DIGITAL DIVIDES

Parc Extension Community-Based Action Research Network

The Impact of Montreal's AI Ecosystems on Parc Extension: housing, environment and access to services

2022

Table of contents.

Projection
Protest

Organized by the Comité d'action de Parc Extension (CAPE) and Parc Extension Anti-Eviction Mapping Project, December 2021

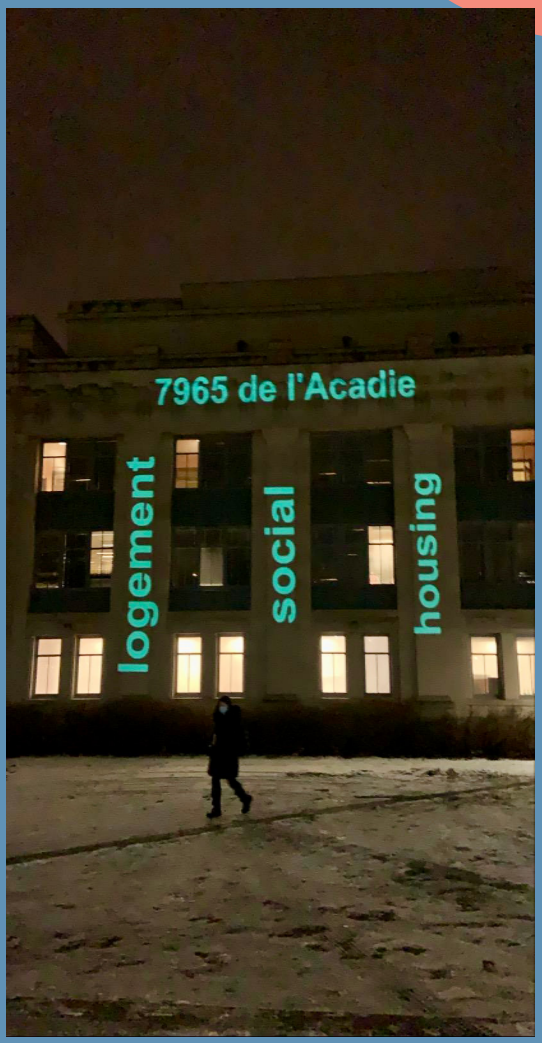


Photo by Alessandra Renzi

EXECUTIVE SUMMARY

The Digital Divides project brings together researchers, activists, and community members to examine the emerging Artificial Intelligence sector in Montreal and understand its social, economic, ethical, and environmental impacts that are all too often ignored by its proponents in government and the private sector who encourage its unabated expansion into our neighbourhoods. To these ends, the Digital Divides project, facilitated by Concordia University's Office of Community Engagement (OCE) and the Parc Extension Community-Based Action Research Network (CBAR), employs both traditional and community-based research methods to mobilize knowledge in an accessible and action-oriented manner. Our aim is to forge long-lasting relationships between academics, community organizers, and residents of neighbourhoods impacted by the AI sector that are built upon trust and accountability, while working toward collective solutions to inequalities perpetuated by this industry.

With an emphasis on issues of housing and gentrification, the report provides the socio-economic context for the neighbourhoods most impacted by Montreal's AI sector, especially Parc Extension and Marconi-Alexandra. Of particular interest is the entanglement between the AI sector and the Université de Montréal's Campus MIL, which has exacerbated exclusion in the area's housing market. This serves as background for the report's two case studies; the first of which provides a policy and macro-economic analysis of the AI sector, while the second identifies technosocial issues that impact women and youth in Parc Extension through embedded community research and collaboration with community groups such as Afrique Au Féminin.

The Digital Divides report also explores potential solutions to the inequitable distribution of the economic benefits of Montreal's AI sector. These include alternative housing models, collective benefit agreements (CBAs), and AI Commons, in addition to smaller-scale, grassroots efforts. These initiatives aim to empower communities affected by the development of the AI sector while also democratizing its top-down governance structure. The researchers behind Digital Divides conclude the report by calling for a number of reforms to AI and housing policy that prioritize justice-oriented, rather than for-profit aims and involve meaningful community consultation. The report highlights the importance of mutual aid and community organizing—rather than just academic and government intervention—as key forces in the pursuit of these goals.

Photo by Celia Dehouche

INTRODUCTION

1.1 THE DIGITAL DIVIDES PROJECT

This report is based on data collected for the Digital Divides (DD) project[1] and stems from ongoing exchanges facilitated by the Parc Extension Community-Based Action Research Network (CBAR), which involves community organizers and researchers concerned with the housing crisis in the neighbourhood and with better understanding the development dynamics—including the rise of an Artificial Intelligence (AI) hub in the neighbouring Marconi-Alexandra district—that underpin it.

The Parc Extension CBAR Network coordinates the work and presence of researchers and students affiliated with a number of post-secondary institutions from Montreal and beyond, who commit to a range of strategies in engaging with the Parc Extension community either in relation to research or experiential learning work. The CBAR Network meets on a bi-monthly basis and, while its work primarily centers around projects that are led by researchers, there are also a number of occasions when local residents and organisers have requested that the CBAR Network engage with private, entrepreneurial, or philanthropic efforts who are also invested in basing parts of their mandates in the neighbourhood. When this occurs, these actors are contacted, invited to attend CBAR Network meetings, and are presented with the CBAR Network terms of engagement in the hope that it will also influence their own work.

In spring of 2019, the work of artificial intelligence firm Element AI was discussed by the CBAR Network, partly in relation to founder Yoshua Bengio's affiliation with the Université de Montréal Campus MIL—a new research innovation campus that is adjacent to Parc Extension and placing increased pressure on housing accessibility—as well as in relation to Bengio's Montreal Declaration, which advocates for ethical and just work in the AI industry. Given his professed values and link to Campus MIL, the CBAR Network hoped Bengio could influence Université de Montréal towards mitigating their impact on neighbourhood housing.

At the time, a representative of the CBAR Network contacted Element AI and meetings were held with one of their representatives, both at their office and as part of two CBAR Network meetings. During the exchanges, the representative expressed a desire to support local communities in a number of concrete ways:

1. By allowing access to data generation strategies and internal data sets in the interest of supporting housing rights organizing

2. By providing funding to local efforts through a pool of discretionary funds reserved by the company and a fledgling foundation

3. By granting access to their physical spaces and expertise for community organizing, research, and student-directed institutional mandates of university representatives

Given many neighbourhood residents' limited access to technology and bandwidth, it would be an understatement to say that this offer was well received by participants of the CBAR Network. Subsequently, steps were taken to follow through on these offers. However, the Element AI representative abruptly discontinued contact with the CBAR Network and any attempts to continue the exchange went unanswered.

1 Co-PIs Alessandra Renzi, Norma Rantisi and Fenwick McKelvey. Coordinator: Alex Megelas. Research team: Janna Frenzel, Leonora Indira King, Nick Gertler, Elijah Herron, Jacob Ryan, nate wessalow.

Stemming from this disappointing first exchange with one of the predominant AI players in Marconi-Alexandra, further conversations took place at the CBAR network about the ways in which the network might further exchange with Element AI or its ecosystem. The Digital Divides project aims to maintain this analysis and critically examine the extensive gap in access to technology and technological literacy between the daily experiences of Parc Extension residents and the professionalized spheres of Element AI and related enterprises.

As part of the project, we decided to interrogate the drive to consider urban challenges through a technologically-centric lens that integrates artificial intelligence (AI) strategies into municipal planning and development. The research actions and experiential learning activities undertaken for the DD project considered the impacts of the Marconi-Alexandra AI hub on adjacent neighbourhoods, particularly Parc Extension, and attempted to examine how an increased reliance on AI has impacted decision-making, regulation, and urbanism at the local level and how technological hubs manage to cohabitate with nearby neighbourhoods that face a range of challenges related to the housing crisis.

The project aimed to produce insights that would build on grounded research and knowledge and skill exchanges between community groups, residents and researchers to build effective extensions of local community agency. Over the course of the project, a range of community-based, student-led and supported strategies explored how digital divides are experienced in relation to technological and artificial intelligence hubs in Montreal during the COVID-19 crisis. Ultimately, the Digital Divides project aimed to contribute to useful analysis and create tools that would extend from housing rights activism and would allow for additional means of applying pressure on private AI firms and public policies that have engendered this divide.

This report shares insights about the neighbourhood of Parc Extension gained during fieldwork with local organizations, as well as on research about bottom-up approaches to technology in general, and AI in particular, as a potential shared community resource.

More specifically, we aim to provide insights into:

1. Montreal's AI ecosystem and its impact on increasing inequality, as well as on the environment.
2. The entanglements between housing,economic and social problems that are relevant for advocacy and community organizing.
3. Potential solutions for mitigating tech-led gentrification and the digital divides that are impacting housing and livelihood conditions in Parc Extension.

1.2.1 Methodology and Mission

The Digital Divides project seeks to mobilize knowledge in an accessible and action-oriented way. Our research approach is two fold:

1) it builds community research networks among academics, community organizers, and Parc Extension residents to engender long-lasting research infrastructure that will strengthen community agency and support knowledge exchanges that are reliable, trustful and accountable;

2) it mobilizes community action research to answer questions that are continuously redefined in conversation with community researchers and stakeholder groups.

Research in vulnerable communities has a long, complex history (e.g., James Bay Survey and the Tuskegee Study). Participants are often probed for information only to see that their contributions to research did not directly benefit their community. In the worst of cases, vulnerable persons have been denied informed consent leading to abusive, harmful, and deceptive practices (Mosby 2013; Park 2017). These exploitative approaches inevitably create a dynamic where participants come to distrust institutions as they realize that they do not have their best interests in mind (Boulware 2003; Kobetz et al. 2009). In order to overcome this distrust, researchers must first have an awareness that this distrust exists and understand that it is warranted, especially given that researcher-participant dynamics are still structured within an imperial framework. Operating from this framework when working with vulnerable populations perpetuates a power imbalance where the researcher is viewed as the expert and authority figure, while members of the community are treated as subjects who do not possess knowledge of their own (Brunger and Wall 2016; Koster et al. 2012). This approach can disempower members of the community and reinforce an ongoing system of oppression. It is therefore necessary to deconstruct these imbalances in order to move towards a partnership that embraces mutual respect and a reciprocal learning process.

Moreover, university-based community research all too often needs to be rushed to follow the rhythms of academic production. While these interventions may still produce valuable knowledge, we hope to instead forge a strong research infrastructure network that is flexible enough to follow the rhythms of community organizing, not university calendars. In this sense, the DD project emboldens the work of researchers and activists through the reliable presence of the CBAR Network and militant research methods such as community action research, co-research and co-research-creation (Borio et al. 2007; Renzi 2020). Our approach is iterative: issues and research goals are defined or redefined through consultation and collaboration; problems identified spur new collaborations and research initiatives. We are inspired by notions of community care, mutual aid practices and their social reproduction.

1.1.2. Case study 1: AI Ecosystems and the Impacts on Political, Economic and Environmental Sustainability

The first case study attempts to bring some clarity on the impact of the emerging AI industry in Montreal. It points to current policy frameworks and environmental impacts and is aimed at gathering information about community-led approaches to technology and AI. In order to confront the power imbalances that are amplified by the turn to artificial intelligence and machine learning, it is necessary to understand AI at multiple levels and scales. First, one needs to consider the policy frameworks that attract and support the AI industry in Montreal. These are distributed among municipal, provincial, and federal governments. Second, one needs to look at the direct impact of the technologies on processes of decision making that distribute resources and knowledge. Third, one needs to consider the material and geographical impact of the industry as it grows its presence in and around Parc Extension. An examination of the policy context and the associated political, socio-economic, and environmental consequences within this first case study provides a macro-economic

picture of the structural forces shaping everyday life in Parc Extension. This provides the backdrop for a consideration of the micro-level challenges that are illuminated through the on-the-ground, community-based research of the second case study.

1.1.3. Case study 2: Bridging Divides, Fostering Self-Reliance

This case study embedded community researcher and psychiatry PhD student Leonora Indira King in the Parc Extension community to map out digital divides and other technosocial problems, especially as they impact women in the neighbourhood. Leonora's work in a First Nations context has taught her about Indigenous-led research which is guided by OCAP—Ownership, Control, Access and Possession principles (First Nations Centre 2007; First Nations Information Governance Center 2017). Applying an OCAP approach encourages researchers to engage members of the community in deciding how their data should be collected, processed, and used. To better position herself as a researcher in a community where she is already rooted and in accordance with this approach, Leonora built relationships with Parc Extension residents so that they came to know and trust her. Leonora's engagement in Parc Extension built trust with residents by shifting the dynamic from one of exploitation to one of giving back to the community through advocacy work, assisting with service navigation, collecting clothes and household items to donate, leading workshops and information sessions on various issues affecting residents, and providing means of financial support. By building this rapport, residents were more comfortable expressing their needs and engaging in collaborative efforts to find solutions (Tse et al. 2015). Of course, Leonora did not do this work alone, but in collaboration with community leaders as well as with Afrique au Feminin, a local community organization in Parc Extension.

While developing relationships with residents and acquiring a better understanding of their needs, Leonora identified gaps in service delivery by communicating with residents directly. With this information, it became possible to work in collaboration with relevant institutions and organizations to come up with appropriate solutions and inform more effective resource allocation and research threads. The resulting initiatives, in addition to this report, included a series of community events and a food sovereignty community project. This type of approach is recognized as community-based research (or community-centered research) and has proven to be particularly effective when working with marginalized communities (Heinzmann et al. 2019; Altman et al. 2020). Community-based research, as the name implies, is intended to be carried out in the community, rather than the university or institution. It is a collaborative approach to research that aims to improve the well-being of the community in question while integrating multiple sources of knowledge. It understands

Image: Christophe Dubois and Leonora King at Café La Place Commune, a food solidarity cooperative located in Parc Extension. Thanks to Café la Place Commune, boxes of fresh vegetables are prepared each week for the chefs affiliated with Parc-Ex Curry Collective. Photo: Chloé Faussat

Kamal doing a dance performance at Afrique au Feminin.

Photo by Leonora King

that the needs of the community are shaped by its social and cultural context (Israel et al. 1998). It embraces a fieldwork approach which relies on passive data collection and relieves residents from having to 'participate' or be interrogated. Some of the key principles of community-based research are that it:

1. Recognizes community as a unit of identity

2. Builds on strengths and resources within the community

3. Facilitates collaborative partnerships in all phases of research

4. Integrates knowledge and action for mutual benefit of all partners

5. Promotes a co-learning and empowering process that attends to social inequalities

6. Involves a cyclical and iterative process

7. Addresses wellness from both positive and ecological perspectives

8. Disseminates findings and knowledge gained to all partners

➔ Community researchers serve as a crucial link between the research project and the participating community, with the success of this relationship depending on ongoing reciprocal outreach in collaboration with residents (Khanlou 2010)

1.1.4 Proposed Solutions

These case studies demonstrate important lessons for reclaiming more decision-making power and resources within communities affected by the AI sector and potential solutions towards these ends, such as Community Benefit Agreements (CBAs) and AI commons, but also smaller grassroots projects. These initia-

Savita Taheem (Afrique au Féminin) and Leonora King pose with new arrivals during one of their visits to local community organizations as part of the Tournée d'Organismes. This visit took place at CAPE, with community organizers Amy Darwish and Rizwan Khan. Photo: Rizwan Khan

tives, when developed in genuine collaboration with those impacted, can empower communities to manage their own resources, and set up projects that will offset the negative impact of top-down tech initiatives. Such initiatives can vary in scope and focus, but they share the general aim of democratizing the governance of physical and intellectual resources and equitably distributing, at least to a certain extent, the benefits of economic development.

Simply put, community benefit agreements (CBAs) are formal, binding agreements between community representatives and private and/or public entities that ensure a degree of benefit—often in the form of targeted jobs, local procurement, and community investment—results from development initiatives such as major real estate and infrastructure projects (Canadian Council for Public-Private Partnerships 2021). While at this stage of our research collaborations we do not wish to set up either a CBA nor an AI commons—the process for such initiatives requires much more community impetus, discussion, consultation, and clarity of scope and aims—we wished to share with Parc Extension residents and organizers information on community-led tech that could inspire and propel discussion about how to engage with the destructive potential of the emerging AI ecosystem in Montreal [2]

Community knowledge about emerging trends in AI and their impact on urban space can contribute to an ongoing analysis of the housing justice movement, and to encourage a sustained reflection on how university research and experiential learning led by researchers and students can contribute to addressing localized issues. Our approach combines insights into community tech with those on community housing in order to stimulate discussion about possible strategies to create community spaces that are protected from fluctuating forces of capital, such as real estate trends and the impacts of for-profit technological enterprise.

Before presenting the two case studies and proposed solutions, the following section

2 The material we present here was collected through literature reviews of studies of CBAs and literature on the commons.

(Section 2) provides an overview of the context of Parc Extension, first in terms of its historic evolution and then in relation to current housing issues in Montreal.

One of Parc-Ex Curry Collective's chefs makes one of her signature dishes, aloo gobi sabji with rice.
Photo by Deepali.

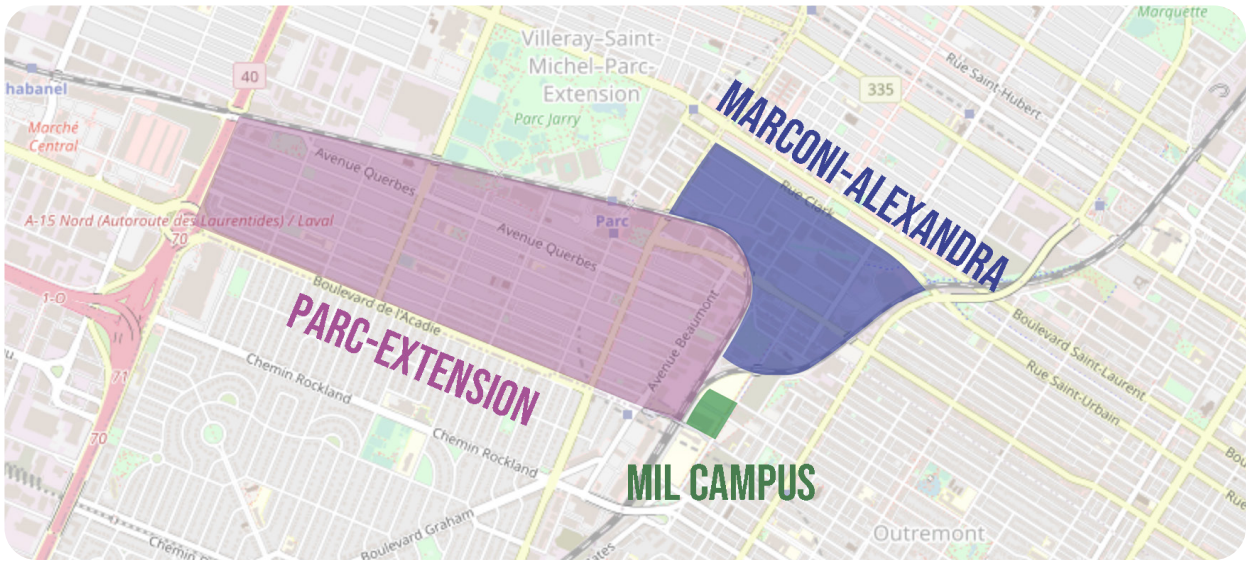
2. Situating Parc Extension

2.1. A Portrait of Parc Extension

With its 110-year history, the Parc Extension (Parc-Ex) neighbourhood has undergone and continues to undergo significant transformation (see Map 1 below for the location of Parc Extension within Montreal). Initially a rural area with significant farmland, plots of land started to be annexed in 1907 'extending' Parc Avenue to create the Parc Avenue Extension subdivision. The introduction of the 80 Tramway line in 1912 (now bus line #80) as well as the opening of Park Avenue railway station (or Gare Jean Talon) in 1931 converted the area into a major transportation hub, contributing to the urbanization of the city. Churches, schools, libraries, and small businesses started to be built during this time. In fact, many of the community organizations in the neighbourhood that exist today have a 20 to 35-year history (Parc Extension Historical Society n.d.).

In terms of population characteristics, Parc Extension's Jewish community experienced

Parc Jarry in Parc Ex in winter. Photo by Alessandra Renzi



significant growth in the 1950s, followed by the arrival of Italian and Greek immigrants in the 1960s-1980s. Since the 1980s, South Asian communities (from India, Bangladesh and Pakistan) have populated the area, making up 64% of its immigrant population. Parc Extension is now one of the most culturally diverse neighbourhoods in Canada, with over half (57%) its population composed of immigrants, while almost two-thirds (63.5%) are visible minorities (Table 1). Over two thirds (69%) of Parc-Ex residents do not speak French or English as their mother tongue. Almost three-quarters (71%) of the neighbourhood consists of families with children (compared to 63% for the Island of Montreal). 83% of these are immigrant families; while for Montreal, that rate is 51%. Although the current population of Parc-Ex is 28,775, it has the highest population density in the Montreal area with 17,672 inhabitants per square kilometre, more than four times that of the city's (Centraide of Great Montreal 2020).

Université de Montréal's Campus MIL is part of a wider strategy in post-secondary education actively incentivised by public funds disbursed by initiatives like the City's Laboratoire d'innovation urbaine de montréal. As a result, research and development in the Artificial Intelligence sector has substantially increased in neighbourhoods such as Parc Extension and

Table 1: Demographic Characteristics

Variable	Parc Extension, %	Island of Montreal, %
Youth (0 to 14 years)	17.2	15.7
Seniors (65 and over)	15.7	16.7
People living alone	16.6	18.1
Seniors living alone	32.7	36.1
Families with children	71.2	63
Single-parent families	31.6	32.5
Immigrants	56.5	34
New immigrants	10.1	7.3
Visible minorities	63.5	32.9
People >15 without a diploma or degree	33.5	16.9
Low-income individuals	38.4	21.3
Children <6 from a low-income family	36.2	22.8
Low-income seniors	42.6	21.2
Renter households	79	60
Renter households dedicating >30% of income to housing	39.7	36.8

Source: Statistics Canada, 2016 Census of Population

Little Burgundy[3]. For instance, Scale AI[4] received $230 million in investment through Canada's Innovation Superclusters Initiative. An additional $500 million has flowed to the AI sector as foreign direct investment. As part of their Pan-Canadian AI strategy, the Canadian Institute for Advanced Research (CIFAR) has allocated $40 million to the Quebec government (Brandusescu 2021, 33). The province of Quebec is also creating immigration incentives for skilled workers in the AI sector. As part of a new permanent immigration pilot, 550 people from the AI, IT, and visual effects sector will be able to settle in Quebec, provided they have a full-time job and an annual salary of $100,000 (in the Montreal region) (ibid., 32). Many of the main players in the field of AI development are located in or adjacent to Parc Extension. Scale AI and research institute Mila[5] have their offices in Marconi-Alexandra, or what has been dubbed the "Mile-Ex" by private developers and entrepreneurs, contributing to the dehistoricization of the area between the neighbourhoods of Mile End, Parc Extension and Little Italy (see Map 2 above for the location of Parc Extension in relation to Marconi-Alexandra). In recent years, Marconi-Alexandra has transformed into a hub not only for AI but also for other tech start-ups and Montreal's growing gaming industry, spurred on by French software giant Ubisoft's arrival in the city two decades prior. The proliferation of these sectors has led AI entrepreneurs to speak of an "AI ecosystem" in Montreal. Researcher Ana Brandusescu notes, "[a] cluster can be more focused in scope and reach, whereas an ecosystem permeates many industries and is found across many sectors. From government services to banking and finance, health, retail and manufacturing.

3 Labelling itself an "urban lab for public experimentation", Quartier de l'innovation is a consortium of private, public and academic actors who apply a range of technologically-centric approaches in this traditional Black neighbourhood currently undergoing rapid gentrification. One project currently led by Quartier de l'innovation proposes the mitigation of food insecurity through driverless electric smart buses that are meant to bring area residents to the nearby Atwater Market. Never mind the fact that Atwater Market offers a kind of open-air food-as-entertainment experience that is in no way accessible to people living on a budget.

4 A consortium of private entities, research centres, academia and… start-ups that constitute the federally-designated AI supercluster of Canada (https://www.scaleai.ca/about-us/)

5 Officially the Quebec Artificial Intelligence Institute, founded by UdM's Yoshua Bengio

In particular, the Montreal ecosystem includes 5,000 entities of various sorts in the ICT space that provides a pool of 91,000 workers." (ibid., 31). The growth of this larger system has significant impacts on the inner-city neighbourhoods in which its enterprises are located, such as Marconi-Alexandra. In these neighbourhoods, gentrification stemming from the proliferation of the tech industry and an influx of young professionals looms as an ever-increasing threat as corporations such as Microsoft, IVADO, and Element AI establish artificial intelligence research facilities in former industrial sites. Although the negative impacts of gentrification under similar circumstances in Parc Extension

Image: Street art beautifies the Mile-ex neignbourhood. Photo by Alessandra Renzi

are likely to be repeated in Marconi-Alexandra without significant intervention, elected officials enthusiastically encourage the unabated expansion of this sector into the neighbourhood (Keating 2018), despite research indicating that its benefits remain concentrated among a limited segment of private interests (Brandusescu 2021). Researchers have identified the technology sector as a driving force behind the rapid gentrification of a number of major American cities. In the San Francisco Bay Area, this phenomenon has been observed in two waves of skyrocketing housing costs coupled with evictions and tenant harassment: first with the "dot-com boom" of the late 1990s and early 2000s, and then more recently with the rise of tech giants such as Twitter, Facebook, and Google, who all have significant operations in the Bay Area (Opillard 2015). Tech-led gentrification has also been studied in Seattle, where the outcomes of this process—increased housing costs and the displacement of non-white residents from the area surrounding Amazon's headquarters—have been obfuscated by "environmentally friendly" development that has accompanied this wave of gentrification (Rice et al. 2015).

In the context of "Mile-Ex", research has highlighted the ways municipal government has facilitated ongoing gentrification through zoning revisions, tax incentives, and "beautification" projects that have hastened the area's transition from a manufacturing district with relatively affordable mixed housing in the early 2000s to a technology hub with condominiums and single occupancy conversions rapidly replacing rental units (Sprague and Rantisi 2019). This research also draws attention to the lack of consultation with community organizations when compared to the redevelopment of other former manufacturing districts in Montreal, resulting in a "vision for the neighbourhood [that] is imposed, rather than collectively… composed" for Marconi-Alexandra (ibid., 316). Given the well-established negative impacts of gentrification on the city's most vulnerable populations in nearby neighbourhoods, coupled with the insufficient attempts to mitigate housing displacement at a policy level, and the links between the technology sector and rapid gentrification in other cities, attention must be drawn to the AI boom in Marconi-Alexandra and its impacts on the neighbourhood. In order to avoid exacerbating the already mounting housing-related pressures facing its residents, private and public actors facilitating

neighbourhood change in Marconi-Alexandra must meaningfully consult impacted parties and ensure the benefits of redevelopment are equitably shared, while also ensuring that

Image: Parc Ex in the streets, a common banner at housing rights protests in Parc Extension

claims of positive social returns stemming from AI and other technologically-centric approaches to urban planning are balanced through dutifully integrated resident input. The following four subsections provide a closer look at these dynamics by presenting an overview of housing issues in Montreal, a review of the specific housing issues in the Parc Extension neighbourhood and then a review of contemporary municipal housing policies and community-based alternative housing models.

2.2. Housing Issues in Montreal

When compared to other Canadian cities, Montreal is a city of tenants. It ranks last among Canadian Census Metropolitan Areas (CMAs) in home ownership rate (Statistics Canada 2017) and more than two thirds of its population rely on the rental market for housing (FRAPRU 2019, 6). This set of circumstances is a key factor in what many tenants advocates, politicians, and members of the media have identified as an ongoing housing crisis in the city. This crisis is twofold, with significant issues relating to both supply and affordability. In 2019, Montreal's vacancy rate dropped to 1.5%, a 15 year low (CMHC 2020) well below the 3% benchmark considered by experts to be the minimum for a healthy private housing market (Wellesley Institute 2010, 36). According to CMHC's 2020 Rental Market Report, the average cost of rent in Montreal increased by 4.2% from 2019 to 2020, the largest increase since 2003 (CMHC 2020). Nearly 180,000 households, accounting for approximately 40% of Montreal's tenant population, spend more than 30% of their income—the benchmark set by the CMHC for affordability—on rent. Of those 180,000 households whose rent is considered to be unaffordable, nearly half contribute more than 50% of their income to rent, while more than a fifth contribute a staggering 80% or more of their income to rent (FRAPRU 2019, 4-6).

In Quebec, the Tribunal administratif du logement (formerly the Régie du logement) is a government agency that, among other functions, serves as an intermediary between tenants and landlords in ensuring rental increases are justified based on increases in costs such as municipal taxes, insurance, and utilities. Each year, the Tribunal administratif du logement (TAL) publishes non-binding, suggested rent

increases based on these, and other, factors. Often, these increases are modest: for example, in 2021, the TAL recommends a basic 0.5% increase in rent for electrically heated housing (TAL 2021). However, these percentages do not take the costs of major repairs into account, which landlords can use to justify rent increases that are significantly above the TAL's suggested guidelines. This has become a strategy increasingly used by landlords to bypass the rent control functions of the TAL. Tenants are forced to leave their units, often for extended periods of time, to allow for supposedly unavoidable renovations. When (and if) they return, tenants often find their landlord has increased their rent significantly, using the costs of renovation as justification to the TAL.

Data suggests that this practice, referred to as "renoviction", is on the rise in Montreal, with tenant requests to the TAL contesting a notice to "subdivide, substantially enlarge or change the allocation of a dwelling" increasing by 142% between the years 2019 and 2020, accounting for the most significant increase in five years (Thomas 2021). This statistic only tells part of the story: many renovictions go uncontested, as landlords are known to use intimidation, harassment, or cash payments to coerce vulnerable, often low-income tenants into terminating their leases prior to renovation (CLPP 2020). A 2020 report from Comité logement de la Petite Patrie (CLPP) found that, of the 363 cases of repossession, eviction, major work, or demolition they examined in the city's Petite-Patrie neighbourhood, a large majority involved either fraud or "malveillance" on the part of the landlord and only 15% of cases resulted in the completion of the renovation project as initially presented to the tenant (ibid., 14). A common practice highlighted in the report involves landlords buying tenants out of their leases for modest sums of money in order to allow for an "expansion" of the unit. However, landlords will quickly take the unit off the rental market and resell it as a condominium or list it as an Airbnb, while only nominally expanding the unit (by adding a terrasse in the yard, for example) (ibid., 18). The CLPP concludes their report by criticizing the complacency of the TAL and demanding stricter measures to protect tenants from the fraudulent practices of predatory landlords.

Image: New building at Campus MIL. Photo by Alessandra Renzi

2.2.1 Housing Issues in Parc Extension

Many of Montreal's most pressing housing issues—dwindling rental stock, skyrocketing costs, renovictions, and the exploitation of vulnerable populations by predatory landlords—are in particularly sharp focus in the city's Parc Extension neighbourhood. As of the 2011 census, 81% of households in Parc Extension were tenants and 42% of tenants spent more than 30% of their income on rent, both higher figures than the city's average (Femmes et villes international 2014). As of 2018, the vacancy rate in Parc Extension stood at 0.7% for one bedroom units and 0.6% for two bedroom units, figures that are considerably lower than both the city's average and the 3% threshold often cited for

a healthy housing market (Parc Extension Anti-Eviction Mapping Project 2020). This low vacancy rate has resulted in large families—and sometimes multiple large families—living together in cramped, inadequate apartments; a fact that health officials have linked to the neighbourhood's high COVID-19 infection rate, at times the highest in the city (Abboud 2020). Consultation with Parc Extension residents has shown that these factors have resulted in a significant imbalance of power between tenants and landlords in the neighbourhood, with language barriers, fears surrounding immigration status, lack of knowledge of Quebec's housing laws, and limited social networks all serving as barriers to overcoming housing issues (Beck et al. 2019). A community roundtable on systemic racism conducted by a number of organizations working in Parc Extension brought forward reports of racial profiling by police, employers, and landlords, "who would rather rent to students… [than] racialized tenants" (Table de Quartier de Parc Extension 2019).

These issues are compounded by the ongoing gentrification of the neighbourhood, which has been attributed in large part to the Université de Montréal's Campus MIL, recently built on the site of a former rail yard at the edge of Parc Extension. A 2020 report from the Parc Extension Anti-Eviction Mapping Project, in collaboration with Comité d'action de Parc Extension (CAPE), the Community-Based Action Research Network in Parc Extension (CBAR), and the Collectif de recherche et d'action sur l'Habitat (CRACH), found that Campus MIL has resulted in the "exacerbation of economic and social precarity in an already vulnerable area of the city" (Parc Extension Anti-Eviction Mapping Project 2020, 6). Data collected by CAPE, beginning in 2018, suggests that evictions have been on the rise in Parc Extension, with the organization experiencing a significant increase in tenants requesting assistance upon receiving eviction notices. The report also presents research showing that, between the period of February to May 2020, the average costs of publicly-available rental listings for both two and three-bedroom units in Parc Extension were more than twice as high as averages provided by the CMHC, suggesting a significant and rapid increase in the cost of rental housing in the neighbourhood (ibid., 15-16). Many of the listings examined by CAPE directly target UdeM students and young professionals, suggesting a demographic reorientation of the neighbourhood along these lines—a conclusion corroborated by an ongoing study conducted by a team led by

Image: Press conference for the launch of the report "MIL façons de se faire évincer: The University of Montreal and Gentrification in Parc Extension), June 2020.

Image: Screenshot from live camera of the Campus MIL area before construction. Photo: Alessandra Renzi

Université de Montréal geography professor Violaine Jolivet, which shows that more than a third of rental listings in Parc Extension mention the new campus. Ads that highlight a unit's proximity to campus average $100 more per month than those that do not (ibid., 19-20).

In addition to rising housing costs, dwindling supply, reports of discriminatory landlords, and other systemic issues facing many residents of Parc Extension, disrepair and unsanitary housing conditions are also disproportionate in the neighbourhood. According to the 2016 census, almost 10% of housing in Parc Extension is in need of major repair, compared to an average of 8.5% for Montreal. Of the hundreds of resident reports CAPE receives each year relating to housing conditions, 17% involve cockroaches and 15% involve rodent infestations, with overlap between these two problems not uncommon (ibid., 23). Parc Extension is located in the federal electoral district of Papineau, currently held by Prime Minister Justin Trudeau. Given that Prime Minister Trudeau has often spoken about the importance of housing issues, even declaring that "housing rights are human rights," (Tasker 2017) the fact that his constituents are experiencing rapidly deteriorating housing conditions exacerbated by poverty that ranks among the worst in the country is especially egregious.

2.3. Municipal Intervention

At the level of municipal politics in Montreal, housing is a central issue that is a frequent topic of debate, campaign promises, and legislative action. The city's current administration, led by Projet Montréal, a relatively new party founded on the principle of "sustainable urbanism", has in fact publicly affirmed the right of all Montrealers to have access to affordable, quality housing (Plante 2021).

One of Projet Montréal's most notable commitments to housing is the Règlement pour une métropole mixte, often referred to as the "20-20-20" by-law, which mandates housing developers to include at least 20%

Photo: Alessandra Renzi

social housing, 20% affordable housing, and 20% family housing into their projects. While this by-law has been criticized by developers as overly onerous, it is also the subject of equally fervent criticism from housing advocates, who view its intervention in the speculative real estate market as ineffective and largely insufficient in countering the city's worsening housing crisis. In particular, the Front d'action populaire en réaménagement urbain (FRAPRU) criticizes the by-law's criteria for affordability, which is based on the market value of housing rather than the income of tenants, leaving even average earners priced out of so-called "affordable" housing in many of the city's central neighbourhoods (FRAPRU 2019). FRAPRU also urges the city to increase the 20% threshold for social housing to 40% (and 100% for developments on publicly-held land) (ibid., 14), viewing it as a crucial tool in addressing the housing needs of the city's most vulnerable. Notably, the by-law contains a loophole that allows developers to buy their way out of the obligation to designate 20% of their units as social housing by contributing to a municipal social housing fund (Ville de Montréal 2019), doing little to halt the gentrification of neighbourhoods with hot property markets.

Another development in the City's capacity to measurably decrease housing scarcity has been the formulation of an approach allowing the city to exercise a right of first refusal and pre-emptively purchase property with priority over other, private buyers.

While this ability, initially granted in 2016, could have become a core component of a locally applied mitigation strategy was not used until four years after its adoption, when in September 2020, after considerable public pressure, the city purchased Plaza Hutchinson, a vacant six-storey former community center in Parc Extension that held significant symbolic capital for housing rights advocates city-wide. The City has yet to concretise its commitment to transforming Plaza Hutchison into social housing.

The City has made similar pre-emptive claims on 300 other properties across the city, including many in Parc Extension. However, the City is under no obligation to exercise these claims or develop these properties into social housing and may only do so when (and if) they are listed for sale by their current owners (Magder 2020). While the right of first refusal could be a powerful tool, since its adoption in 2016, it has resulted in the securing, in principle, of a scant 40 units of social housing (ibid.), which in actuality will not be ready for years. Whether the right of first refusal can be used to meaningfully contribute

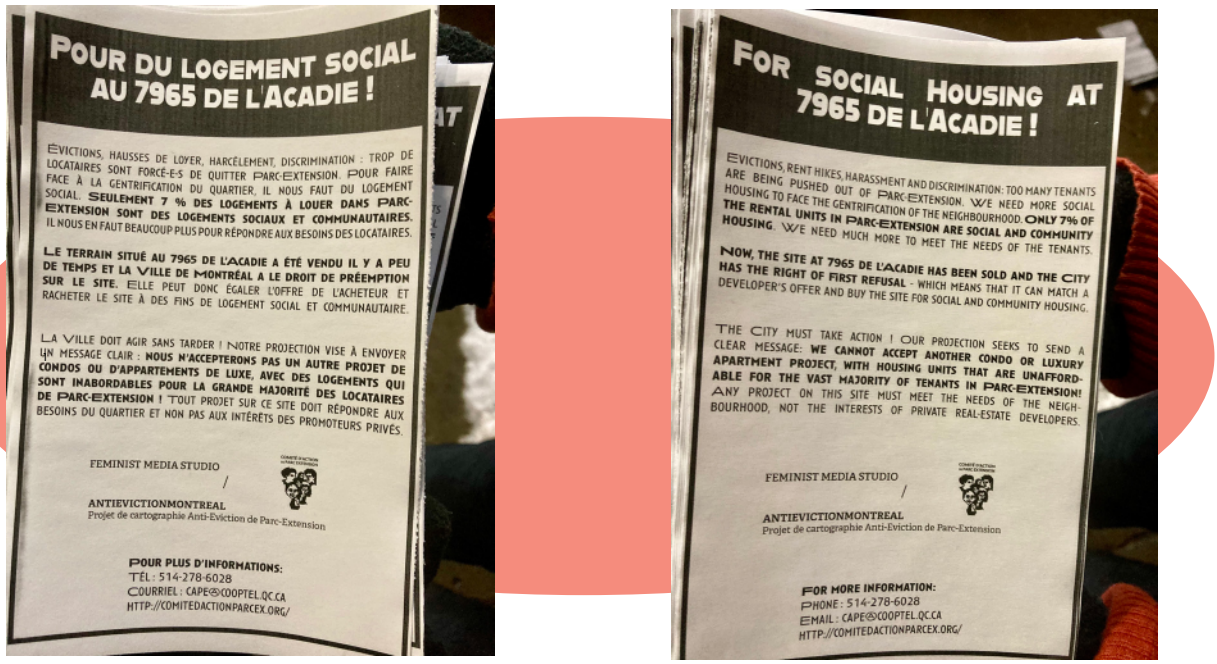


Image: Protest flier for a housing rights event organized by various community groups. Photo by Alessandra Renzi

Photo by Alessandra Renzi

to changing the course of Montreal's housing crisis remains to be seen.

On the borough level, other attempts at regulatory intervention have also been seen in recent years. In 2019, in Rosemont–La Petite-Patrie, councillors voted to ban the conversion of duplexes into condos in an attempt to shore up the rental supply and stem the rapid decline of the borough's vacancy rate, which at the time stood at 1.5% (CBC News 2019).

2.4. Community Efforts and Alternative Housing Models in Montreal

Across the city, numerous organizations are attempting to fill gaps in housing provision left by both the private market and various levels of government. In Parc Extension, this effort is led by several groups, such as the aforementioned CAPE, who, among other initiatives, offer free resources and legal assistance to residents of Parc Extension experiencing housing issues. The Parc-Ex Anti-Eviction Mapping Project is a collective of academics, activists, and community members who use digital technologies and collaborative research to document and push against gentrification in the neighbourhood. Brique par Brique is an organization that aims to develop "infrastructure that is managed by and for marginalised people" (Megelas 2018) and is in the process of developing a 30-unit affordable housing project on the site of a former paint factory in Parc Extension. Less formal groups, such as Parc-Ex contre la gentrification (PECG) coalesce around issues such as the (ultimately unsuccessful) plan to develop the Plaza Hutchinson into luxury apartments (Radio-Canada 2018).

Elsewhere in Montreal, community organizing has successfully led to alternative models of housing that have kept rents well below market levels for years. Given the current housing crisis, these successes in community housing can serve as useful examples. The Communauté Milton-Parc (CMP), a network of housing co-operatives that collectively accounts for one of North America's largest housing co-op projects, stands as such an example of the potential of this type of organizing. The successes of the CMP resulted from a years-long struggle initiated in the 1970s by community members pushing against redevelopment that would

have displaced many of Milton-Parc's residents, replacing low-rent housing with high-rises, hotels, and office towers. Following years of nonviolent direct action, including sit-ins and occupations, members of the Milton-Parc community were able to broker a deal, involving several non-profits and the CMHC, to purchase and convert buildings slated for redevelopment or demolition into co-operatives and other forms of social housing. Residents who became members of co-operatives were able to own and control their places of residence in common, preventing displacement and safeguarding the community from the speculative real estate market; rents in the CMP remain affordable to this day (Hawley and Roussopoulos 2019, 24-35).

The Benny Farm residential development, located in a working class part of the Notre-Dame-de-Grâce (NDG) neighbourhood, also demonstrates the extent to which large spaces with former public mandates can be reimagined in response to housing needs. A former residential development reserved for World War II veterans, Benny Farm now houses a range of private, social, and community housing initiatives co-led by NDG community groups who also sometimes integrate environmental and social mandates (NDG Community Council n.d.).

Recent housing initiatives have been led by groups such as the Unité de travail pour l'implémentation du logement étudiant (UTILE), which promotes the development of student-led housing co-operatives throughout the province, and Vivacité, which attempts to counter housing speculation through the provision of financial support for home buyers in exchange for committed limitations on resale price.

With more grassroots momentum and sufficient pressure on the city (and the province), it is possible to develop new projects that make housing truly affordable for Parc Extension residents.

3. CASE STUDY 1: AI Ecosystems and the Impacts on Political, Economic and Environmental Sustainability

3.1. AI ecosystems, policy frameworks, and implications for political and economic development

To better understand the role that the burgeoning, state-supported AI sector plays in shaping gentrification dynamics and neighbourhood resource allocation, as well as the prospects for more just housing and infrastructure responses to economically-induced pressures, an analysis of the harmful impacts that AI can trigger is warranted.

Critical research on AI bias and algorithmic harms has revealed some of the dark sides of the turn to machine intelligence (Eubanks 2018; Buolamwini 2019; Benjamin 2019). In addition to high-visibility cases such as biased police profiling with AI, AI also impacts the geography of cities relying on algorithmic decision-making (Safransky 2019, 200). For example, the popular Market Value Analysis (MVA) digital tool, adopted by cities like Detroit, uses data-driven processes to guide development, automating and hiding historical bias (Safransky 2019, 201). These decisions have had dire consequences for Detroit's poor and racialized residents whose neighbourhoods have been deprived of public services. When algorithms for AI govern planning decisions, the processes of marginalization become entrenched in the governmental fabric of a city, perpetuating systemic oppression or producing new violence under the cover of neutral technology. This has been well-documented in the case of water relief policies and lawmaking in the US (Anson et al., 2022). Additionally, algorithmic violence[6] (Onuoha 2020) is not always caused directly

6 Mimi Onuoha conceptualizes digital and data-driven forms of inequity as algorithmic violence—"the violence that an algorithm or automated decision-making system inflicts by preventing people from meeting their basic needs. Algorithmic violence results from and is amplified by exploitative social, political, and economic systems, but can also be intimately connected to spatially and physically borne effects" (Onuoha 2018).

by AI software but can be woven into the fabric of the environment where the industry's infrastructure takes shape. This is the case with the gentrification of areas where tech workers move to.

Montreal has become one of three of Canada's AI centers, with tech giants, start-ups, and considerable federal, provincial, and municipal investment (Roberge et al. 2020). Montreal has aimed to position itself as a global player in AI research and development. Research leaders like Yoshio Benigo have also positioned Montreal as an 'ethical' hub, moving from championing a technology to praising its social benefits (Roberge, Senneville and Morin 2020). These proposasl of AI4Good find themselves at oods with forces reshaping Montreal in their name.

AI is the latest technology to be leveraged as a means of urban development. Increasingly, commitments to fostering a technologically-deferent city see these perspectives applied in neighbourhoods as a means of "revitalizing poor areas," such as the Plateau-Mont-Royal neighbourhood, redesigned in relation to the presence and size of multimedia giant Ubisoft. Similar processes can be observed in the historically Black neighbourhood of Little Burgundy, claimed as an "innovation playground" by intersectorial hub le Quartier de l'innovation (Shearmur 2017), and now in relation to the newly rebranded Mile-Ex.

The most prominent figures behind these efforts promote the notion of an ecosystem. In their use, AI ecosystems build ties and connections among industries, sectors, and governance rather than reflect the characteristics of a specific cluster or hub. On a general level, the thinking behind AI innovation legitimizes and normalizes inclusions and exclusions of stakeholders by presenting the ecosystem as mundane and harmless. Since the ecosystem metaphor is used to develop policy and urban planning initiatives, a blurring of boundaries occurs between business, academia and government that effectively sidesteps accountability through limited transparency and resistance to critique through the use of "smart-cities" language and positioning.

The Montreal AI ecosystem includes 5,000 entities of various sorts with a pool of 91,000 workers, plus talent in academia including special research chairs and appointees and some 9,000 students enrolled in university AI programs. Important players include entrepreneurial actors such as PME Montreal, Université de Montréal, Element AI, and the Quebec Artificial Intelligence Institute, in addition to large tech corporations such as Google, Facebook, and Microsoft (Brandusescu 2021). To learn more about Montreal's AI ecosystem, one can read the excellent report by Ana Brandusescu "Artificial intelligence policy and funding in Canada: Public investments, private interests," published in March 2021 by McGill University. Among its many findings, the report concludes that "public investments in AI technologies primarily benefit the private sector" and "concentrations of power provide advantages to a handful of entities" (2021: 46). As a sector, AI benefits from extensive access to private, public, and philanthropic support, including the McConnell Foundation's Smart Cities strategy and the City's own funding program to support private enterprises operating in social innovation. The efforts developed as a result of this funding tend to frame their iterative and 'innovative' nature as justification for a lack of demonstrability. As argued by Gélinas, Grosbois, and Lavoie-Moore (2021), Montreal's AI ecosystem disproportionately favours a relatively politically neutral startup culture of innovation at the direct expense of grassroots efforts that argue for the allocation of resources towards technologically-oriented approaches that could contribute to housing rights advocacy and addressing police violence.

The idea of the "ecosystem" has circulated as a metaphor for some time in business literature. The term "ecosystem" derives from biology, linking living organisms and their habitat. Ecosystems have made it to AI innovation research and development through theorizations in the field of innovation management that draw attention to the fact that companies cannot be viewed

as part of a specific industry but are part of cooperative and competitive interactions among companies from different sectors (Arenal et al. 2020, 3). Unlike their biological counterparts, AI ecosystems are thought to have reflexivity and foresight in the sense that they can be modified through interventions by ecosystem members such as organizations and actors who are internal or external to the ecosystem. For instance, quantum computing could influence an AI ecosystem (Stahl 2021). AI organizations use the term to develop strategies to become more competitive and shape the ecosystem to their advantage (Stahl 2021). Ecosystem approaches have been critiqued both from inside and outside the field. At a general level, they rely on applying Darwinian evolutionary theory to socio-technical systems. Social Darwinism's "survival of the fittest" is widely recognized as problematic. Oh et al. (2016) critique the fact that while natural ecosystems develop through evolutionary processes, innovation ecosystems are the product of economic intervention that also impacts policy and regulation. Nevertheless, AI ecosystem theory aims to foster connections among public and private actors in order for the specific ecosystem to become more powerful (Arenal et al. 2020, 3). Today, we find the adoption of the model of AI as an ecosystem in important transnational and regulatory bodies, like the European Commission (2020), the OECD (2019, 3), and UNESCO (2020), as well as the Canadian and Quebec governments (CIFAR n. d.; Investissement Quebec 2019). Once the ecosystem model, which was intended to help businesses accumulate capital, begins to be the basis for policy and planning decisions in places like Parc Extension, even those not directly touched by algorithms are impacted. Public policy driven by business principles presents minimal options to push back.

➔ For these reasons, it is important that intersectional organizing also begins to address innovation discourse.

In the report "Strategy for the development of Quebec's Artificial Intelligence Ecosystem", the Artificial Intelligence Cluster Steering Committee issues a series of recommendations to mitigate the impact of AI. The recommendations call for citizens' participation in the accountability process for the development of AI tools. They praise the focus of the Montreal Declaration for a Responsible Development of Artificial Intelligence on scientific expertise and public consultation. However, Brandasescu's research underlines that the public can only comment on funding allocations after the infrastructure is set in place. Public consultations are sparse and held in private buildings, which in some cases require signing a non-disclosure agreement. AI innovation is a largely uncontested pursuit, yet, Suchman and Bishop (2000) argue innovation agendas reproduce existing organizational and economic orders. For instance, Prime Minister Trudeau's riding is located in the neighbourhoods impacted by AI-led gentrification, as his major funders play an important role in this new ecosystem. For example, Stephen Bronfman, a major fundraiser for the Liberal Party, is the owner of Claridge Inc., while Claridge President and CEO Pierre Boivin sits on the federal government Advisory Council on Artificial Intelligence. Boivin is also co-chair of Quebec's Artificial Intelligence Cluster Steering Committee.

Importantly, the real estate business is closely connected to the AI industry. This link is visible, for instance, in the role played by Claridge Inc., a private investment firm investing in both real estate and technology. Similarly, San Francisco-based boutique investment firms specializing in tech real estate in Silicon Valley are also investing heavily in the Mile-Ex area. The everyday relations in the AI ecosystem involve real estate in important ways, including the residential options for wealthier residents. Still, the entanglement of the tech boom and the housing crisis are seldom discussed, while industry cherry-picks

scientific terms for disingenuous planning.

➔ It is important to draw attention to these hidden relations between the housing crisis and AI innovation strategies to develop more effective forms of community organizing and advocacy.

Conceiving of innovation in terms of ecosystems that can be bred and manipulated is deceiving and shows a frontier mentality with little attention to what already exists in the areas targeted (and to contemporary understanding of biological ecosystems). In biology, to describe the progression of the AI sector in Parc Extension, one ought to use terms such as "ecosystem engineers" or "habitat modifiers", not simply "ecosystem." Such terms better describe the invasive nature of the organisms affecting existing ecosystems by changing the environment either with their bodies, their activities or their interactions (Rilov et al. 2012). The discussion of AI in Montreal is framed in terms of overwhelmingly positive economic benefits that make no mention of socio-economic drawbacks in an ecosystem that pre-existed the emergence of the AI sector. Beyond gentrification, AI "ecosystems" (i.e. ecosystem engineers) invade other habitats like academia to install big tech for-profit models in previously critical and independent research spaces. One of the recommendations in the strategic report mentioned above is that "the Quebec government supports the creation of an international prospective observatory on the responsible development of AI" (Artificial Intelligence Cluster Steering Committee 2018, 60), and it seems that participation from academia and civil society is allegedly encouraged.

➔ Therefore, there is a need to create a critical mass including academics and community groups who recognize the danger of these slippages. Advocates and organizers may want to push governing bodies to not only think about the Responsible Development of Artificial Intelligence but also the responsible development of the AI industry and its ecosystem.

➔ Another, more experimental approach to resisting the impact of AI ecosystems, could be to find ways to increase the power of the community and activist ecosystem by actively fostering synergies between groups and organizations through networks, events and initiatives.

3.2. Sustainable AI? Assessing carbon impacts and greenwashing gentrification

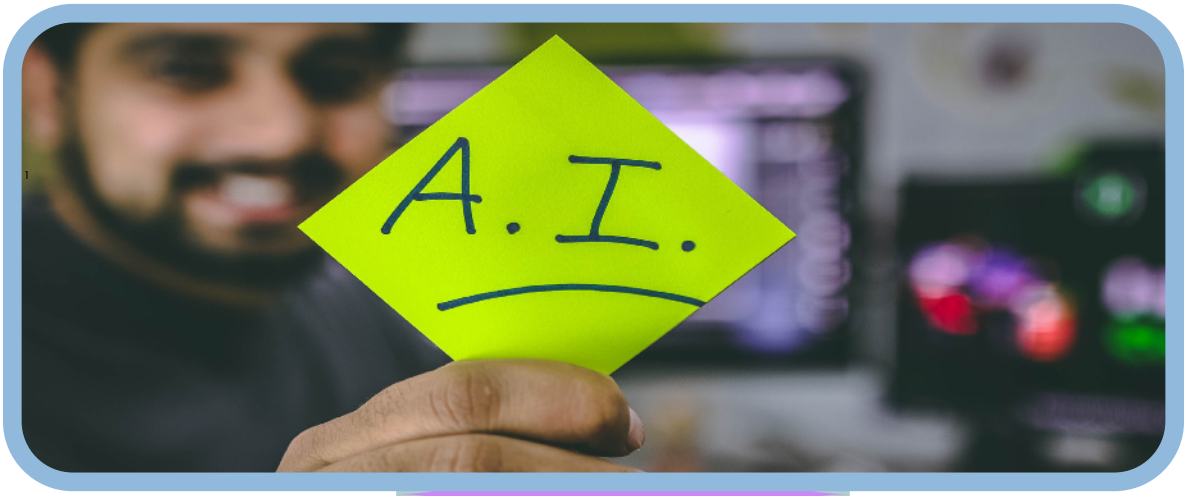


Image: Photo by Hitesh Choudhary on Unsplash*

Training an AI model requires immense amounts of computing power and hence electricity. Only recently have computer scientists, social scientists, and humanities scholars begun to explore the implications of this part of the "AI assembly line" in detail. Emma Strubell, Ananya Ganesh, and Andrew McCallum studied the carbon footprint of common Natural Language Processing models (NLP), estimating that training one transformer (a type of deep learning model) with neural architecture search on a General Processing Unit (GPU) produces roughly the same amount of CO2 emissions that are emitted for building and driving five cars over their entire lifetime (2019).

As AI models grow continuously larger, the more computationally intensive they become. As more parameters, or weights, are added to neural networks, electricity and other computing-related resource consumption increases (Saenko 2020). Computations required for AI training increased 300,000x between 2012 and 2018 (Amodei and Hernandez 2018). Since larger models are more accurate compared to smaller ones, AI developers have largely adopted model accuracy as the sole measurement of success, which leads to a situation where "the focus on this single metric ignores the economic, environmental, or social cost of reaching the reported accuracy" (Schwartz et al. 2019). Schwartz and colleagues refer to this approach as "Red AI", and propose a "Green AI" approach that would elevate efficiency as an at least equally important criterion for AI development (ibid.). Considering the lack of data and reporting mechanisms necessary to systematically assess the energy consumption of machine learning, Henderson and colleagues have suggested a framework they call "experiment-impact-tracker". This framework is supposed to facilitate "consistent, easy, and more accurate reporting of energy, computer, and carbon impacts of ML systems" (Henderson et al. 2020). Computer scientist Kate Saenko concludes,

> Unless we switch to 100% renewable energy sources, AI progress may stand at odds with the goals of cutting greenhouse emissions and slowing down climate change. The financial cost of development is also becoming so high that only a few select labs can afford to do it, and they will be the ones to set the agenda for what kinds of AI models get developed (Saenko 2020).

Of course, the resources that AI development and implementation consumes are not limited to energy alone. As has been well documented in works such as Jennifer Gabrys' "Digital Rubbish" (2011), the sourcing of raw materials and manufacturing of computing hardware conjure up images of abundance that conceal their wastefulness due to short lifespans and planned obsolescence, as well as the precarious conditions of production and disassembly in the Global South (see also Taffel 2019).

In May 2021, the Université de Montréal published its new strategic plan for sustainable development for 2021-2023. According to the university, the plan is a precursor to a long-term strategy for 2024 that will involve the student population, faculty members, and community (Université de Montréal 2021, 12). Based loosely on the UN's Sustainable Development Goals, the plan identifies nine strategic themes, divided into four areas of engagement: planning and management, teaching and research, operations, and social engagement. An appendix breaks down these broader areas into 44 goals, for instance "Reducing water consumption" or "Minimizing the impact of professional travel".

These goals have the potential to decarbonize some of the university's activities and infrastructures (transport, waste production, building maintenance and operation) and to increase access to education and food security. But some of the goals are phrased in such general terms that they are not tangible, at least not in the publicly available document cited here ("Recognizing and promoting our sustainable development practices", "Staying on the cutting edge of sustainable development by encouraging innovation", "Making the University an inclusive workplace that represents the diverse community it serves"). The document is also vague in regard to implementation. Each theme is said to be handled by a working group made up of various university stakeholders

and external collaborators (Ibid., 11), but the document does not provide any detail on when and by whom these groups will be set up, or how one can get involved either as an affiliate of the university or as an external member. It mentions being influenced by the criteria outlined in the STARS rating system, but does not provide any information on which exact criteria will be applied, or how the university's performance will be evaluated and by whom.

Notably, the document makes no specific reference to the environmental impacts of data storage and hardware purchase. In other words, the digital devices and infrastructures needed for the university's operation and for research, including but not limited to the field of AI, are not part of the sustainability plan. This limits the scope of assessment of the university's environmental footprint of the "usual suspects" of transportation, food production, investments, building operations, and maintenance (which no doubt are important), while disregarding the field of digital technologies entirely—and the massive investment in AI research and development in particular.

➔ Given the focus of UdM's Campus MIL on AI Research and Development, holding the institution accountable to commitments made in its strategic plan would involve more transparency, specificity and accountability for their impact on climate change.

Unlike UdM, Mila and CIFAR are actively involved in the question of how sustainability relates to digital technologies, among them AI. As part of the initiative Sustainability for the Digital Age (SDA), the institutes are involved in investigating how digital tools can be leveraged to "disrupt the facets of existing economic, governance, and cognitive systems that are maintaining society on a carbon-intensive and increasingly inequitable path" (Sustainability in the Digital Age 2020, 9). Mila and Element AI researchers have also developed an algorithmic impact assessment tool that calculates the carbon footprint of machine learning algorithms. As is common in technology development close to industry, SDA's "Digital Disruptions for Sustainability Agenda" presents digital

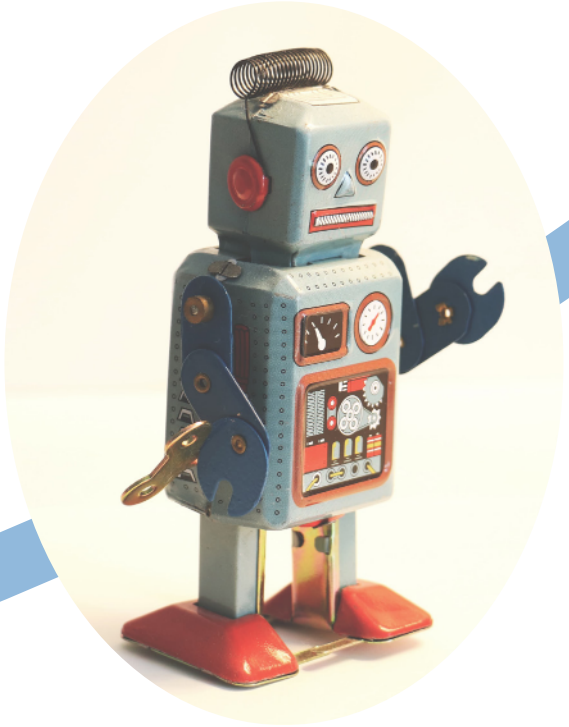


Image: Toy robot. Photo by Rock'n Roll Monkey on Unsplash

technology as problem-solving instruments with disruptive and transformational capacity.

While it acknowledges that today's digital technologies have a large carbon footprint themselves and that there is an urgent need to switch to exclusively renewable energy sources to develop AI at scale (ibid., 32), it does not mention the double role that large corporate AI developers play in the fight against climate change. On one hand, they develop solutions such as energy efficiency in data centers or improved analysis of heat patterns. On the other, they continue to provide services to the fossil fuel industry, which uses AI and other digital tools to optimize extraction of oil and gas (Greenpeace 2020, see also Cohen 2020).[7] The Agenda also does not reference recent debates in the field such as red vs. green AI or the efficiency/accuracy question (see above). In addition, resource extraction, e-waste production, short life cycles, and planned

7 Google has since stated that it plans to cease developing and selling AI tools to gas and oil firms, see e.g. https://www.cnbc.com/2020/05/20/google-ai-greenpeace-oil-gas.html and https://www.forbes.com/sites/rachelsandler/2020/05/19/google-halts-ai-tools-for-oil-industry-after-greenpeace-report/?sh=3e1ca97569ae

obsolescence in hardware manufacturing are mentioned fleetingly with little detail about how these problems could be addressed (ibid., 96-97). Rather, big data, earth observations, Internet of things (IoT), and AI are presented as solutions for increasing transparency of global supply chains (ibid., 49). Generally speaking, AI is certainly making important contributions to understanding climate change, systemic problems related to carbon emissions, biodiversity, forest monitoring, and other areas. But just like in criminal justice or financial services, where adverse impacts have been well-documented,[8] the use of AI systems can also replicate or reinforce existing problems, or have potential negative impacts depending on how they are designed and which metrics are used. AI's contribution to the climate crisis and social inequalities is thus not clear-cut and deserves closer, case-by-case scrutiny (see for example Coeckelberg 2021, Dhar 2020, AI Now Institute 2019, Malliaraki 2020).

➔ If they are to take accountability and harm reduction seriously, developers of digital tools should account for the externalized harms and feedback of their systems. If a comprehensive approach of care was applied to the material and social impacts of AI, the "AI supply chain" would be considered in its entirety and scrutinized through a lens of social and environmental justice.

As Sy Taffel asks, "[t]o what extent can we justify damages to [...] ecological systems based on the socioeconomic benefits that digital culture brings?" (2019, 164). As it stands, acceleration, obsolescence and upgrade culture contribute to a "digital colonialism" that extracts raw materials and data from poor areas of the globe while offloading toxic electronic waste back onto those same areas (ibid., 178). So-called "cradle-to-cradle" design, where every material employed in a product is entirely recoverable and reusable, is one possible approach to addressing the issue (ibid., 184). Tapping into circular economy approaches and making reuse, upcycling, and recycling a key feature of an institution's hardware sourcing could contribute to minimizing harm and decreasing environmental injustice.

However, as this report makes clear, externalized harms also occur at the local level of AI research and production through reevaluating neighbourhoods and driving displacement, an aspect that is usually sidelined or not even considered in the conversation around AI harms. What is more, environmental concerns and sustainability are often used by corporate parties to paint themselves as progressive and responsible "neighbours" who are doing their share for environmental protection, while such "greenwashing" reinforces the displacement of poor residents from their neighbourhoods.

While the impact of AI ecosystems on Parc Extension is hard to track and is certainly not at the top of its stakeholders' priorities, current efforts to strive for environmental sustainability not only miss the mark but are deeply interwoven with the problem of gentrification.

Leadership in Energy and Environmental (LEED) certification standards are applied to institutional buildings and expensive new condominium developments, such as those built by developer Mondev on land initially designated for student housing and subsequently sold by UdM. The City of Montreal has partnered with organizations like Vert le Nord and the David Suzuki Foundation to "green the city" and "make property owners and their agents happy" (see image below) [9].

Similarly, agreements between UdM and the city to create more green spaces around

8 See for example Virgina Eubanks, "Automating inequality", Ruha Benjamin (ed.), "Captivating technology", Safiya Noble, "Algorithms of Oppression", the work of organizations such as Data & Society, Algorithmic Justice League, and Data for Black Lives, and many others.

9 For an analysis of green gentrification in Parc Extension and a series of recommendations for municipal governments and their greening partners to mitigate green gentrification see Baumann, Yannick, Alex Megelas, Sepideh Shahamati, Claire-Gaëlle Champagne, Simone Chen, Mitchell McLarnon, and Amy Preston-Samson. "The Impacts of Green Gentrification on Homelessness; Urban Greening and Displacement in Parc Extension Neighborhood of Montreal." The Homeless Hub, November 16, 2021. https://www.homelesshub.ca/blog/impacts-green-gentrification-homelessness-urban-greening-and-displacement-Parc Extension.

Image: a tree label created during a collaboration between the City of Montreal and the David Suzuki Foundation. It says: "This tree will make proud home owners... and their real estate agents." Photo by Vijay Kolinjivadi.

Campus MIL fall into the same approach of creating value in neighbourhoods for future wealthy residents, instead of prioritizing the needs of current, poorer residents. While neighbourhood greening strategies are often enjoyed by many, it is property owners who benefit economically through increased property values, often leading to the displacement of long-time residents through rent increases above justified levels or evictions through renovictions or conversions of rental units to condominiums.

4. CASE STUDY 2: Bridging Divides, Fostering Self-Reliance

4.1. Community research in Parc Extension

As noted above, the second case study shifts from a macro-level analysis of development pressures to a micro-level picture of the challenges that under-serviced residents in Parc Extension confront. It was thanks to community-based research, like that carried out by Leonora King, that we were able to gain important insights into the entanglements of housing injustice with other pressing problems, like exploitative labour conditions and unemployment, as well as unhealthy housing and domestic violence. While it was clear to us before starting the research that these problems are always connected, Leonora's role as a community-based researcher and outreach worker provided an anchored presence in the Parc-Ex community, building relationships with residents, assessing their needs, empowering members of the community, and facilitating collaboration between all participating parties. Furthermore, being a woman of South Asian descent ensured a sense of cultural safety whereby Leonora's integration was met with less resistance, allowing her to navigate relationship building with other South Asian women in Parc-Ex more easily. Leonora is part of the organizing committee for the Community-Based Action Research (CBAR) Network in Parc-Ex. The members of this network strive to apply commitments to equity, social justice, and resident engagement through all aspects of research carried out in the Parc-Ex neighbourhood. Her involvement with CBAR since September

Image: One of Parc-Ex Curry Collective's chefs (Parveen) preparing meals for redistribution. Photo by Leonora King

2018 has kept her up-to-date on various developments, research initiatives, and local projects happening in the neighbourhood. It has also provided an opportunity to share information about what is happening on the ground and connect researchers with community initiatives.

The majority of Leonora's community engagement occurred through Afrique au Féminin (AauF), a Parc-Ex community center serving vulnerable women and families who are newcomers to the country. AauF was founded in 1988 and thus has a strong presence in the community. Leonora fulfilled various roles at AauF including workshop facilitator, coordinator, liaison, and community organizer. AauF is one of the participating organizations within the Table de concertation femmes de Parc Extension (TCFPE), a committee made up of about 15 local community organizations. The TCFPE was established in 2017 and its purpose is twofold: to better and more efficiently refer Parc-Ex residents to the services that meet their needs and to establish a directory of community resources available in Parc-Ex (e.g., resource pamphlets) that can be distributed to all Parc-Ex residents as well as to Parc-Ex community and intervention workers. As coordinator for the TCFPE, Leonora is responsible for a range of administrative tasks. By attending each meeting, she is increasingly acquainted with other community organizations, including their services and event programming. Furthermore, Leonora's involvement with TCFPE allowed her to remain up-to-date on issues affecting Parc Extension residents so that the community can organize and respond accordingly. She also supported some of the public health work done at Parc-Ex's La Maison Bleue, a maternal health center. The mission of La Maison Bleue is to provide perinatal (prenatal and postnatal) support to vulnerable women during pregnancy until 5 years postpartum. They provide access to doctors, social workers, nurses, psycho-educators, and midwives and have 4 locations: Parc-Ex, Cote-des-Neiges, Saint-Michel and a future location in Verdun.

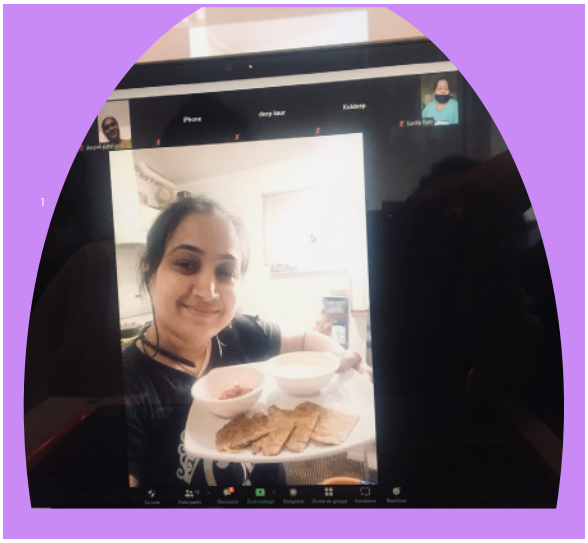


Image: Chetna participating in the Café Rencontre series run by Afrique au Féminin. Photo by Leonora King

4.2. Understanding what Digital Divides look like

Our approach to understanding digital divides was intentionally small-scale and process-based. It was small-scale as we prioritized the expert knowledge and experiences of community groups, rather than big data collected through surveys. Our approach was processual because, in addition to seeking solutions, the research process itself was used to exchange ideas and find shared ways of understanding the challenges faced by Parc-Ex residents. Digital divides and differential access to technology are pervasive in Parc-Ex, yet they are heterogeneous and compound with other issues to exacerbate existing problems. For instance, in some cases, access to smartphone technology may connect people to social media but makes participating in activities like online classes difficult because of the small screen. Hence, while some residents are indeed connected to the internet, they are excluded from training opportunities.

During her work as a volunteer at La Maison Bleue from January to April 2021, Leonora polled eligible mothers to assess their availability and willingness to participate in a virtual, educational playgroup with their child. During these conversations, she collected information about internet access: of the 11 moms contacted, all but 1 had an internet

provider, although 2 women claimed to have an unstable internet connection and would often get disconnected during the sessions. All except 4 mothers (2 using their laptops and 2 using tablets) used their cell phones to participate in the virtual playgroups and 3 of the 11 participants did not have their own personal email addresses, so they used their husband's email address instead. At AauF online events, most of the attendees were mothers with precarious immigration status. Typically 15 to 30 women attended each session, suggesting that many women in the community have stable internet access. However, most used their cellphones to join the sessions via Zoom, and some tended to get disconnected. The integration of immigrant women, particularly the acquisition of English and French, is necessary to prepare them for the job market. Although some community organizations in Parc-Ex offer free French classes, many of these classes were only offered online during the pandemic. The move to online learning excluded many immigrant women from participating, as they did not have access to laptops. This inevitably stalled certain women from learning the official languages, making them less prepared to enter the labour market.

➔ While it seems that many women participating in community group activities have some access to the internet, the majority access online services through their phones, which results in unstable connections and limited opportunities to benefit from online education, training, and socializing.

The situation is also far from ideal when it comes to youth internet access. At one of the TCFPE meetings, one of the points of discussion was that many children in the neighbourhood do not have access to computers/laptops at home to access remote learning (as a result of the pandemic). To address the problem, an initiative was set up in a local high school to distribute refurbished laptops to up to 200 students in need around the beginning of the pandemic. An interview with the teacher behind the initiative (Wilton 2020; Villes D'Avenir Canada 2020) revealed that they needed to compensate for the fact that École Lucien-Pagé did not receive any of the laptops promised by the government when schools had to close and move online due to the COVID-19 pandemic. Although access to education is a basic human right, it took individual initiative to find alternative solutions to ensure that students at this high school did not fall behind in their studies. After contacting this teacher to see if the laptop initiative could be shared with other children in need in the community, Leonora was informed that they are struggling to meet the demands at École Lucien-Pagé and would not have additional devices to spare. A few months later, Leonora came across another laptop initiative based in Saint-Michel, through which refurbished laptops are donated and distributed to families in need through AauF. Out of 85 applications, AauF distributed 60 laptops and the remaining are on a waiting list. Despite higher computer literacy rates, many young people in Parc-Ex struggle to access appropriate technology that can keep them on track with schoolwork, especially during the pandemic. At the same time, the City of Montreal's free wi-fi network hotspots are concentrated in tourist and entertainment areas, with only one free access point in the library at the WIlliam Hingston Community Center (Ville de Montréal n.d.).

➔ There is still very high demand for computers and better internet access in Parc-Ex. Moreover, although many women have received laptops, they have expressed

Image: Recipients (Mahmoud & family) receiving free meals courtesy of Parc-Ex Curry Collective. Photo by Khalid Zampini

a desire to improve their computer skills. While this research was not exhaustive, it is clear from our observations that there is a need, especially for women and youth, for affordable and stable internet access, for computers, as well as for computer literacy. Some of these needs could be met through more redistribution of technology, computer training in languages other than French and English, and by offering free internet provision.

4.3. Intersectional problems and mutual aid

Parc-Ex has large communities of newcomers to Canada, many of them refugees with differential access to services in English and French, to work opportunities, and to healthcare and housing. When seeking to understand and mitigate the problems of tech-led gentrification, it is important to consider the intersectional nature of these issues. Housing insecurity is often combined with financial, legal, social, and health concerns. Many Parc-Ex residents face employment barriers due to their precarious immigration status, and many women struggle to be financially autonomous. Many rely exclusively on their husbands for money. For example, many women do not have a bank account and do not know how to use a credit card; they are instead given a cash allowance by their husbands to cover domestic expenses. Immigration status, language barriers, and a lack of financial stability and housing alternatives make women more vulnerable to domestic violence and other difficult situations from which they cannot escape. Another barrier to self-reliance is access to subsidized daycare. According to the Ministère de la Famille, only Canadian citizens, permanent residents and accepted refugees are eligible for subsidized daycare; however "an asylum seeker with a work permit is not eligible" (Famille Quebec n.d.). Without access to affordable daycare, women cannot leave home to attend language classes, job training, or work outside the home. In this sense, in addition to confirming an initial hypothesis of intersecting oppressions, Leonora's research provided specific insights into what intersectional oppression can look like among the groups she met.
In collaboration with the TCFPE, Leonora identified certain challenges facing women residents. After which, she designed bi-weekly workshops on a range of topics such as: domestic violence, housing, immigration challenges, food insecurity, access to healthcare, barriers to employment, parenting, and mental health. These workshops (also called les Café Rencontres) were conducted virtually from AauF due

Image: Les Tournée d'Organismes: Savita from project Rapprochement Femmes (Afrique au Féminin) and Lucie from Centre Génération Emploi pose with new arrivals. Photo by Leonora King.

to the COVID-19 pandemic and were hosted by Leonora and her colleague, Savita Taheem (who recruited women through Projet Rapprochement Femmes and provided translations from Hindi and Punjabi to English during the workshops). Representatives from various community organizations co-facilitated these sessions by being available to answer questions, provide resources, and inform the women of the services offered. At the end of each session, participating women led a virtual cooking class from the comfort of their own home. Many of the recipes shared used inexpensive ingredients so that the women can replicate them at home. Since many of the participating women are homemakers, this kind of activity helped to empower them by giving them the opportunity to flaunt their cooking skills and to feel like they are contributing to the group. As a bonus, the food made during these sessions was brought to the community center where it was distributed. Each woman was paid $50 to lead the cooking class, thanks to funds received from Concordia's Office of Community Engagement.

Image: recipients of donated meals through the Parc-Ex Curry Collective initiative. Photo: Leonora King.

The insights gathered about women's precarity and skills led Leonora to found Parc-Ex Curry Kitchen (Cuisine au Curry Parc-Ex, now called the Curry Collective), a grassroots food-catering initiative for the Montreal area. The Parc-Ex Curry Collective is a mutual aid initiative where Montreal residents can either purchase meals for themselves and/or for families and elders in need while financially supporting vulnerable women who are featured as the main chefs. To identify families and elders in need, Leonora collaborated with La Maison Bleue, AauF, and local residents. Not only does this initiative build women's financial independence, but it also gives them an opportunity to feel more integrated into society as up to 45% of women in the neighbourhood rely on social assistance and feel isolated, according to AauF's annual (2020/21) report. An additional resource that has been helpful to residents is a WhatsApp group created by Savita Taheem in June of 2018, called "HELP each other". The group includes ~200 South Asian women, most of whom are newcomers to the country. As the name implies, it is a form of mutual aid in practice (Spade 2020b). In this group, women share events, things to give away and/or sell (including appliances and baby items), housing for rent, and job opportunities. Savita will use this group to advertise when the center has received donated goods for distribution (e.g., food, appliances, furniture, etc.).

Overall, Leonora's observations as a community-based researcher and outreach worker are that a majority of participants struggle to meet their basic needs. Amidst an ongoing housing crisis, food insecurity, numerous barriers to employment, a lack of digital literacy, language barriers, difficulty accessing subsidized services such as daycare and medicare, and limited mobility due the precarious immigration status of many, it is necessary to recognize the compacted nature of these challenges before moving forward. These kinds of structural barriers expose the failures of the current system and highlight the need for alternative solutions based on mutual aid (Spade 2020a, b). The next section considers some proposed solutions for the reallocation of resources and decision-making power to the community and towards practices of mutuality.

➔ Working on the frontlines places community

researchers in a position to advocate on behalf of Parc-Ex residents if they are unable to advocate for themselves, while at the same time pushing to develop solutions that lead to empowerment and self-reliance. It is crucial to further empower the Parc-Ex community by encouraging its members to lead, identify their own problems, self-organize, and be agents of their own change. With growing solidarity, innovative thinking, and a commitment to equity, Parc-Ex can flourish.

BOX 1 - FEATURED PROJECT

A Parc-Ex example of community tech to bridge the digital divide: The Tele-Health Gap[10]

When the COVID-19 vaccine roll-out began in April 2021, collective efforts were carried out between Mutual Aid Parc-Ex and Clinique Parc-X to ensure the vaccination of residents who faced language and technological barriers. Given that a significant amount of Parc Extension residents are allophones (their mother tongue is neither English or French), and most campaigning around the vaccine roll-out was only done in the two official languages, there was concern that many residents would not know how to register for the vaccine. This, combined with the fact that many older residents lack digital literacy, do not necessarily have internet access, and did not know how to complete the online registration process to make their appointments meant that vaccine uptake in the neighbourhood was a challenge (Bongiorno 2022).

Since Parc-Ex has often been the neighbourhood with the highest number of positive COVID-19 cases in Montreal (Table 2) (Institut national de santé publique du Québec 2021), specialized efforts were necessary in order to facilitate vaccination in the community. To this end, Mutual Aid Parc-Ex volunteers assisted elders with reduced mobility by coordinating transportation to vaccination appointments when vaccines were not yet available at the local CLSC. Once vaccines were made available at the CLSC in Parc Extension, Clinique Parc-X provided Mutual Aid Parc-Ex with their patient list and designated volunteers cold-called patients, beginning

10 From a conversation with Julia Pohl-Miranda, a volunteer with Mutual Aid Parc-Ex.

RÉSEAU LOCAL DE SERVICE (RLS)	CAS CONFIRMÉS (CUMUL)		CAS ACTIFS	
	NOMBRE	TAUX POUR 100 000	NOMBRE	TAUX POUR 100 000
06 - Montréal				
0611 - RLS de Pierrefonds - Lac Saint-Louis	10 577	4 704,0	37	16,4
0612 - RLS de Dorval - Lachine - Lasalle	9 426	6 284,6	21	14,0
0621 - RLS de Côte-Saint-Luc - NDG - Montréal-Ouest	7 018	5 324,5	16	12,1
0622 - RLS de Côte-des-Neiges - Métro - Parc-Extension	16 019	6 490,6	47	19,0
0631 - RLS de Verdun - Côte St-Paul - St-Henri - Pointe-St-Charles	7 393	4 432,8	26	15,5
0632 - RLS des Faubourgs - Plateau-Mont-Royal - St-Louis-du-Parc	7 150	4 409,2	17	10,4
0641 - RLS du Nord de l'Île - Saint-Laurent	12 914	7 932,8	45	27,5
0642 - RLS d'Ahuntsic - Montréal-Nord	14 944	8 639,9	44	25,4
0643 - RLS de la Petite Patrie - Villeray	5 270	4 552,4	22	19,0
0651 - RLS de Saint-Léonard - Saint-Michel	13 025	9 334,3	32	22,9
0652 - RLS de Rivière-des-Prairies - Anjou - Montréal-Est	15 803	7 555,7	44	21,0
0653 - RLS de Hochelaga - Mercier-Ouest - Rosemont	10 484	5 533,7	15	7,9
Total (incluant inconnus)	132 646	6 401,7	371	17,9

Affichage de l'élément 1 à 13 sur 13 éléments (filtré à partir de 114 éléments au total)
n.d. Le nombre de cas et le taux ne sont pas diffusés lorsque le nombre de cas varie de 1 à 4. Le total des cas d'une région sociosanitaire ne correspond pas toujo

Table 2: Number of Confirmed and Active Cases of COVID-19 by RLS – Montreal (per 100,000)

Café Rencontre series: Leonora & Savita from Afrique au Feminin organize bi-weekly Zoom workshops with local residents. Photo by Leonora King.

with elderly residents, on a weekly basis to inquire if they had received their first dose of the vaccine. A significant portion of those contacted had not received their first dose and were not even aware of the vaccine registration procedure. These residents received direct assistance to register for their vaccine appointment through the Clic Santé website. Initially, about 450 residents between the ages of 60 and 80 were contacted. When other age brackets were invited to get vaccinated, Mutual Aid Parc-Ex volunteers then contacted an additional 1300 residents between the ages of 40 and 60. Other initiatives organized by the Table de quartier de Parc Extension recruited multilingual staff to go door-to-door and provide residents with vaccine information. Despite efforts to inform residents of the vaccination process, there was limited availability at the CLSC in Parc Extension to schedule appointments. Since many Parc Extension residents, particularly women and older residents, do not often leave their neighbourhood and may not have bus passes, local vaccination strategies were needed. Therefore, mutual aid groups and community organizations put pressure on the CIUSSS to open up more accessible vaccine locations. Following these efforts, pop-up, walk-in vaccinations began to be offered and posters were put up (in several languages) advertising various vaccine locations and times. The William Hingston Community Center, Hindu and Sikh temples, and a local mosque took turns offering vaccines without appointment. This vaccine initiative was so successful that demand outweighed the number of available vaccines and many residents were unfortunately turned away. As a result, volunteers pressured the CIUSSS to make more vaccinations available at the local CLSC and provide more walk-in clinics in the neighbourhood. This push led to plans to return pop-up clinics to religious spaces, visits from the vacci-van (a mobile vaccine clinic that administered 50 doses of the vaccine per day), and extended walk-in hours at the CLSC at the beginning of July. Volunteers from Parc-Ex Mutual Aid continued to contact Clinique Parc-X patients to help them get vaccinated.

Parc Extension residents face economic, techno-social, and environmental pressures. In addition to calling for more public pressure to improve critical resources such as housing and health, in this section we share a set of potential solutions for the protection, management, and control of community resources.

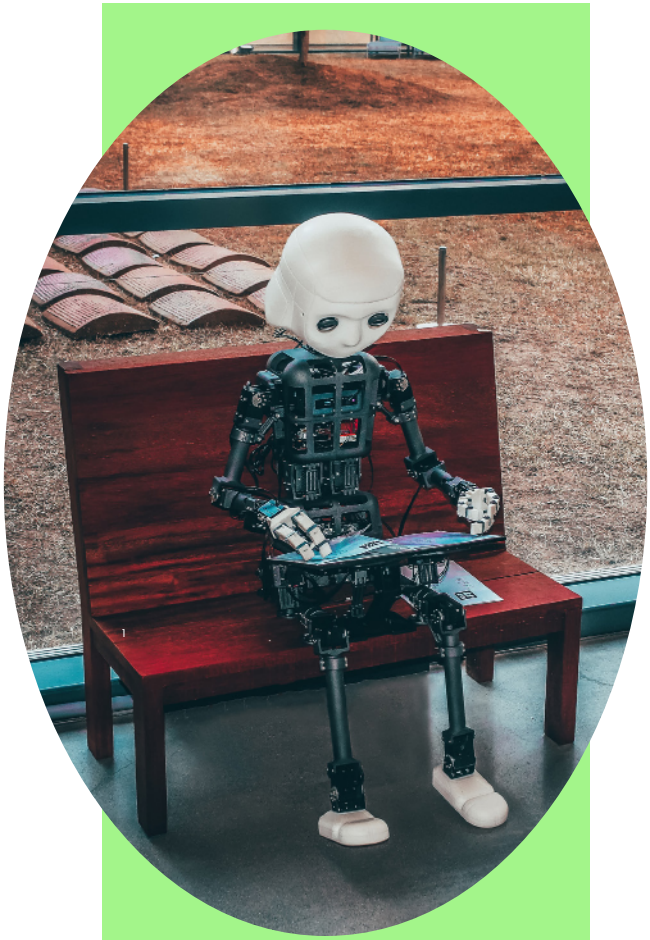


Image: Photo by Andrea De Santis on Unsplash

5. Proposed Solutions: Building Pathways to Urban Commons

5.1 Pushing back against the interests of businesses and institutions: Community Benefit Agreements

Community Benefit Agreements (CBAs) are one possibility to mitigate social harms that occur through development. While in the United States, Community Benefit Agreements are most often private agreements, in Canada, it is common for public entities to be parties to CBAs. For example, the 2010 Vancouver Winter Olympics involved a CBA negotiated by a coalition of community groups, the City of Vancouver, and the developer of the olympic village to ensure employment of inner-city residents and mitigate displacement (Canadian Council for Public-Private Partnerships 2020, 8-12). Although CBAs are often one-off agreements associated with specific projects, some jurisdictions mandate CBAs on an ongoing basis. For example, the City of Vancouver became the first major city in Canada to have a mandatory CBA policy when, in 2018, it mandated minimums for local employment and procurement of local material goods for projects with over 45,000 square metres of floor space (City of Vancouver, n.d.).

In Montreal, CBAs have been employed during a number of major development projects in recent decades. In 1989, an agreement was struck between McGill University and community groups in Saint-Henri to provide loans for social housing and ensure local employment in the construction of an off-campus residence hall (Concertation Interquartier, n.d.). In 1997, the municipal government and Cirque du Soleil entered into an agreement with community groups in Saint-Michel to bolster economic development in the neighbourhood, provide resources to social economic enterprises, and provide training to marginalized groups in order to mitigate the impacts of its TOHU circus arts project on the neighbourhood (Ferilli et al. 2017). In 2008, the Montreal University Health Center committed to working with researchers and community organizers as part of a research and access to space strategy in the Saint-Raymond neighbourhood adjacent to the hospital built on the Glen Campus site (Community-University Research Alliance 2013). In 2007, Regroupement économique et social du Sud-Ouest (RESO) and the property developer Devimco entered into an agreement involving a $1.3B real estate project in Griffintown that mandated jobs targeted to unemployed local residents, facilitating

the movement of displaced businesses, and major contributions to programs benefiting local residents (Concertation Interquartier, n.d., 12). While not formally identified as a CBA, the city's Règlement pour une métropole mixte, which came into effect in April 2021, acts in a similar fashion to these types of agreements, mandating that new real estate developments with 50 or more units include at least 20% social housing, 20% affordable housing, and 20% family housing (Ville de Montréal 2019).

Many community groups have called for commitments from UdM regarding the impact of Campus MIL on residents of Parc Extension. Among these groups are the Parc Extension Anti-Eviction Mapping Project, Comité d'action de Parc Extension (CAPE), Réseau de recherche-action communautaire de Parc Extension (CBAR), and Collectif de Recherche et d'Action sur l'Habitat (CRACH), who, in their 2020 report call for a commitment from UdM to address housing-related issues caused by Campus MIL and prevent further displacement of Parc Extension residents (Parc Extension Anti-Eviction Mapping Project 2020). A 2019 open letter signed by over 200 hundred academics, organizers, and residents called on UdM to take measurable steps to mitigate the impact of Campus MIL on the neighbourhood. The letter recommended that the university grant scholarships to residents of Parc Extension, allocate contracts to community-owned businesses, and develop an on-site housing strategy for Campus MIL that can adequately accommodate its large body of incoming students without displacing Parc Extension residents (Nichols 2019). Université de Montréal has tellingly refused to acknowledge these reports or any other subsequent calls to action. Without a formal agreement, such as a CBA, there is no guarantee that commitments will be honored. This was the case when UdM sold to private developers land which it had initially committed in public briefings and presentations to designate for student housing (Parc Extension Anti-Eviction Mapping Project 2020, 9)

➔ CBAs present an option for mitigating the harms of large developments, ensuring they benefit the communities that they are—both literally and figuratively—built upon. These agreements are legally binding, enforceable, and have precedent both in Canada and in Montreal. As such, they are well-suited to developments such as Campus MIL and projects that constitute the emerging "tech hub" in Marconi-Alexandra.

5.2. Information commons and data sovereignty

The struggle for affordable housing, public services, land, and other resources hinges on who owns and controls urban space—and under what conditions. While often cast in terms of the public-private divide, there is more at stake than simply the question of titles and distribution of resources. When one thinks about urban space, municipal resources, and decision-making processes as something that a city's inhabitants have "in common", the city appears in a different light. Whereas political negotiations often revolve around what is an "acceptable" amount of contribution to the common good—in the form of taxes and social and financial support for the populations who the city has outpriced—the commons perspective approaches the issue from a different angle. First, it asks who lives within what can be described as a "commons". Second, it asks what the terms of engagement should be for this "commons". Central to this approach is the principle that anyone, regardless of social status, has an equal claim to the spaces they live in, and that the terms of sharing and caring for these spaces are worked out communally.

In this section, we discuss how AI is not simply a service developed and sold by private entities, but a socio-technical construct that builds on—and exploits—various "commons." This approach provides an additional (or alternative) route to mitigate the impact of innovation and development plans in Parc Extension and beyond.

Defining AI means creating a framework for "how it will be understood, measured, valued, and governed" (Crawford 2021, 7). Most definitions of AI centre on the building of "intelligent" agents that can recognize patterns and make predictions, or present AI as systems of knowledge refinement that can aid and/or surpass human capacity in decision-making (ibid.). Kate Crawford has argued that

> AI is neither artificial nor intelligent. Rather, artificial intelligence is both embodied and material, made from natural resources, fuel, human labor, infrastructures, logistics, histories, and classifications. AI systems are not autonomous, rational, or able to discern anything without extensive, computationally intensive training with large datasets or predefined rules and rewards. In fact, artificial intelligence as we know it depends entirely on a much wider set of political and social structures. And due to the capital required to build AI at scale and the ways of seeing that it optimizes AI systems are ultimately designed to serve existing dominant interests. In this sense, artificial intelligence is a registry of power. (ibid.8)

Image by Alexander Sinn on Unsplash

Artificial intelligence builds on various commons in so far as any proprietary commercial good relies in some way on exploitation of a commons (Tsing 2015). At its core, AI (or more specifically machine learning and its subfield, deep learning) is based on the availability of large sets of data, which are then used to train an algorithm to perform specific functionalities. Since the early days of the internet, a vast amount of open data has been produced that AI development now profits from (Pasquinelli and Joler 2020). Put differently, AI becomes profitable by computing into a model the data which comes into existence through the invisible labour and social cooperation of countless humans producing content and interacting with each other online. Unlike what the dominant narratives around AI may suggest, this process is not just a technical one but also a cultural and social one.

In light of these observations, corporate AI appears as a new wave of enclosures, where human sociality, cooperative production, and knowledge sharing are extracted for profit. This stands in stark contrast to visions and practices of a "digital information commons" which presumes that "no one uses exclusive rights to organize effort or capture its value, and [...] cooperation is achieved through social mechanisms other than price signals or managerial directions" (Benkler 2004, 1110). Such was the case, for example, with the database of digital images compiled under Creative Commons licenses which was later appropriated as a "free" resource for developing and selling surveillance technologies based on facial recognition

(Pasquinelli and Joler 2020). The corporate AI enclosure of digital commons does not stop at extracting previously communal knowledge and sociality but also makes the models it builds inaccessible to the people on whose data it relies upon and whose lives are impacted by the model's deployment. Unlike other statistical models, such as those produced to understand climate change, AI models are "blackboxed," meaning that while the dataset may be public, the model created by it is private (Crawford 2021, 120). This means that proprietary algorithms are inaccessible to public scrutiny and debate.

Commons are conventionally understood as something physically tangible, a natural resource shared among a collective of people (Hess and Ostrom 2007, 4). The term originated as a legal arrangement in feudal England and described an area of uncultivated land that could be used by "commoners" for specific purposes, such as grazing livestock. Nobel Prize for Economics winner Elinor Ostrom distilled eight principles for the management of what she called "common-pool resources" (**CPRs**):

1. Define clear group boundaries.
2. Match rules governing use of common goods to local needs and conditions.
3. Ensure that those affected by the rules can participate in modifying the rules.
4. Make sure the rule-making rights of community members are respected by outside authorities.
5. Develop a system, carried out by community members, for monitoring members' behavior.
6. Use graduated sanctions for rule violators.
7. Provide accessible, low-cost means for dispute resolution.
8. Build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system. (Walljasper 2011, based on Ostrom 2015)[11]

Since Ostrom first formulated her eight principles, the idea of the commons has inspired many to practice and envision better collective futures that centre on the ethics of sharing, care, and mutual responsibility. We hope to lay out some key lines of thought we find particularly inspiring for imagining an AI commons and the next steps for community tech self-reliance.

For example, the City of Barcelona in Spain is considered a pioneer in the development of democratic data management strategies; it is also co-founder of the Cities Coalition For Digital Rights. Since the municipalist party Barcelona en Comú[12], which includes Mayor Ada Colau and Chief Data Officer Francesca Bria, came to power in June 2015, the establishment of a data commons has been at the center of the Barcelona Ciutat Digital transformation plan (City of Barcelona 2018). The plan aims to make city-related datasets—ranging from the number of trees in city parks to air and noise pollution, the use of city bikes, and the distribution of municipal advisory centers—available to citizens, as well as civil and commercial actors. Data is treated as a social resource. In addition to data from sensors installed in the city, data from city administration and from companies contracted by the city for this purpose (such as telecommunication service Vodafone) are increasingly being combined into a data commons pool through the establishment of overarching infrastructure and open standards. The Open Data BCN portal, established in 2010, currently holds 502 datasets. It also provides visualizations of data and data-driven applications, such as an app that shows disposal options for hazardous waste. Pilot projects such as the interactive Barcelona Now Dashboard are experimenting with the possibilities of displaying and expanding access to datasets. Other pilots like DECODE—a project for the development

11 For the original list of Ostrom's 8 principles with more detail, see Ostrom 2015: 260-262.

12 The so-called municipalist parties of Spain, which won electoral victories on the municipal level following the social movements of the 2010s, set themselves apart from the established two-party system on the national level. As a movement, Spanish municipalism opposes the centralized politics of representative democracy, and instead aims to further the autonomy of local alliances and municipal initiatives for self-governance.

Image: A solidarity cooperative (Café La Place Commune) partnering with Parc-Ex Curry Collective to address food sustainability. Photo by Leonora King

of a "DEcentralized Citizen Owned Data Ecosystem"—are contributing to the greater vision of data sovereignty by providing an app that helps citizens decide under which conditions they want to share their data with others, encouraging them to co-design their own data politics.

The municipalist government derives the establishment of open, municipal data infrastructures from the principle of technological sovereignty, which has moved to the center of European data policy in recent years. In the Manifesto for Digital Rights of Cities, Francesca Bria describes technological sovereignty as democratic control over cities' information and communication technologies that is aligned with the preservation of the digital rights of city residents. As institutions characterized by a particular closeness to citizens and tasked with providing key infrastructures, Bria sees cities as having a special responsibility for the management of data, which she describes as a new, urban infrastructure, similar to water or energy supply. The collection and management of city-related data offers new opportunities to enact specifically targeted policies. AI-based systems are also used here, for example in the evaluation of the records of thermal cameras monitoring the occupancy level of beaches to ensure compliance with COVID-19-related capacity restrictions (City of Barcelona 2021). In addition to ethical requirements and the development of guidelines for the use of data-driven technologies, the urban transformation plan also includes the promotion of Barcelona's digital economy, particularly of small and medium-sized enterprises.

➔ The principle of technological sovereignty puts a strong emphasis on the use of free software, open data, and open standards, formats, and protocols, which are meant to ensure non-discriminatory access to and provision of online services independent of the influence of large IT corporations. In the context of Parc-Ex, information

commons could be part of an infrastructure for advocacy (e.g. offering public data on housing and evictions), they could be set up to offer training to residents and spur bottom-up tech initiatives.

5.3. No commons without community: Autonomy, citizen science, and networks of care

While the case of Barcelona still involves support from a local government, it is also possible to set up smaller projects that promote data literacy and provide spaces where residents can develop their own projects and collect their own data.

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The hackerspace model, introduced to the computer hacker subculture in 2008 at the Last HOPE Conference by Vienna's technology and arts anarchist collective monochrom, presents a unique model for localized and autonomous technological exploration unlike what is found in its more politically neutral makerspace and fablab offshoots.

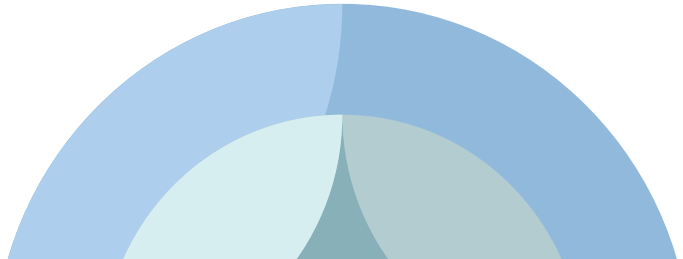
Other inspiring projects for citizen data and science initiatives include Public Lab, which "pursues environmental justice through community science and open technology" in the US, and CanAir.io, a citizen-run network monitoring air quality in Bogotá, Colombia. These projects are examples of a new approach towards data technology that aims at seizing its potential for self-governance and the common good. Here, the development of open and free infrastructures is necessarily combined with a new way of discussing, developing, using, improving, mobilizing, critiquing, and governing with technology and data as part of an engaged and participatory technopolitics in the city.

➔ It is possible to set up new, self-run initiatives for data collection and use in Parc Extension that may work in tandem with community and housing infrastructure such as community centers and housing co-ops. In addition to environmental data, these initiatives could collect, share, and publicize data about housing and public health. The maps recently produced by the Parc Ex Anti-Eviction Mapping Project are a first step in this direction.

While defining the commons as a shared resource-space governed by institutional arrangements already moves away from commons as goods, other conceptualizations have brought collective practice, or acts of commoning, into the focus. For example, historian Peter Linebaugh has proposed understanding commoning as a practice that is as much about sharing as about reciprocal obligations (Volont 2018). Commoning puts relationships between humans as well as relationships between humans and nature front and center. Linebaugh describes the commons as follows:

> The opposite of the commons is the commodity. In the commodity, the social relations of creation and the social relations of subsistence are hidden. The commodity is about production. The commons, by contrast, are about reproduction (…) Its principles are not those of the commodity, not those of accumulation, but those of subsistence and health. (ibid.).

The key issue here is not one of ownership (for example in reference to land) but of mutual subsistence (ibid.). Commoning redefines labour as a human mutuality, as opposed to an exploitation. The struggle for the commons, or for the ability to practice commoning, essentially denotes



the struggle against domination and exploitation (ibid.). In a similar vein, Silvia Federici has observed that "'commoning' of the material means of reproduction is the primary mechanism by which a collective interest and mutual bonds are created" (Federici n.d.). Since women have historically had to take on the vast majority of reproductive work and are still doing so today, they are especially dependent on communal resources and practices of commoning—and as a group often take the frontlines in struggles for retaining or reclaiming the commons. Understood through a feminist lens, commoning the material means of reproduction is the key mechanism to create a collective interest and mutual bonds (ibid.). Commoning also means building and cultivating relations of care. Following Maria Puig de la Bellacasa, "care is everything that is done (…) to maintain, continue, and repair 'the world' so that all (…) can live in it as well as possible" (Puig de La Bellacasa 2017, 161). In this understanding, commoning does not necessarily need to include 'productive' acts of relation building and the provision of care. It can also simply denote collective refusal that pushes back against exploitation and oppression (Veltmeyer and Bowles 2014, 66).

The creators of the Pirate Care Syllabus bring attention to commoning care in the form of cooperativism, redistribution of material and immaterial resources, and other practices that "[position] care within specific forms of situated, embodied practices tinkering with technologies (…) expressing a transformative vision through commoning wealth and health" (Pirate Care n.d.). In this context, one can think of the Internet as a site of experimentation with commons-based infrastructure, for instance, through early attempts to build wireless mesh networks to share access online. In Canada, these efforts have been less successful. Montreal's Réseau Libre, an informal grassroots group made up of volunteers, community organizations, university staff, and local businesses attempted to build a city-wide free mesh network, however the project remained a small-scale undertaking.

➔ In addition to setting up infrastructure in common such as community spaces for data literacy and production and

BOX 2 - FEATURED RESOURCE
Pirate Care

"We live in a world where captains get arrested for saving people's lives on the sea; where a person downloading scientific articles faces 35 years in jail; where people risk charges for bringing contraceptives to those who otherwise couldn't get them. Folks are getting in trouble for giving food to the poor, medicine to the sick, water to the thirsty, shelter to the homeless. And yet our heroines care and disobey. They are pirates." https://syllabus.pirate.care/#-care-a-political-notion

The Pirate Care Syllabus continues the tradition of crowdsourced online syllabi generated within social justice movements. For more information and inspirations for commoning care, see https://syllabus.pirate.care/topic/piratecareintroduction/ and https://syllabus.pirate.care/topic/commoningcare/

mesh networks for internet sharing, commoning and care take place through informal networks like Mutual Aid Parc-Ex, the Curry Collective and other projects highlighted in this report. It is important to support these initiatives to break down social isolation and foster solidarity.

Image: Sandra, from the Organisation des jeunes de Parc Extension (PEYO) talks to new arrivals about the services offered at the community center. These tours are organized by Savita and Leonora, from Afrique au Féminin as part of their integration series entitled "les tournée d'organismes". Photo by Leonora King

6. HIGHLIGHTS AND RECOMMENDATIONS

6.1. Highlights

This report seeks to contribute to community-based efforts in Parc Extension by providing a broader understanding of digital divides and potential pathways to address them as they intersect with housing, health and economic justice.

Methodologically, we intentionally approached the topic at two levels: 1) a macro-level analysis of AI ecosystems and their multifaceted impacts on people and the environment; and 2) a small-scale and processual level that conveys the experience and expertise of community groups and individuals living in Parc-Ex in regard to what digital divides exist in this specific context, how they are experienced, and which bottom-up solutions are being proposed to address them

1. Montreal's AI "ecosystem" illustrates how an assemblage of both public and private actors drives the revaluation of Parc Extension through investment and policies that aim to drive technological development and innovation, but fail to benefit the residents of the local communities who already experience higher than average levels of poverty, housing and food insecurity, and precarity in regard to immigration status. Currently, Montreal's AI ecosystem favours a startup culture of innovation that enjoys private, public, and philanthropic support at the direct expense of grassroots efforts that aim to integrate technology into a rights-based politics for housing rights

Image: Halloween protest against gentrification in Parc Extension and Villeray. Photo by Alessandra Renzi.

advocacy, access to education, or addressing police violence.

2. There are direct connections between AI innovation in Montreal and the housing crisis, which is exacerbated by AI corporations, publicly funded institutions such as Scale AI, and the Université de Montréal. The presence of these corporations and institutions in the neighbourhood drives up the cost of rent and provides opportunities for luxury real estate development. Meanwhile, the university has failed to deliver on promises to build affordable student housing, which would alleviate some of the pressure on the Parc-Ex housing market.

3. While there are many examples of more equitable urban development, such as Community Benefit Agreements (CBAs) or commons-based approaches, there is no such framework in place in Parc Extension. Local housing rights groups and organizations as well as the Community-Based Action Research Network (CBAR) have attempted multiple times to communicate with actors from within the AI ecosystem, particularly the Université de Montréal, and hold them accountable to their declared goals of social responsibility as part of AI ethics. As of publication, these attempts have been unsuccessful and the addressees remain unresponsive.

4. Current institutional efforts to strive for environmental sustainability in Parc-Ex not only miss the mark but greenwashing is deeply interwoven with the problem of gentrification in Parc Extension.

5. As long as the AI industry remains indifferent and/or unresponsive to questions of social and economic equity within the communities where their offices are located, AI research and development remains a driver of gentrification, much like other sectors of the tech industry. San Francisco, Seattle, and other cities have had experiences comparable to Montreal prior to the Canadian AI "boost". Unfortunately, the city and provincial governments did not anticipate this and failed to put in place adequate policies to mitigate the effects of tech-driven gentrification.

6. While the City's recently passed "20-20-20" by-law and the right of first refusal policy are improvements in their capacity to combat the housing crisis, they come too late and are currently too limited in their application.

Protest art for social housing

Photo by Maya Hey

7. Digital divides in Parc-Ex include a lack of affordable and stable internet access, lack of ownership or access to laptops, and limited computer literacy. This prevents individuals, particularly women and youth, from participating in online learning activities during the ongoing COVID-19 pandemic, resulting in an infringement to the basic human right to education. For adults, it is an obstacle to French/ English language acquisition, for entering the job market and for accessing public health services. Individual and community initiatives are providing some remedies to these problems, but more comprehensive and long-term investments are needed that redistribute technology, offer computer training in languages other than English and French, and provide free and reliable internet access.

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Image: Protest shot in Parc Extension. Photo by Alex Megelas.

6.2. Recommendations

1. AI policy:

a. AI policy and R&D need to mitigate the impact of applied AI on gentrification, digital divides, infrastructural and economic inequities, and social and cultural exclusion. As this report outlines, digital divides go beyond questions of access and literacy to questions of priorities and investments, both public and private, in relation to resource distribution and control. AI policy needs to recognize the limitations of the AI ecosystem framework in providing equitable access and benefits for groups that do not belong to private, academic, business, and government sectors. Despite the hype of the R&D model, AI cannot constitute an ecosystem in itself. To this end, rather than subsidizing private sector initiatives, the government (at multiple scales) should provide direct incentives for new types of community-managed data commons and for community-managed AI projects (including start-ups) with explicit justice-oriented ends in order to ensure that an AI ecosystem provides public benefit rather than perpetuates harm.

b. AI systems and the resources they are built on could, and should, be treated as commons rather than exclusive and enclosed, for-profit entities. A process of commoning can only be meaningful if it is accessible, transparent, and inclusive of all groups that are impacted by it. The example of Barcelona and information commons and data sovereignty initiatives from other cities can provide inspiration to this end.

c. Private and public actors facilitating neighbourhood change in Marconi-Alexandra must meaningfully consult impacted parties and ensure the benefits

of redevelopment are equitably shared, while also ensuring that claims of positive social returns stemming from AI and other technologically-centric approaches to urban planning are balanced through dutifully integrated resident input.

2. Housing policy

a. Accountability mechanisms need to be put in place to implement promises made by institutional actors (e.g., Campus MIL student housing). On the city level, we call for a comprehensive plan to mitigate the rise in housing costs that accompanies development in the AI and other sectors, especially in low-income residential areas. Making use of the right to first refusal should figure as one of many components in this regard, since by itself it is not far-reaching enough to stem the tide of large-scale and fast-pacing gentrification and is not able to provide direly needed social housing in the short term. Given the limits to existing by-laws and regulations, we call on the city government to commit to making an adequate number of social housing units available that can be accessed immediately by individuals who qualify, and procure the necessary funds from the provincial government.

b. Community Benefit Agreements (CBAs) should be incorporated into urban planning more generally and need to be structured around specific provisions for accessibility, transparency, and inclusion to guarantee fair and equal representation of residents/ citizens who have no affiliation with the corporations and state actors involved in urban and industrial development.

c. It remains crucial to both put pressure on the city to improve access to affordable housing and to support Parc Extension-based community groups, such as CAPE and Brique par Brique, in their fight for affordable housing and against renovictions and rent hikes. Similarly, it is essential to bolster locally based solutions to structural digital divides that are developed from the bottom up and rooted in existing networks of mutual aid and solidarity, for instance by providing adequate space in community centers.

3. Social infrastructure

a. We call for comprehensive and long-term support for community-led initiatives for digital literacy and

Image: Leonora King speaking to GEOGRAD students (department of Geography, Planning and Environment, Concordia University) during a tour of Parc Extension. Photo by Emanuel Guay.

general access to technology such as affordable or free, reliable, high-speed Internet. The City should expand the public wi-fi network into priority neighborhoods offering free services. Universities, government institutions, and AI firms can support community initiatives by contributing or sharing infrastructure, financial and material resources, as well as training, while community groups would retain sovereignty when deciding how these resources are used. Such support should be viewed not as a form of charitable donation, but as a measure to distribute revenues from the highly profitable AI industry that is operating out of these communities more equitably.

b. We call on the municipal, provincial, and federal governments to recognize informal networks of mutual aid as legitimate entities to interface and negotiate with and to provide community support when requested by these groups. Mutual aid is a citizen-based, informal practice of urban politics and should be viewed as a crucial component of building a better city for everybody.

4. Community organizing and advocacy

a. There is a need to create a critical mass including academics and community groups to push governing bodies to implement better policy, research and development by participating in decision-making bodies in the AI industry and its ecosystem.

b. It may also be advantageous to actively foster more synergies between groups and organizations through networks, events and initiatives that center on the challenges identified in this report.

c. Given the focus of UdM's Campus MIL and AI Research and Development initiatives on sustainability, it is important to call for more transparency, specificity and accountability for their impact on climate change.

d. The principle of technological sovereignty puts a strong emphasis on the use of free software, open data, and open standards, formats, and protocols, which are meant to ensure non-discriminatory access to and provision of online services independent of the influence of large IT corporations. In the context of Parc-Ex, information commons could be part of an infrastructure for advocacy (e.g. offering public data on housing and evictions), they could be set up to offer training to residents and spur bottom-up tech initiatives. Community groups could begin imagining what kind of data and technical infrastructure would be beneficial to them.

e. Community advocates should tackle and critique innovation discourse as a tool to legitimize structural violence.

BOX 3- PRACTICAL ADVICE ON SETTING UP COMMONS[13]

"Commons have to be constructed. After you have discerned a potential resource space or a problem that involves a resource space that needs to be solved, you have to create this commons. And that's always an economic, political, and social problem. And the most important question is, who gets a seat at the table when it is decided what commons is created?" - **Eda Kranakis**

"If we're thinking about commons as a governance regime for resources within communities, then we would want to know: what is the set of resources we are talking about with AI? I tend to think of AI as a complex system that involves many different intellectual or knowledge resources like training data and sensing data. Data itself can be managed by a community as a commons. Then there's also the algorithms, the code, data analytics that enable you to develop actionable intelligence from the data, like sensing patterns or making predictions. Those resources can also be managed by the members of a particular community as a commons, which might be a different community than the one that governs the training dataset. Then there are the computational resources: the computers, the servers, the networks, all the things that are not purely intellectual resources or, in economic terms, public goods.

In any case, first you have to think about what the relevant resources are, then identify what the relevant communities are. And you can't talk about 'AI commons' in some kind of universal, abstract way. In general, one should beware of thinking about commons as a panacea, some sort of generalizable solution. The management of different resources within an AI system as a commons is going to look different depending on whether it is employed in a hospital, a school, a transportation system, and so on. You can go through a whole range of contexts and the possibilities and opportunities for governing the resources involved will be completely different: different sets of social dilemmas, different sets of objectives and goals, different social norms within communities. Plus there's also the issue of scale: some AI commons might involve a bigger role of government while others might be more reliant on actors from within the communities." - **Brett Frischman**

13 These quotes are contributions of scholars who participated in a workshop entitled "AI Commons", led by Fenwick McKelvey in December 2019.

5. Community-led research:

a. Universities and research funding bodies should support more community-led research. Support can come in the form of more funding, especially funds that allow for suitable compensation of community groups and community researchers for their labour, in-kind donations of space and resources, and general support of networks that perform community-led research for both researchers and community organizers.

b. It is important to support networks like the CBAR in order to set in place mechanisms of accountability between researchers and communities.

c. It is crucial to further empower the Parc-Ex community by supporting a process in which its members lead, identify their own problems, self-organize and are agents of their own change.

d. Community researchers should focus on the processes as much as on the results of research projects to improve synergy between all those involved in the research, valorize local knowledge, provide long lasting training and share research results without exploiting community members.

Image: Organisation des jeunes de Parc Extension (PEYO) Photo by Leonara King.

Image: New building at Campus MIL Photo by Alex Megelas

Appendix I

List of Organizations : Table de Concertation Femmes de Parc-Ex (TCFPE)

Afrique au féminin (AauF)

Arrondissement VSP

Bibliothèque de Parc Extension

Bouclier d'Athena / Shield of Athena

Carrefour de Liaison et d'Aide Multiethnique (CLAM) Centre Communautaire Jeunesse Unie

Centre Génération Emploi (CGE)

Centre Haïtien d'animation et d'intervention sociale (CHAIS) "CIUSS Centre-Sud-de-l'Île-de-Montréal

Coalition jeunesse de Parc Extension (CJPE)

Comité d'action de Parc Extension (CAPE)

Cuisine et Vie Collective St-Roch

Héberjeune de Parc Extension

La Maison Bleue Parc Extension

PDQ 33

Projet Rapprochement Femmes

Table de Concertation Petite Enfance de Parc Extension Table du Quartier de Parc Extension

Appendix II

Les Café Rencontres at Afrique au Féminin

7000, ave. Du Parc, bureau 106-107, (Entrée 7009, Hutchison, à côté du CLSC Parc- Extension) Montréal, Québec, H3N 1X1

Téléphone; 514 272-3274 / Télécopieur: 514.272.8617

Courriel : info@afriqueaufeminin.org / Site web: www.afriqueaufeminin.org / Facebook : Afrique au Féminin

Appendix II (cont')

Café Rencontre Programming

Café Rencontre # 1: Welcome and introductions. Facilitator: Leonora

For this workshop, I introduced myself and explained the purpose of the Café Rencontre series.

My colleague, Savita arranged for a few women and children to do performances (e.g., traditional singing and dancing). It was a good opportunity for the women to get to know each other and have fun.

Café Rencontre # 2: Food insecurity

Facilitator: Shalina Khatun from Cuisine Vie et Collective Co-facilitator/Chef: Parveen (an elder in the community)

For this workshop, Shalina introduced Cuisine Vie et Collective and explained the services offered, including access to a collective kitchen and cooking workshops. The women then asked questions about how to register for the foodbank and the grocery delivery service.

Café Rencontre # 3: Mental health in marginalized communities

Facilitator: Runa Reta*, couple and family therapist, Jewish General Hospital Co-facilitator/Chef: Shumaila

For this workshop, Runa discussed how symptoms of depression and anxiety may manifest in different cultural groups as well as mental health challenges related to immigration. She also provided resources on where/how to access mental health services. Runa was then available to answer a variety of questions related to the symptoms and circumstances the women were facing.

* Runa also presented at one of our TCFPE meetings where she educated the participating community organizations about the types of mental health symptoms typically facing immigrant communities. She also discussed barriers to mental health care access and the importance of using alternative (non-institutional) approaches to treat mental health issues in marginalized populations.

Café Rencontre # 4: Conjugal violence

Facilitators: Sayu (survivor of conjugal violence), Polly Tsonis (social worker at the Shield of Athena, a local women's shelter) and Julie Normand (police officer with PDQ 33).

For this workshop, Sayu began by telling her story of how she navigated immigration and legal processes after leaving an abusive spouse. Following Sayu's story, Polly educated the women on the different types of abuse. Polly also informed the women on where to get help and how the shelter supports women and families who are experiencing violence at home. Finally, Julie Normand, a police officer in Parc Extension, explained the standard police procedure when a conjugal violence complaint or call is made.

Café Rencontre # 5: Housing

Facilitator: Sohnia Ali from CAPE (Comité d'action de Parc Extension) Co-facilitator/Chef : Kamal

For this workshop, Sohnia presented CAPE and the services offered. She also discussed tenant's rights as well as common issues facing PEx residents. Sohnia then answered a range of questions related to housing conditions, problems with landlords, and lease agreements. CAPE also provided AauF with flyers in various languages (Hindi, Punjabi, Tamil, English, and French) which outlines what is permitted in terms of rent increases for different types of apartments.

Café Rencontre # 6: Immigration Challenges

Facilitators: Panchi Chakma, Iram Qadeer and Mangaie Saravanabavan from the South Asian Women's Community Center (SAWCC) and Valerie Weigand-Warr from PRAIDA. Co-facilitator/Chef: Barinder

For this workshop, 3 staff members from the SAWCC explained the mandate of their center and the services offered . The women learned about SAWCC's settlement program for new immigrants and refugees, their free daycare, counseling services and English/French classes as well as their job search workshops. Following SAWCC's presentation, Valerie spoke about the kinds of services that PRAIDA (Programme régional d'accueil et d'intégration des demandeurs d'asile) provides. Since PRAIDA works with clinics who provide medical services for non-status individuals, this session was particularly informative given that many of the women are awaiting their permanent residency and cannot access the public healthcare system.

Café Rencontre # 7: Support for Parents and Youth

Facilitators : Suzette Brutus from Centre Haïtien d'Animation et d'Intervention Sociales (CHAIS) and Kimberly Sassi from Coalition Jeunesse de Parc-Ex (CJPE). Co-facilitator/Chef: Chetna

Suzette familiarized the participants with CHAIS's services as well as provided parenting tips and discussed the different kinds of support available for parents. Then Kimberly discussed a range of issues affecting youth and informed the women of the various youth services available, including homework support and the PEx youth hotline. Both Suzette and Kimberly were then available for questions and concerns regarding parenting.

Café Rencontre # 8: Employment Strategies for Non-Status Women

Facilitators : Lucie Dupont from Centre Génération Emploi (CGE) Co-facilitator/Chef: Sarbjeet

Lucie discussed the various services offered by CGE, including workshops on how to job hunt and what to expect, how to integrate into the job market as well as tips for CV writing. She emphasized the importance of learning the official languages before embarking upon a job search as well as discussed what options are available for women who do not yet have permanent residency status and cannot legally work. We then invited women to share the kinds of barriers they have faced when attempting to look for work.

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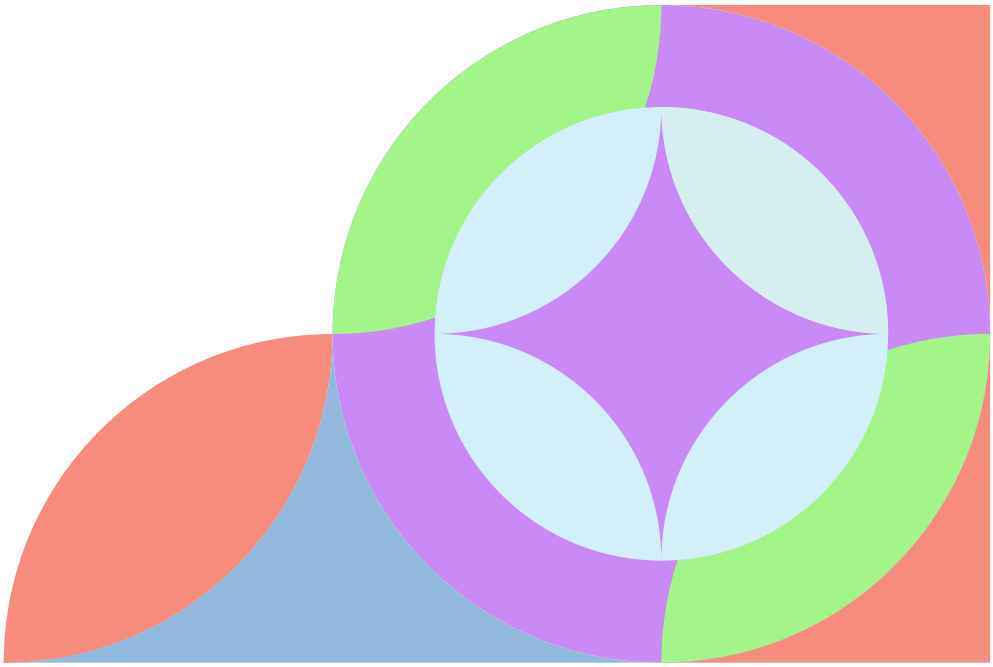

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