



SUSTAINABILITY MATTERS: PROSPECTS FOR A JUST TRANSITION IN CALGARY, CANADA'S PETRO-CITY

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A New Story of Cities and Urban Life

As communities around the world confront the imperative for a sustainability transition, recurring stories have emerged as core sustainability challenges, whether our concern is Calgary, cities in general, or the global village. One such story is the notion that we have entered an era of uneconomic growth. A flawed accounting system, by definition, presents any growth as good growth, but the increasingly pressing externalities of economic growth make it uneconomic. In Calgary, as in many cities across Canada and around the world, the fiscal cliff of deferred maintenance is just one example of an externality.

In this era of neoliberal economics, public debate is fixated on short-term budget deficits. Such discussion seems not only blind to long-term public infrastructure deficits but also to ecological and social deficits. The growing wealth and income inequalities in Calgary speak to the social deficit, which is also evident in automobile-related death and injury and in public health issues related to sedentary lifestyles, including heart disease, diabetes, and obesity. The mounting ecological deficit (most evident in our oversized ecological footprint) includes the loss of wildlife habitat to urban sprawl, increased greenhouse gases due to the burning of fossil fuels, and the appropriation of natural resources from around the globe to support an unsustainable consumerist lifestyle.

A core issue for so many urban challenges is the artificial divide between public and private spending and the ideological bias that private spending is good for the economy but public spending is not. In fact, most critical urban systems are based on a combination of both. The transportation system, for example, relies on public spending on roads and private spending for the rolling stock—the automobile. We need to link city

economies to sustainability priorities and understand economic development as a means to an end. Just any old kind of investment or innovation is not enough. Sustainability provides an end that benefits everyone; it is a moral and ethical compass for cities.

Most sustainable development discourse asserts that urbanization is inevitable and irreversible in the foreseeable future; indeed, most of the world's people now live in cities. Richard Florida has popularized the notion that cities are the economic and cultural engines of growth, creativity, and innovation, a thesis that is not without its critics.¹ In response to the challenge of sustainable development, critiques of classic North American suburban development and of automobile-dependent urban transportation have proliferated.² These critiques have led to more compact, people-centred, and green urban and community design options.³ Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck describe and critique urban sprawl and are co-founders of the urban design movement known as New Urbanism, which calls for a return to neotraditionalist, pre-auto urban and neighbourhood design.⁴ William McDonough and Michael Braungart have helped popularize the concepts of ecological design and industrial ecology and their application to energy-efficient building design, redesign of mass transit, and systems of industrial production.⁵ In the social domain, many recognize the importance of a sense of community, vibrant neighbourhoods, and designing to the notion of human scale as necessary ingredients for safe, healthy, and vibrant cities.⁶ David Satterthwaites' *Earthscan Reader in Sustainable Cities* and Stephen Wheeler and Timothy Beatley's *Sustainable Urban Development Reader* curate this diverse body of city and urbanization literature.⁷

Civic debates about the future of the city have been taken up via a dizzying array of proposed city typologies that have moved in and out of favour since the 1992 Rio Earth Summit convened global leaders to agree on an agenda for sustainable development. Our cities have been variably referred to as ecological, creative, liveable, sustainable, just, resilient, in transition, smart, post-carbon, new urbanist, and circular.⁸ Many of these monikers make an appearance in this book's essays, often used as foils to champion or challenge visions for Calgary's future.

Meanwhile, the global discourse, policy, and practice of city-making inspired by the Brundtland Report are reflected in publications of groups

such as the German Advisory Council of Global Change, International Council for Local Environmental Initiatives (ICLEI), and UN-Habitat. The focus tends to be on how we can improve the sustainability of urban living by integrating the domains of environment, society, and economy through common policy framings, such as the triple bottom line.⁹ Contemporary global city coalitions are rallying around notions of sustainability (ICLEI and the Global Environmental Facilities Sustainable Cities Impact Program), resilience (the 100 Resilient Cities, of which Calgary is a member), and climate change (C40 Cities Climate Leadership Group). None of these initiatives imagine life beyond capitalism or the logic of economic growth.

Geographic traditions of critical analysis of the evolution, function, and spatial character of cities proper, of processes of urbanization, and of the conventional framing of sustainable cities are more compatible with the notion of strong sustainability. Geographers in the radical Marxist tradition have focused on the ways in which the built environment inhibits or enhances opportunities for a flourishing and just urban life. David Harvey, Mike Davis, Edward Soja, and Doreen Massey are some of the most well known.¹⁰ The critical urbanist perspective has been clearly summarized by Neil Brenner, David Marcuse, and Margit Mayer in their volume on critical approaches to urbanism:

In the most general terms, critical approaches to urban studies are concerned: (a) to analyze the systemic, yet historically specific, intersections between capitalism and urbanization processes; (b) to examine the changing balance of social forces, power relations, socio-spatial inequalities and political-institutional arrangements that shape, and are in turn shaped by, the evolution of capitalist urbanization; (c) to expose the marginalizations, exclusions, and injustices (whether of class, ethnicity, “race”, gender, sexuality, nationality, or otherwise) that are inscribed and naturalized within existing urban configurations; (d) to decipher the contradictions, crisis tendencies, and lines of potential or actual conflict within contemporary cities; and on this basis, (e) to demarcate and politicize the strategically essential possibilities for more aggressive,

socially just, emancipatory and sustainable formations of urban life.¹¹

The spectrum of prescriptions for making cities sustainable ranges from relatively minor reform to significant transformation of cities and urban life. While many acknowledge a sustainability crisis, a general sense of impotence prevails about how to deal with it. In Canada, this is exacerbated by the fact that cities are legal creatures of their provinces, leaving them constrained by provincial legislation that governs what they can and cannot do and with very limited fiscal tools to fund sustainability initiatives. Most policy and planning exercises begin from a vantage point relatively close to the status quo, the argument for this stance usually being practicality or pragmatism. The Bruntland Report, the Kyoto Protocol, and the City of Calgary Municipal Development Plan are all examples of this approach.¹² Solutions arrived at from this status quo perspective are rarely long term. They are piecemeal and incremental in the sense that they set their sights on a goal that may represent improvement but is not consistent with strong sustainability.

We maintain that cities need to orient planning and action toward a realistic end point that is sustainable in the long term. In this book, we propose practical transformative solutions to that end. We advocate going beyond improving how we “make do” in present circumstances in order to widen the horizon of change into future generations and to critically examine what needs to be done now to ensure long-term sustainability. In our view, the goal is not to sustain the current system but to craft and construct a better one—one that conforms to a framework of strong sustainability.

The call for more equitable and just cities is explicit in many of these essays and implicit in all of them. The simple fact is that during the past three decades of unprecedented economic growth in Calgary, injustice and inequity have increased. As pointed out in several of these essays, this trend is a global one. The symptoms of injustice and inequality are evident in deteriorating housing affordability and in homelessness, the extreme end of the affordability continuum; the institutionalization of food banks in some of the wealthiest cities in the world; and the number of people working full time and more, yet still living in poverty.

The utopian urban stories we tell ourselves, like Richard Florida's *Rise of the Creative Class*, turn out to be flawed, as Florida himself acknowledges in his 2017 book, *The New Urban Crisis*.¹³ Members of the economics profession, from Nobel economist Paul Krugman to best-selling author Thomas Piketty, acknowledge the positive correlation of equity to overall economic health.¹⁴ Writers like Naomi Klein argue that equity and justice are, in fact, prerequisites for dealing with the global catastrophe that is climate change.¹⁵

Throughout these essays, two conflicting metaphors for the city are invoked—the machine versus the living organism. These conflicting metaphors are evident in the observation that modern cities are economic “growth machines” and have been designed as car habitat rather than human habitat. While urban planners and designers have been inspired by the ideas of Jane Jacobs and Jan Gehl, traffic engineers still seem to be in the thrall of New York City's infamous development czar Robert Moses. While cities are increasingly imagined as urban ecologies, industrial ecologies, and social ecologies, it is engineers who command the largest budgets in cities and who are charged with laying the infrastructure (most importantly, highways and major roads) that constrains the intentions of urban planners and designers to create human habitat rather than car habitat. The emerging debates over data-driven, networked, smart cities and autonomous vehicles are some of the most high-profile manifestations of this ongoing dialectic. The Hollywood blockbuster *Blade Runner* is a popular media manifestation of these debates and anxieties about the future of cities.¹⁶

These competing metaphors of the city have been debated for at least one hundred years. Most famously, Lewis Mumford's *The City in History* draws this contrast in strong terms.¹⁷ Mumford's bleak analysis fell out of favour as the ascendant city emerged as the dominant form of human settlement on our planet, but the city as machine is still arguably the dominant utopian/dystopian image driving city building. Critical debate about city as machine versus city as living organism obliges us to reflect on cities at a civilizational scale. The machine metaphor is rooted in Western philosophy, science, and industrialization. The founders of modern Western science, including Isaac Newton and René Descartes, helped entrench

the clockwork universe in our imaginations. Subsequently, the Industrial Revolution ushered in the age of machines.

There is nothing more emblematic of the city-as-machine metaphor than the automobile. During the post-World War II period, which many now refer to as the geological era of the Anthropocene, we have seen both staggering increases in humanity's impact on the planet and the blossoming of the so-called love affair with the automobile.¹⁸ In light of the effects of ground-level air pollution, global warming, and the shocking carnage of death and injury, the automobile surely stands out as one of the most destructive machines ever devised, and Calgary, like so many cities in North America, is utterly car dependent.

These essays also critically examine the paradoxical social and cultural dimensions of sustainability. In Calgary, as in cities around the world, we see this paradox reflected in the trend toward cosmopolitanism, the celebration of diversity, and the embrace of the cultural and material spectacle of cities. Cities are arguably the planet's greatest co-operative achievement. They are built on social and cultural capital and on attributes like trust, compassion, civility, and conviviality. Calgary has taken halting steps (witness the nasty race-infused and female-candidate-shaming 2017 civic elections) toward a more culturally inclusive city. Cowtown—the hard-driving, abrasive, insular city of the 1970 and 1980s—is fading as we celebrate growing cultural diversity, its valuation represented in the election of an immigrant, Muslim, visible-minority mayor. Beyond the cosmopolitan vibe, people are also drawn to cities for the material culture—the ubiquitous universe of products and experiences that are on display and on offer on a daily basis. The average city dweller is exposed to from four to ten thousand advertisements and product brands every day.¹⁹ Home appliances, communications media, and the automobile are the most evident technologies that highlight the materiality and artificiality of this human enclave.

Governance, how we collectively organize society and make decisions, plays a prominent role in most of the issues discussed in these essays. Good governance—whether in voluntary organizations or the media, the private sector or the public sector—is about transparency, efficiency, effectiveness, meaningful participation, and, perhaps most importantly, fairness. In the essays on governance, we use the concept of the “urban

regime” to understand municipal governance, highlighting the activities of a collection of influential actors, the most prominent among them being business leaders, land and real estate developers, and politicians. We examine aspects of governance at provincial, national, and global scales. We would go so far as to say that good governance is the *sine qua non* of sustainable cities.

Our political silos encourage us to think in a fragmented fashion. City governments have discrete responsibilities, as do other levels of government, but as citizens, our well-being, our practical lives, are not so easily apportioned. Ecologically speaking, we live in a connected world. As global citizens who happen to live in cities, we have an obligation to imagine city life within both nation-states and a planetary ecological system. In fact, it is in our self-interest to do so: as city dwellers, we of course influence global events, but global events also affect our cities. Cutting through the issue of governance is the constant struggle, at all levels, between the *laissez-faire* doctrine of neoliberal economics and the sustainability agenda’s call for assertive collective governance.

What these essays demonstrate is that although we manage cities, for the most part, as bounded human settlements, it is an inescapable reality that the reach and impact of cities is unbounded. In ecological terms, cities and their hinterlands constitute one unified phenomenon. The resource consumption demands of the materialistic, artificial lifestyle that has evolved in cities is best represented by the concept of “ecological footprint.” Calgary’s footprint, the largest of any city in Canada, is of such a magnitude that we would need five or six planets for all of humanity to live as the average citizen of Calgary does.²⁰ This is clearly not sustainable.

At this period in history, when cities have become home for more than half of humanity, high-profile urbanites like Mayor Ann Hidalgo of Paris, former mayor Michael Bloomberg of New York, and former mayor Enrique Peñaloso of Bogotá—as well as Calgary’s own mayor, Naheed Nenshi—proclaim their belief that cities are the answer to the problems that plague the world—that it is in cities that we nurture the human creativity and innovation through which these problems will be surmounted. Exploring the concept of “ecological footprint” obliges us to entertain the notion that perhaps at the core, the city is not a sustainable form of human habitat.²¹ This is something that Lewis Mumford postulated—that

the human invention of the city is a tool for the accumulation of power and wealth and that it is parasitic on its surrounding ecological systems.²²

This is also a question that William Rees, co-creator of the ecological footprint concept, put on the table when he asked whether the term *sustainable city* is an oxymoron.²³ As Rees points out, our cities are wholly dependent upon a land area far greater than their political boundaries. While the popular imagination of the city is as an engine of growth, innovation, and creativity, cities are also parasitic on their hinterlands and those on the margins. The flow-through of energy and resources needed to maintain the incredible metabolism of cities requires a harvest of resources not only from their adjacent geographies but also from places around the globe. As the ecological footprint concept makes clear, a modern, affluent city like Calgary by necessity appropriates land and resources from every corner of the planet.

In recent years, it has become fashionable to project cities as the answer to the problems of the world, especially climate change. In this collection, we emphasize that it is equally important to be vigilant, skeptical, and demanding of evidence for or against that assertion. If cities are in fact the dynamos of the global economy—and more grandly, of the human experience on this planet—then it is the nature of cities that needs to be called to account for the predicament we find ourselves in. We should not shy away from the question of whether humanity can survive the rise of the city. Science, technology, and the economic engine of capitalism drive the city dynamo, but they are also the catalyst of the challenge of the Anthropocene and of a nasty future, according to the warnings of thoughtful individuals. In his 2010 Charles R. Bronfman Lecture in Canadian Studies, elder statesman Ed Broadbent warned of a return to barbarism in the wake of growing inequality and lack of progress on an environmental agenda.²⁴ In October 2017, the managing director of the International Monetary Fund, Christine Lagarde, spoke of “moving into a dark future” if we do not respond to climate change and inequality.²⁵ Activist and author Jane Jacobs writes at length of this threat in *Dark Age Ahead*.²⁶

We find ourselves in a world that, unfortunately and tragically, vindicates the critical stance toward cities expressed in these pages. In 2013 Calgarians experienced the second-most expensive natural disaster

in Canada's history, after the 2016 Fort McMurray fire, with much of our downtown submerged in floodwaters. Since 2017, we have seen the US president incite violence against his fellow citizens and stand in the United Nations threatening North Korea with genocide. We have recently been witness to the most catastrophic and deadly wildfires in history in California and Australia, as those regions continue to endure the worst droughts in thousands of years. In 2018 the Caribbean and southeast coast of the United States lived through three Category 5 hurricanes in less than a month, and Mexico was devastated by three earthquakes over the same period. As a result of all of these events, the cities of Havana, Houston, Mexico City, Oaxaca, Sonoma, San Juan, and Calgary have suffered loss of life and damages from which some of them may never fully recover. During the period in which these essays were written, ongoing violent conflicts have laid waste to cities like Aleppo, Syria, and Sana, Yemen. Urban issues are a microcosm of global issues, from climate change to water to state violence.

Cities—and the human experiment that has imagined them into existence—are at an epochal turning point. The core message of this collection of essays is this: we need a new story, a new narrative of what the human enterprise is about and what our species should aspire to. Clearly, the story that tells of continual economic growth based on exploitation of the planet is leading us to the edge of a precipice. In *Sapiens*, Yuval Noah Harari argues that we dominate the planet because seventy thousand years ago, a cognitive revolution, a rewiring of our brains, gave us the capacity to imagine and create new “fictional realities.”²⁷ According to Harari, the stories that people invent and tell one another are the most powerful forces in the world and are at the root of the ecological and social challenges we face. He is convinced that in this time of crisis, we need completely new stories—a notion that is certainly not new. Ecologist Thomas Berry has written that “the deepest crises experienced by any society are those moments of change when the story becomes inadequate for meeting the survival demands of a present situation.”²⁸ David Korten declares his simple message in the title of his 2015 book, *Change the Story, Change the Future*, echoing Riane Eisler, who argues that to change our realities, we have to change our myths.²⁹

Cities can be at the forefront of addressing the critical issues that humanity faces, but this will only happen by design: there is nothing inherent in the nature of a city that ensures it. As Mumford writes, the new story of cities will require “a fresh dedication to the cosmic and ecological processes that enfold all being,” thereby ensuring “to the highest degree possible, the illumination of consciousness, the stamp of purpose, the color of love.”³⁰ To achieve this promise, we will have to craft a new story, one in which sustainability matters.

NOTES

- 1 Richard Florida, *The Rise of the Creative Class: Revisited*, 10th anniversary ed. (Philadelphia: Basic Books, 2014). For a forceful critique of Florida, see Jamie Peck, “Struggling with the Creative Class,” *International Journal of Urban and Regional Research* 29, no. 4 (2005): 740–70.
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- 3 Stephen Wheeler and Timothy Beatley, eds., *The Sustainable Urban Development Reader*, 3rd ed. (New York: Routledge, 2014).
- 4 Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck, *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream* (New York: North Point Press, 2010).
- 5 William McDonough and Michael Braungart, *Cradle to Cradle: Remaking the Way We Make Things* (New York: North Point Press, 2002), and *The Upcycle: Beyond Sustainability—Designing for Abundance* (New York: North Point Press, 2013).
- 6 Jan Gehl, *Cities for People* (Washington, DC: Island Press, 2010); Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961).
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 - 11 Neil Brenner, David Marcuse, and Margit Mayer, *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City* (New York: Routledge, 2011), 5.
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 - 14 Paul Krugman, *End This Depression Now* (New York: W. W. Norton, 2012); Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Belknap, 2014).
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- 29 David C. Korten, *Change the Story, Change the Future: A Living Economy for a Living Earth* (Oakland, CA: Berrett-Koehler, 2015); Riane Eisler, *The Chalice and the Blade: Our History, Our Future* (San Francisco: Harper, 1988).
- 30 Mumford, *City in History*, 575–76.

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