closely and probably well understood by the relevant segments of the electorate.)

These observations must be kept in mind given the anticipatory orientation of our research program. An important exploration of the opportunities for innovation to protect and enhance the “social sustainability” of cities (2000), based on comparative case studies from ten cities in both the industrialized and developing world, argued not only that political institutions

²⁷ Wallace et al. (1999); Wallace & Wallace (1993a); Wallace & Wallace (1993b); Wallace, (1990) and for a popular presentation Wallace & Wallace (1998).

matter, but more specifically that *local* institutions and policy choices matter (Stren & Polèse, 2000). Although contributors were not specifically concerned with health, their conception of social sustainability fits well with a vision of the metropolitan future that would emphasize equity in access to a wide range of SDH. The key policy choices and dilemmas they identified involved (i) how to respond to the possible exclusionary effects of housing markets and, conversely, whether and where to build social housing; (ii) how to address the similarly exclusionary effects of auto-centred transport planning and the declining salience of public transportation for key political constituencies as both incomes and income inequality increase; (iii) how to address the fragmenting effects of fiscal decentralization, exemplified by the worst-case almost total reliance of US school districts on property taxes; (iv) how to choose the appropriate balance between metropolitan-scale governance and highly localized decision-making.²⁸ Against the background provided by what we know (and will learn) about globalization, this list provides a useful template for identifying the generic challenges associated with globalization and its effects on Canadian metropolitan areas. At the same time, it must be recognized that some challenges, such as mitigating or compensating for globalization's effects on the distribution of market incomes (assuming for the sake of argument that this is desired), probably could not be addressed by local or regional governments even were they given the necessary legal authority.

4. Maps, scenarios, and why they matter

“It is [the] ability *to link the territory with what comes with it* that has made maps so valuable to so many for so long” (Wood, 1992: 10). The fact that maps have not been used more extensively in the study of place and health is therefore surprising. One exception, which demonstrates their effectiveness, is a recent atlas of neighbourhood environments and socioeconomic characteristics in Toronto and their relations with diabetes and obesity, which is one of the major risk factors for type 2 diabetes (Glazier et al., eds., 2007). Using 140 neighbourhoods designated by the City of Toronto for planning purposes as the units of data aggregation, the authors found the highest prevalence of diabetes in areas with low household incomes and high proportions of visible minorities or recent immigrants. However, key influences appeared to be not only socioeconomic disadvantage but also the physical characteristics and organization of the neighbourhood, as measured using an Activity-Friendliness Index (AFI), which reflected inter alia the effect of suburbanization and auto-centredness on the possibilities for daily physical activity, and a Healthy Resources Index (HRI) that incorporated such variables as accessibility and affordability of healthy foods (the ‘food deserts’ issue). Scores on these two indices were strongly, but not uniformly, correlated with indicators of (dis)advantage, and high income

²⁸ This list is somewhat condensed from seven policy choices identified by Polèse (2000), since some of the elements in their original list are closely related.

appeared to have an independent protective effect. The extensive use of choropleth (shaded) maps, as in the Toronto diabetes atlas, makes it possible to show “what comes with the territory” in a way that is much more effective than, e.g., tables of correlations between neighbourhood characteristics and health outcomes. In particular, maps that (for instance) distinguish neighbourhoods on two dimensions, e.g. high/low unemployment and high/low diabetes prevalence, provide the basis for useful inferences about risk and protective factors. Furthermore, and more generally, the maps in this (and other similar applications) are a powerful visual representation of the spatial dimensions and cumulation of (dis)advantage for purposes of knowledge transfer.

We (like many others) are still exploring what uses can be made of maps in studying globalization and metropolitan health. One intriguing possibility is suggested by a recent Statistics Canada study of what happened to workers who lost their jobs in the high-technology industry downturn of 2001 (Frenette, 2007). Using a Longitudinal Worker File constructed from multiple administrative data sources (Employment Insurance records, earnings records generated for income tax purposes, and company-level data on industry sector that use the North American Industry Classification System), the researcher was able to compare the subsequent employment and earnings history of workers laid off in the 2001 downturn with outcomes for workers laid off in two previous years: 1992 and 1997, and with the outcomes for workers in other sectors of the economy. Because the income tax record file contains postal code information, the researcher was also able to determine whether the laid-off workers had moved to another city. If sufficient resources were available, this same attribute would appear to make it possible to map the incidence of layoffs and subsequent earnings history on a neighbourhood level, either for the entire economy or for specific sectors judged to be susceptible to the effects of globalization – potentially an innovative way of depicting the changing contours of globalization’s impact on metropolitan areas over time.

As noted, an important element of our research program is its future orientation. Scenarios for metropolitan health in our study areas in the context provided by globalization, with the year 2025 as an endpoint, constitute a key deliverable and represent a key element of the knowledge translation strategy. Scenario development is a methodology that is often misunderstood, and more widely used in Europe than in North America to address domestic or regional policy issues. It does *not* attempt to predict the future.²⁹ Rather, it seeks to inform those with a stake in the future about how a range of policy choices and exogenous events might interact. Scenarios are not intended to be ‘right,’ but to answer the question ‘what would happen if ...’ (usually within a specified time frame) in a way that is based on the best available evidence and expert opinion. Because of the need to be clear about the causal relations being posited, while recognizing the relevant uncertainties, the exercise of scenario construction is thus

²⁹ Useful methodological overviews are provided in van Notten et al. (2003); Bradfield et al. (2005); Rotmans et al. (2000)

intellectually demanding for participants. Another way of thinking about scenarios is as alternative plausible histories of the future. They can incorporate both quantitative (based on mathematical models) and qualitative dimensions, the latter usually taking the form of a narrative or story line.

Two examples may be useful. Shortly after the Soviet Union collapsed, a research team at the Cambridge Energy Research Associates (CERA) consulting firm was commissioned to assess *Russia 2010 and What it Means for the United States* (Yergin & Gustafson, 1993). The researchers developed four scenarios, each dominated by a central trend: the unwinding of the Soviet state; a powerful central government based on an alliance of financiers and industrialists with the army and policy; disintegration, either gradually into semi-autonomous regions or suddenly through a breakdown of civil order; and a market-driven economic miracle. They also identified eight “surprises” and described their implications for each of the scenarios. None of the scenarios, of course, was ‘right’: however, readers of the CERA report with the benefit of 14 years of subsequent history will find a number of the insights remarkably prescient.

On a much larger scale, the Millennium Ecosystem Assessment (MEA, final report published in 2005) was a multi-year, \$24-million UN-supported effort (involving more than 1300 natural and social scientists) to explore, on a global scale but with attention to regional impacts, the relations between human activities and ecosystem services: the ways in which the natural world makes human life and development possible.³⁰ Multiple uncertainties were therefore involved, having to do not only with how human activity affects ecosystems but also with how human beings and their institutions respond to ecological change. To organize this body of complexity, the MEA researchers developed four scenarios organized according to two dimensions: “(1) the degree to which social and political institutions become more or less connected globally or more or less disaggregated regionally and locally than they are now; and (2) the extent to which decision makers in these institutions adopt proactive vs. reactive policies and practices with respect to managing ecosystems and their relationships with societies’ needs and aspirations” (Cork et al., 2005: 14). Each scenario is organized around assumptions about the dominant approach taken to ecological sustainability, to economic policy and to social policy, as well as around a distinctive set of dominant social organizations ... and each describes distinctive patterns and distributions of improvement and deterioration in human and ecological well-being between the present and 2050, which was the chosen end-point.

We are not yet at the stage of identifying the key elements of scenarios for the future of SDH in Canada’s major metropolitan areas. However, some of the questions that it would be interesting to address include: (i) What are the implications if current trends in national and provincial policy continue more or less unchanged until 2025? (ii) If we can identify core

³⁰ The final report is downloadable, on a chapter-by-chapter basis, from <http://www.millenniumecosystemassessment.org>. For a description of the MEA’s findings at a level of detail that will suffice even for many sophisticated users, see Alcamo et al.(2005); Butler & Oluoch-Kosura (2005); Carpenter et al. (2005); Cork et al. (2005); Nelson et al. (2005); Rodriguez et al. (2005).

elements of a 'healthy cities' agenda that would address globalization's impacts on SDH, what measures are within the authority of municipal or regional governments and what would require commitment by more senior levels? (iii) What would be the consequences of SDH within our study areas if Canadian provincial or national governments were gradually to adopt standards of social provision characteristic of some Nordic countries (see e.g. Curtis & Phipps, 2004; Phipps et al., 2006) today? Conversely, (iv) in the context of expanded policy attention to cities or city-regions as contributors to innovation and economic competitiveness, are there ways in which competition state policies could actually result in improving health in metropolitan areas – and if so, who are the most likely beneficiaries? Finally, (v), former Canadian Minister of National Health and Welfare Monique Bégin recently observed that: “Today, and for the last 20 years, nobody, whatever the political party, discusses values, values like solidarity.” If public policies are ultimately reflections of the values of a particular society, or (alternatively) of the values of dominant social actors, what value shifts are implied by the policy assumptions embedded in alternative scenarios for metropolitan health?

DRAFT

Figure 1. Downtown Vancouver, 2006



Photos: T. Schrecker (The top picture shows the fortified entrance to a downtown condominium tower)

References

- Abraham, L. K. (1994). *Mama Might be Better off Dead: The Failure of Health Care in Urban America*. Chicago: University of Chicago Press.
- Abu-Lughod, J. (1999). *New York, Chicago, Los Angeles: America's Global Cities*. Minneapolis: University of Minnesota Press.
- Agence de la santé et des services sociaux de Montréal (2007). Atlas Santé Montréal. Carrefour montréalais d'information sociosanitaire (CMIS) [On-line]. Available: <http://www.cmis.mtl.rtss.qc.ca/fr/atlas/>
- Aguiar, L. L. M. (2006). Janitors and Sweatshop Citizenship in Canada. *Antipode*, 38, 440-461.
- Alcamo, J., van Vuuren, D., Ringler, C., Cramer, W., Masui, T., Alder, J. et al. (2005). Changes in Nature's Balance Sheet: Model-based Estimates of Future Worldwide Ecosystem Services. *Ecology and Society*, 10.
- Beauchesne, Eric (2007, July 13). Further job losses expected in Canada's manufacturing sector. *Vancouver Sun*.
- Blakeley, E. J. (2001). Competitive Advantage for the 21st-Century City: Can a Place-Based Approach to Economic Development Survive in a Cyberspace Age? *APA Journal*, 67, no. 2, 133-145.
- Blomley, N. (2004). *Unsettling the City: Urban Land and the Politics of Property*. New York: Routledge.
- Blumenberg, E. & Manville, M. (2004). Beyond the Spatial Mismatch: Welfare Recipients and Transportation Policy. *Journal of Planning Literature*, 19, 182-205.
- Bourgois, P. (1995). The Political Economy of Resistance and Self-Destruction in the Crack Economy: An Ethnographic Perspective. *Annals of the New York Academy of Sciences*, 749, 97-118.
- Bradfield, R., Wright, G., Burt, G., Cairns, G., & Van Der Heijden, K. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures*, 37, 795-812.
- Bradford, N. (2000). The Policy Influence of Economic Ideas. In M. Burke, C. Moore, & J. Shields (Eds.), *Restructuring and Resistance: Canadian Public Policy in an Age of Global Capitalism* (pp. 50-79). Halifax: Fernwood Publishing.
- Bryant, T. (2003, March). The current state of housing in Canada as a social determinant of health. *Policy Options*, 52-56.
- Buck, N., Gordon, I., Hall, P., Harloe, M., & Kleinman, M. (2002). *Working Capital: Life and Labour in Contemporary London*. London: Routledge.
- Bunting, T., Walks, R. A., & Filion, P. (2004). The Uneven Geography of Housing Affordability Stress in Canadian Metropolitan Areas. *Housing Studies*, 19, 361-393.
- Burke, M. & Shields, J. (2000). Tracking inequality in the new Canadian labour market. In M. Burke, C. Moore, & J. Shields (eds.), *Restructuring and Resistance: Canadian Public Policy in an Age of Global Capitalism* (pp. 98-123). Halifax: Fernwood Publishing.
- Butler, C. D. & Oluoch-Kosura, W. (2005). Linking Future Ecosystem Services and Future Human Well-being. *Ecology and Society*, 11.
- Camdessus, M. (1995). The IMF and the Challenges of Globalization-- The Fund's Evolving Approach to its Constant Mission: The Case of Mexico, address at Zurich Economics Society (95/17). Washington, DC: International Monetary Fund.

- Canadian Institute of Actuaries (2007). *A Look Back and A Way Forward: Actuarial Views on the Future of the Employment Insurance System*. Ottawa: Canadian Institute of Actuaries.
- Canadian Population Health Initiative (2004). *Improving the Health of Canadians*. Ottawa: Canadian Institute for Health Information.
- Caraley, D. (1992). Washington Abandons the Cities. *Political Science Quarterly*, 107, 1-30.
- Caraley, D. (1996). Dismantling the Federal Safety Net: Fictions versus Realities. *Political Science Quarterly*, 111, 225-258.
- Carpenter, S. R., Bennett, E. M., & Peterson, G. D. (2005). Scenarios for Ecosystem Services: An Overview. *Ecology and Society*, 11.
- Carter, M. (2004). Promoting Active and Healthy Lifestyles in the South Bronx, presentation to Time/ABC News Summit on Obesity [On-line]. Available: <http://www.time.com/time/2004/obesity/speakers/presentations/carter.pdf>
- Caryl Arundel and Associates (2003). *Falling Behind: Our Growing Income Gap*. Ottawa: Federation of Canadian Municipalities.
- Cerny, P. G. (2000). Restructuring the Political Arena: Globalization and the Paradoxes of the Competition State. In R.D.Germain (ed.), *Globalization and its Critics: Perspectives from Political Economy* (pp. 117-138). Houndmills: Macmillan.
- Chopra, M. & Darnton-Hill, I. (2004). Tobacco and obesity epidemics: not so different after all? *British Medical Journal*, 328, 1558-1560.
- Coen, S. E. & Ross, N. A. (2006). Exploring the material basis for health: Characteristics of parks in Montreal neighborhoods with contrasting health outcomes. *Health & Place*, 12, 361-371.
- Cork, S. J., Peterson, G. D., Bennett, E. M., Petschel-Held, G., & Zurek, M. (2005). Synthesis of the Storylines. *Ecology and Society*, 11.
- Cornia, G. A., Addison, T., & Kiiski, S. (2004). Income Distribution Changes and Their Impact in the Post-Second World War Period. In G.Cornia (Ed.), *Inequality, Growth, and Poverty in an Era of Liberalization and Globalization* (pp. 26-54). Oxford: Oxford University Press.
- Cornia, G. A., Rosignoli, S., & Tiberti, L. (2007). Globalisation and health: Impact pathways and recent evidence. Prepared for conference on Mapping Global Inequality, Santa Cruz, December 13-14.
- Courchene, T. J. (2001). Ontario as a North American Region-State, Toronto as a Global City-Region: Responding to the NAFTA Challenge. In A.J.Scott (ed.), *Global City-Regions: Trends, Theory, Policy* (pp. 138-190). New York: Oxford University Press.
- Cummins, S. & Macintyre, S. (2002). "Food deserts" - evidence and assumption in health policy making. *British Medical Journal*, 325, 436-438.
- Curtis, K. A. (1995). Falling Through The Safety Net: Poverty, Food Assistance And Shopping Constraints In An American City. *Urban Anthropology*, 24, 93-135.
- Curtis, L. & Phipps, S. (2004). Social transfers and the health status of mothers in Norway and Canada. *Social Science & Medicine*, 58, 2499-2507.
- De Wolff, A. (2006). Privatizing Public Employment Assistance and Precarious Employment in Toronto. In L.Vosko (ed.), *Precarious Employment: Understanding Labour Market Insecurity in Canada* (pp. 182-199). Montréal: McGill-Queen's University Press.

- Diderichsen, F., Evans, T., & Whitehead, M. (2001). The Social Basis of Disparities in Health. In M. Whitehead, T. Evans, F. Diderichsen, A. Bhuiya, & M. Wirth (eds.), *Challenging Inequities in Health: From Ethics to Action* (pp. 13-23). New York: Oxford University Press.
- Donaldson, Greg (2000, August). With Justice for All? *Wired*, no. 38 [On-line]. Available: . <http://www.fastcompany.com/magazine/38/mcalevey.html>
- Dreier, P., Mollenkopf, J., & Swanstrom, T. (2005). *Place Matters: Metropolitcs for the Twenty-first Century*. (2nd ed.) Lawrence, KS: University Press of Kansas.
- Dubois, L. (2005). Food, Nutrition, and Population Health. In J. Heymann, C. Hertzman, M. Barer & R. Evans (eds.), *Healthier Societies: From Analysis to Action* (pp. 135-172). New York: Oxford University Press.
- Duménil, G. & Lévy, D. (2004). Neoliberal Income Trends: Wealth, Class and Ownership in the USA. *New Left Review*, new series no. 30, 105-133.
- Dunn, J. R., Frohlich, K. L., Ross, N., Curtis, L. J., & Sanmartin, C. (2005). Role of Geography in Inequalities in Health and Human Development. In J. Heymann, C. Hertzman, M. Barer, & R. Evans (eds.), *Healthier Societies: From Analysis to Action* (pp. 237-265). New York: Oxford University Press.
- Eisenhauer, E. (2001). In poor health: Supermarket redlining and urban nutrition. *Geojournal*, 53, 125-133.
- Eisinger, P. (2000). The Politics of Bread and Circuses: Building the City for the Visitor Class. *Urban Affairs Review*, 35, 316-333.
- Evans, R. G. (2003). *Political Wolves and Economic Sheep: The Sustainability of Public Health Insurance in Canada* (CHSPR 03:16W). Vancouver: Centre for Health Services and Policy Research, University of British Columbia.
- Evans, R. G. (2006). From World War to Class War: The Rebound of the Rich. *Healthcare Policy / Politiques de Santé*, 2, 14-24.
- Evans, R. G., Barer, M. L., Lewis, S., Rachlis, M., & Stoddart, G. L. (2000). *Private Highway, One-Way Street: The Decline and Fall of Canadian Medicare?* (HPRU 2000:3D). Vancouver: Centre for Health Services and Policy Research, University of British Columbia.
- Evans, R. G. & Stoddart, G. L. (1990). Producing Health, Consuming Health Care. *Social Science & Medicine*, 31, 1347-1363.
- Ewing, R., Brownson, R. C., & Berrigan, D. (2006). Relationship Between Urban Sprawl and Weight of United States Youth. *American Journal of Preventive Medicine*, 31, 464-474.
- Ferrao, V. (2006, January). Recent changes in employment by industry. *Perspectives on Labour and Income*, 7.
- Fitzpatrick, K. & LaGory, M. (2003). "Placing" Health in an Urban Sociology: Cities as Mosaics of Risk and Protection. *City & Community*, 2, 33-46.
- Flanagan, Caitlin (2004, March). How Serfdom Saved the Women's Movement: Dispatches from the Nanny Wars. *Atlantic Monthly*, 293, 109-128.
- Frenette, M. (2007). *Life After the High-tech Downturn: Permanent Layoffs and Earnings Losses of Displaced Workers* (Analytical Studies Branch Research Paper Series No. 302). Ottawa: Statistics Canada.
- Frumkin, H., Frank, L., & Jackson, R. (2004). *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities*. Washington: Island Press.

- Fullilove, M. T. (2001). Root shock: The consequences of African American dispossession. *Journal of Urban Health*, 78, 72-80.
- Gauvin, L., Robitaille, É., Riva, M., McLaren, L., Dassa, C., & Potvin, L. (2007). Conceptualizing and Operationalizing Neighbourhoods. *Canadian Journal of Public Health*, 98, S18-S26.
- Gilliland, J. A. & Ross, N. A. (2005). Opportunities for video lottery terminal gambling in Montreal: an environmental analysis. *Canadian Journal of Public Health*, 96, 55-59.
- Glazier, RH, Booth, GL, Creatore, MI, and Tynan, A. (eds.) (2007) *Neighbourhood Environments and Resources for Healthy Living -- A Focus on Diabetes in Toronto: ICES Atlas*. (2007). Toronto, Institute for Clinical Evaluative Sciences. Available: http://www.ices.on.ca/webpage.cfm?site_id=1&org_id=67&morg_id=0&gsec_id=0&item_id=4406&type=atlas.
- Gobillon, L., Selod, H., & Zenou, Y. (2007). The Mechanisms of Spatial Mismatch. *Urban Studies*, 44, 2401-2428.
- Good, K. (2005). Patterns of politics in Canada's immigrant-receiving cities and suburbs: How immigrant settlement patterns shape the municipal role in multiculturalism policy. *Policy Studies*, 26, 261-289.
- Hackbarth, D. P., Schnopp-Wyatt, D., Katz, D., Williams, J., Silvestri, B., & Pflieger, M. (2001). Collaborative research and action to control the geographic placement of outdoor advertising of alcohol and tobacco products in Chicago. *Public Health Reports*, 116, 558-567.
- Hackbarth, D. P., Silvestri, B., & Cospers, W. (1995). Tobacco and Alcohol Billboards in 50 Chicago Neighborhoods: Market Segmentation to Sell Dangerous Products to the Poor. *Journal of Public Health Policy*, 16, 213-230.
- Hall, M. F. & Hall, L. M. (1993). A Growth Machine for Those Who Count. *Critical Sociology*, 20, 79-101.
- Hawkes, C. (2002). Marketing Activities of Global Soft Drink and Fast Food Companies in Emerging Markets: A Review. In *Globalization, Diets and Noncommunicable Diseases* (Geneva: World Health Organization).
- Hawkes, C. (2005). The role of foreign direct investment in the nutrition transition. *Public Health Nutrition*, 8, 357-365.
- Hawkes, C. (2006). Uneven dietary development: linking the policies and processes of globalization with the nutrition transition, obesity and diet-related chronic diseases. *Globalization and Health*, 2.
- Heisz, A. (2006). *Canada's Global Cities: Socio-economic Conditions in Montréal, Toronto and Vancouver* (Trends and Conditions in Census Metropolitan Areas No. 10). Ottawa: Statistics Canada.
- Heisz, A. (2007). *Income Inequality and Redistribution in Canada: 1976 to 2004* (Analytical Studies Branch Research Paper Series No. 298). Ottawa: Statistics Canada.
- Hodos, J. (2002). Globalization, Regionalism, and Urban Restructuring: The Case of Philadelphia. *Urban Affairs Review*, 37, 358-379.
- Houston, D. (2005). Employability, skills mismatch and spatial mismatch in metropolitan labour markets. *Urban Studies*, 42, 221-243.
- Jackson, K. T. (1985). *Crabgrass Frontier: The Suburbanization of the United States*. New York: Oxford University Press.

- James, P. D., Wilkins, R., Detsky, A. S., Tugwell, P., & Manuel, D. G. (2007). Avoidable mortality by neighbourhood income in Canada: 25 years after the establishment of universal health insurance. *Journal of Epidemiology and Community Health, 61*, 287-296.
- Jenkins, R. (2004). Globalization, production, employment and poverty: debates and evidence. *Journal of International Development, 16*, 1-12.
- Judd, D. (1999). Constructing the Tourist Bubble. In D. Judd & S. Fainstein (eds.), *The Tourist City* (pp. 35-53). New Haven: Yale University Press.
- Kenworthy, L. & Pontusson, J. (2005). Rising Inequality and the Politics of Redistribution in Affluent Countries. *Perspectives on Politics, 3*, 449-471.
- Kirby, A. (1992). The Pentagon versus the Cities? In A. Kirby (ed.), *The Pentagon and the Cities: Urban Affairs Annual Reviews, 40* (pp. 1-22). Newbury Park, CA: Sage.
- Kwate, N. & Lee, T. (2007). Ghettoizing Outdoor Advertising: Disadvantage and Ad Panel Density in Black Neighborhoods. *Journal of Urban Health, 84*, 21-31.
- Kwate, N. O. (2007). Take one down, pass it around, 98 alcohol ads on the wall: outdoor advertising in New York City's Black neighbourhoods. *International Journal of Epidemiology, 36*, 988-990.
- Kwate, N. O., Jernigan, M., & Lee, T. (2007). Prevalence, proximity and predictors of alcohol ads in Central Harlem. *Alcohol and Alcoholism, 42*, 635-640.
- Labonte, R., Blouin, C., Chopra, M., Lee, K., Packer, C., Rowson, M. et al. (2007). *Towards Health-Equitable Globalization: Rights, Regulation and Redistribution, Globalization Knowledge Network Final Report to the Commission on Social Determinants of Health* Ottawa: Institute of Population Health, University of Ottawa. Available: http://www.who.int/entity/social_determinants/resources/globalization_kn_07_2007.pdf
- Lee, M. (2007). *Eroding Tax Fairness: Tax Incidence in Canada, 1990 to 2005*. Ottawa: Canadian Centre for Policy Alternatives.
- Levine, M. V. (1987). Downtown Redevelopment as an Urban Growth Strategy: A Critical Appraisal of the Baltimore Renaissance. *Journal of Urban Affairs, 9*, 103-123.
- Levine, M. V. (2000). "A Third-World City in the First World": Social Exclusion, Racial Inequality, and Sustainable Development in Baltimore, Maryland. In M. Polèse & R. Stren (eds.), *The Social Sustainability of Cities: Diversity and the Management of Change* (pp. 123-156). Toronto: University of Toronto Press.
- Levine, M. V. (2003). Tourism-Based Redevelopment and the Fiscal Crisis of the City: The Case of Montréal. *Canadian Journal of Urban Research, 12*, 102-123.
- Lewchuk, W., De Wolff, A., King, A., & Polanyi, M. (2006). The Hidden Costs of Precarious Employment: Health and the Employment Relationship. In L. Vosko (ed.), *Precarious Employment: Understanding Labour Market Insecurity in Canada* (pp. 141-162). Montréal: McGill-Queen's University Press.
- Luria, D. & Russell, J. (1981). *Rational Reindustrialization: An Economic Development Agenda for Detroit*. Detroit: Widgetripper Press [on file with author].
- Maher, K. H. (2003). Workers and Strangers: The Household Service Economy and the Landscape of Suburban Fear. *Urban Affairs Review, 38*, 751-786.
- Markusen, A., Hall, P., Campbell, S., & Deitrick, S. (1991). *The Rise of the Gunbelt: The Military Remapping of Industrial America*. New York: Oxford University Press.

- Massey, D. S. (1996). The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-First Century. *Demography*, 334, 395-412.
- McCann, E. J. (2004). Urban political economy beyond the 'global city'. *Urban Studies*, 41, 2315-2333.
- McCarthy, M. (2005). Transport and Health. In M. Marmot & R. G. Wilkinson (eds.), *Social Determinants of Health*, 2nd ed. (pp. 131-147). New York: Oxford University Press.
- Moody, K. (2007). *From Welfare State to Real Estate: Regime Change in New York City, 1974 to the Present*. New York: New Press.
- Morland, K., Diez Roux, A. V., & Wing, S. (2006). Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study. *American Journal of Preventive Medicine*, 30, 333-339.
- Mosley, L. (2006). Constraints, Opportunities, and Information: Financial Market-Government Relations around the World. In P. Bardhan, S. Bowles, & M. Wallerstein (eds.), *Globalization and Egalitarian Redistribution* (pp. 87-119). New York and Princeton: Russell Sage Foundation and Princeton University Press.
- Murray, S. & Mackenzie, H. (2007). *Bringing Minimum Wages Above the Poverty Line*. Ottawa: Canadian Centre for Policy Alternatives.
- Nelson, G. C., Bennett, E., Berhe, A. A., Cassman, K., DeFries, R., Dietz, T. et al. (2005). Anthropogenic Drivers of Ecosystem Change: an Overview. *Ecology and Society*, 11.
- Nickell, S. & Bell, B. (1995). The collapse in demand for the unskilled and unemployment across the OECD. *Oxford Review of Economic Policy*, 11, 40-62.
- Ornstein, M. (2000). *Ethno-Racial Inequality in the City of Toronto: An Analysis of the 1996 Census*. Toronto: Access and Equity Unit, Strategic and Corporate Policy Division, Chief Administrator's Office, City of Toronto.
- Pampalon, R. & Raymond, G. (2000). A Deprivation Index for Health and Welfare Planning in Quebec. *Chronic Diseases in Canada*, 21, 104-113.
- Phipps, S. A., Burton, P. S., Osberg, L. S., & Lethbridge, L. N. (2006). Poverty and the extent of child obesity in Canada, Norway and the United States. *Obesity Reviews*, 7, 5-12.
- Pickett, K. E. & Pearl, M. (2001). Multilevel analyses of neighbourhood socioeconomic context and health outcomes: a critical review. *Journal of Epidemiology and Community Health*, 55, 111-122.
- Picot, G., Hou, F., & Coulombe, S. (2007). *Chronic Low Income and Low-income Dynamics Among Recent Immigrants* (Analytical Studies Branch Research Paper Series 294). Ottawa: Statistics Canada.
- Polèse, M. (2000). Learning from Each Other: Policy Choices and the Social Sustainability of Cities. In M. Polèse & R. Stren (eds.), *The Social Sustainability of Cities: Diversity and the Management of Change* (pp. 308-334). Toronto: University of Toronto Press.
- Polèse, M., & Stren, R. (eds.) (2000). *The Social Sustainability of Cities: Diversity and the Management of Change*. (2000). Toronto, University of Toronto Press.
- Quinlan, M. (1999). The implications of labour market restructuring in industrialized societies for occupational health and safety. *Economic and Industrial Democracy*, 20, 427-460.
- Quinlan, M., Mayhew, C., & Bohle, P. (2001a). The global expansion of precarious employment, work disorganization, and consequences for occupational health: placing the debate in a comparative historical context. *International Journal Health Services*, 31, 507-536.

- Quinlan, M., Mayhew, C., & Bohle, P. (2001b). The global expansion of precarious employment, work disorganization, and consequences for occupational health: a review of recent research. *International Journal of Health Services*, 31, 335-414.
- Rice, J. J. & Prince, M. J. (2000). *Changing Politics of Canadian Social Policy*. Toronto: University of Toronto Press.
- Rieff, D. (1993). *Los Angeles: Capital of the Third World*. London: Phoenix.
- Robertson, L. (2007). Taming Space: Drug use, HIV, and homemaking in Downtown Eastside Vancouver. *Gender, Place & Culture*, 14, 527-549.
- Rodriguez, J. P., Beard, T. D., Bennett, E. M., Cumming, G. S., Cork, S. J., Agard, J. et al. (2005). Trade-offs across Space, Time, and Ecosystem Services. *Ecology and Society*, 11.
- Ross, N. A., Houle, C., & Aye, M. (2004a). Dimensions and dynamics of residential segregation by income in urban Canada, 1991-1996. *The Canadian Geographer*, 48, 433-445.
- Ross, N., Tremblay, S., & Graham, K. (2004b). Neighbourhood influences on health in Montreal, Canada. *Social Science & Medicine*, 59, 1485-1494.
- Ross, N., Wolfson, M., Kaplan, G., Dunn, J. R., Lynch, J., & Sanmartin, C. (2005a). Income Inequality as a Determinant of Health. In J. Heymann, C. Hertzman, M. Barer & R. Evans (eds.), *Healthier Societies: From Analysis to Action* (pp. 202-236). New York: Oxford University Press.
- Ross, N. A., Dorling, D., Dunn, J. R., Henriksson, G., Glover, J., Lynch, J. et al. (2005b). Metropolitan Income Inequality and Working-Age Mortality: A Cross-Sectional Analysis Using Comparable Data from Five Countries. *Journal of Urban Health*, 82, 101-110.
- Ross, N. A. (2004). *What Have We Learned Studying Income Inequality and Population Health?* Ottawa: Canadian Institute for Health Information.
- Rotmans, J., van Asselt, M., Anastasi, C., Greeuw, S., Mellors, J., Peters, S. et al. (2000). Visions for a sustainable Europe. *Futures*, 32, 809-831.
- Saez, E. (2005). Top Incomes in the United States and Canada over the Twentieth Century. *Journal of the European Economic Association*, 3, 402-411.
- Sassen, S. (2001). *The Global City: New York, London, Tokyo* (2nd ed.) Princeton: Princeton University Press.
- Sassen, S. (2006). *Cities in a World Economy* (3rd ed.) Thousand Oaks, CA: Pine Forge Press.
- Savitch, H. (2003). How Suburban Sprawl Shapes Human Well-Being. *Journal of Urban Health*, 80, 590-607.
- Sloane, D. C., Diamant, A. L., Lewis, L. V. B., Yancey, A. K., Flynn, G., Nascimento, L. M. et al. (2003). Improving the Nutritional Resource Environment for Healthy Living Through Community-Based Participatory Research. *Journal of General Internal Medicine*, 18, 568-575.
- Stafford, M. & Marmot, M. (2003). Neighbourhood deprivation and health: does it affect us all equally? *International Journal of Epidemiology*, 32, 357-366.
- Ståhl, T., Wismar, M., Ollila, E., Lahtinen, E., & Leppo, K. (eds.) (2006) *Health in All Policies: Prospects and Potentials*. Helsinki, Ministry of Social Affairs and Health. Available: http://ec.europa.eu/health/ph_information/documents/health_in_all_policies.pdf.
- Statistics Canada (2003). Children aged 17 and under living in low-income economic families (2000 income) as a proportion of all children aged 17 and under living in economic families, Canada,

- provinces, territories, health regions and peer groups, 2001. Ottawa: Statistics Canada [On-line]. Available: <http://www.statcan.ca/english/freepub/82-221-XIE/2005001/nonmed/living3.htm>
- Stren, R. & Polèse, M. (2000). Understanding the New Sociocultural Dynamics of Cities: Comparative Urban Policy in a Global Context. In M. Polèse & R. Stren (eds.), *The Social Sustainability of Cities: Diversity and the Management of Change* (pp. 3-38). Toronto: University of Toronto Press.
- Taylor, P. J., Walker, D. R. F., & Beaverstock, J. V. (2002). Firms and their Global Service Networks. In S. Sassen (ed.), *Global Networks, Linked Cities* (pp. 93-115). London: Routledge.
- Tourigny, S. C. (2001). Some new killing trick: Welfare reform and drug markets in a US urban ghetto. *Social Justice*, 28, 49-71.
- UNICEF (2005). Child Poverty in Rich Countries 2005. Florence: UNICEF Innocenti Research Centre. Available: <http://www.unicef.org/brazil/repcard6e.pdf>
- van Notten, P. W. F., Rotmans, J., van Asselt, M. B. A., & Rothman, D. S. (2003). An updated scenario typology. *Futures*, 35, 423-443.
- Vinodrai, T. (2001). *A Tale of Three Cities: The Dynamics of Manufacturing in Toronto, Montreal, and Vancouver, 1976-1997* (Analytical Studies Branch Research Paper Series 177). Ottawa: Statistics Canada.
- Walks, R. A. & Bourne, L. S. (2006). Ghettos in Canada's cities? Racial segregation, ethnic enclaves and poverty concentration in Canadian urban areas. *The Canadian Geographer/Le Géographe canadien*, 50, 273-297.
- Wallace, R. (1990). Urban Desertification, Public-Health and Public-Order - Planned Shrinkage, Violent Death, Substance-Abuse and Aids in the Bronx. *Social Science & Medicine*, 31, 801-813.
- Wallace, R. & Wallace, D. (1993a). Inner-City Disease and the Public-Health of the Suburbs - the Sociogeographic Dispersion of Point-Source Infection. *Environment and Planning A*, 25, 1707-1723.
- Wallace, R. & Wallace, D. (1993b). The Coming Crisis of Public-Health in the Suburbs. *Milbank Quarterly*, 71, 543-564.
- Wallace, R., Wallace, D., Ullmann, J. E., & Andrews, H. (1999). Deindustrialization, inner-city decay, and the hierarchical diffusion of AIDS in the USA: how neoliberal and cold war policies magnified the ecological niche for emerging infections and created a national security crisis. *Environment and Planning A*, 31, 113-139.
- Wallace, R. & Wallace, D. (1998). *A Plague on Your Houses: How New York was Burned Down and National Public Health Crumbled*. London: Verso.
- Warr, D. J., Tacticos, T., Kelaher, M., & Klein, H. (2007). 'Money, stress, jobs': Residents' perceptions of health-impairing factors in 'poor' neighbourhoods. *Health & Place*, 13, 743-756.
- Whelan, A., Wrigley, N., Warm, D., & Cannings, E. (2002). Life in a 'Food Desert'. *Urban Studies*, 39, 2083-2100.
- Whitehead, M., Dahlgren, G., & Evans, T. (2001). Equity and health sector reforms: can low-income countries escape the medical poverty trap? *The Lancet*, 358, 833-836.
- Wilkins, R., Berthelot, J.-M., & Ng, E. (2002). Trends in mortality by neighbourhood income in urban Canada from 1971 to 1996. *Health Reports (Statistics Can)*, 13, 1-28.
- Wilkinson, R. & Marmot, M. (eds.) (2003) *Social Determinants of Health: The Solid Fact*. Copenhagen: WHO Regional Office for Europe.

- Wood, D. (1992). *The Power of Maps*. New York: Guilford Press.
- World Bank (2007). *Global Economic Prospects 2007: Managing the Next Wave of Globalization*. Washington, DC: World Bank.
- Yalnizyan, A. (1998). *The Growing Gap: A Report on Growing Inequality Between the Rich and Poor in Canada* Toronto: Centre for Social Justice.
- Yalnizyan, A. (2007). *The rich and the rest of us: the changing face of Canada's growing gap*. Ottawa: Canadian Centre for Policy Alternatives.
- Yergin, D. & Gustafson, T. (1993). *Russia 2010 and What It Means for the World*. New York: Vintage.
- Zenk, S. N., Schulz, A. J., Israel, B. A., James, S. A., Bao, S., & Wilson, M. L. (2005). Neighborhood Racial Composition, Neighborhood Poverty, and the Spatial Accessibility of Supermarkets in Metropolitan Detroit. *American Journal of Public Health*, 95, 660-667.

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