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ARE WE THERE YET? MONTRÉAL'S EVOLVING URBAN VISION

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Ill-planned urban growth fosters a ruthless competition to claim urban spaces. That is a key message of sociologist and urban planner Bruno Voisin, whose work focuses – surprisingly – on urban public spaces in the Middle Ages.

### **Plus ça la même chose**

Eight centuries later, Voisin's conclusion is equally relevant. “Organic” growth, illustrated above by the forced cohabitation of two eras in Athens, Greece, quickly reaches a limit. Cities have responded with a network of urban regulatory controls, intended to harmoniously integrate all components. But our vision, over the centuries, has been too narrow. We need a new urban development credo which goes well beyond the conventional imperatives of pipe fittings and building density.

### **A New Urban Credo for Quebec**

This realization has helped establish a wide-spread and deep-seated trend toward more sustainable urban development (SUD). In the wake of the 1992 United Nations Conference in Rio de Janeiro which launched the Agenda 21 program, Quebec adopted its own sustainable development law in 2006. In the spirit of Agenda 21, Bill 118 advocates a change in direction toward better, more viable processes. It takes direct aim at the triple bottom line of sustainable urban development (TBL) officially declaring its respect for “the integrity of the environment, social equality, and economic efficiency.”

The new credo was long overdue. Environmentally speaking, a conventional city has a hard time managing the flows of energy and materials to maintain its urban ecosystem. Technologically, our selective interventions to deal with energy use, water use, transportation, and pollution – as enlightened as they may be – are usually “too little too late” to counterbalance the forceful trends of seemingly unlimited growth.

Our conventional approach, the overlay analysis of land use potentials championed by Harvard in the '80s, did indeed contain the seeds of a sustainable approach, but it simply didn't go far enough. We had not yet widened our purview to include social equality, economic efficiency, and environmental viability. Our obligation to respect the TBL principle was minimal or non-existent, and minimal respect yields minimal results.

In 1989, for example, an assessment of the quality of urban niches as part of the Communauté urbaine de Montréal's regional parks project revealed that the environmental situation was already alarming, with 42% of all ground surfaces on the island of Montréal being stripped bare and highly mineralized, and thermal discrepancies of up to 8° C. These conditions were acute enough to seriously hinder biodiversity. In 2009, a quick review of Montréal's building density clearly showed how little had been achieved in twenty years, despite the MUC's ongoing effort.

And yet, Montréal's high environmental resilience potential remains intact. Consisting mostly of flat-roof buildings, the city can count on multiple small spaces that could be turned green or used to install solar panels, two options that could help improve thermal regulation, rainwater retention, and local food production.

This could significantly improve the city's *energy landscape* by lowering its heating/cooling bills, and helping reduce the systematic overflowing of the sewage systems, an endemic issue in Montréal. With less pollution carried to the river, citizens could increasingly reclaim the shores and beaches of the island, increasing our store of low impact development technologies landscapes elaborated by The National Institute of Building Sciences.

Such simple measures would have other positive impacts for our *environmental landscape* – such as renewing biodiversity. Even the *nutrition landscape* could change by creating opportunities for citizens to self-produce their food, community garden being one of many options.

### **Simple truths?**

True, we have understood the potential for decades. Why haven't we designed such landscapes yet? Landscape architects have the technology and expertise, but these things alone are not enough. Sustainable urban development is not a technique or even a process. It's a strategy for the future. And as such, its implementation requires a large consensus within the community. Landscape architects cannot work in isolation anymore.

Of course, this idea is not really new, but what sets it apart today is the widespread awareness of the necessity of thinking of the city in a holistic way that integrates, among other things, social equality and economic efficiency, two notions that were traditionally peripheral to the field of landscape design. Already, there are several good omens that this integration is indeed happening.

Cities across the country are developing an interesting “grocery list” of principles to underpin their shift toward SUD. The Plan IT Calgary Project, for example, specifies increased diversification of the building inventory; pedestrian traffic facilitation; reinforcement of the distinctive features of urban neighbourhoods; more enticing developments highlighting the *genius loci*; implementation of alternative modes of transportation; protection of free urban spaces, urban agriculture, and interesting landscapes and environmental sites; mixed land use; and strategic redevelopment of existing spaces.

The list is as inspiring as it is challenging. The city's viability will depend on all of these concerns but it is eminently clear that many are under the direct control of the city's elected official. If politicians take up the challenge, we can expect the holistic integration of a more

efficient, more socially fair and more environmentally viable economy – the famous TBL – to happen **outside** of the landscape development project. (Of course, this may not always happen, which for me is the Achilles' heel of the SUD approach for landscape design.)

### **Montreal's operational realism**

Montreal's Strategic Sustainable Development Plan is also worth mentioning, in part for the collective commitment of partnering organizations. (The city's administration is just one of many stakeholders.) Beyond its principles, which cover every key component of SUD, Montréal identifies 36 practical environmental actions, ranging widely from eliminating useless car idling to developing a master plan in waste management. Four "star actions" merit special attention: working on elaborating a compensation system for zero-carbon business travel; on reducing heat islands; on organizing environmentally responsible events, and on achieving United Nations University recognition as a centre of regional sustainable development education expertise. This "small-steps" strategy, although practical, may obscure the big picture somewhat, but this initiative's greatest quality is its pragmatic action plan, broken down into autonomous projects.

### **Realism and roots support**

Such agendas illustrate an economic truth: landscape architects must take leadership of the emerging markets by defining the attributes of *responsible design* which respects the integrity of TBL. We need to set performance indicators, including such concerns as materials traceability, control of harmful products, and construction and maintenance processes. And we need to produce measurable outcomes, monitoring a project's short, middle, and long-term effects. Projects are not over once the inaugural ribbon has been cut. The landscape architect's professional liability extends far beyond the blueprints.

As a practice, landscape design must also adapt to emerging niche markets, from urban aesthetics to heritage concerns, from urban permaculture and roof gardens to indoor gardens, living walls, and biomass-increase projects. Our expertise as environmental managers and stewards of the land becomes a backdrop for more specific interventions, from producing seaweed in rooftop basins, to incorporating water and air purification elements into our urban designs. We are poised to develop superior alternative materials and technological organic tools. As the population ages and the city grows more overcrowded, our profession can find ways to re-establish a sacred link with nature, a link that is too often missing from our cities.