



THE GREAT **ACCELERATION**

2024 Environmental Scan

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“Things are going to slide,
slide in all directions
Won't be nothing (won't be)
Nothing you can measure anymore
The blizzard, the blizzard of the world
Has crossed the threshold
And it's overturned
The order of the soul”

Leonard Cohen, *The Future*



Introduction

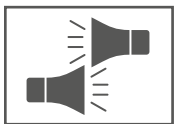
The Great Acceleration is a term coined by historian J.R. McNeill to describe the dramatic, synchronous surge in human activity across a wide range of domains from the end of the second World War through the present and foreseeable future.¹ The vast majority of people alive today were of course born in the time since this period began. Which means that most of Earth's current inhabitants have known nothing but rapid acceleration and change.

As the systems management researcher Dennis Meadows notes, “as we’re making bad decisions, that throws us into crises that by force shortens our time perspective. Everything becomes reactive as we accelerate. That in turn helps us make more bad decisions because we narrow our time horizon more and more. It’s a vicious circle.”² We see the consequences of this truncating perspective, in our public policy horizons, in our workplaces, and in our approaches to solving social challenges. It is making people less productive, less well and anxious about what lies ahead.

It is human nature to yearn for stability and predictability amid this acceleration. What can we expect around the next corner? How should we prepare? The reality is that forecasting trends, events, and turning points is exponentially more difficult than it might have been a century ago. Case in point – last year’s scan accepted the universal gospel among economists that a recession was nearly certain before the end of 2023. This may still hold true, once fourth quarter numbers are in, but a severe downturn was widely anticipated and never materialized.

Paradoxes also make sense-making more challenging. Consider this conundrum from *The Walrus* health writer Kevin Patterson: “Why would disabling mental illness be so much more common now than in the 1990s? Why are there so many more homeless people now? The unemployment level is at near-historical lows, continent wide. Violent crime is a fraction of what it was in the 1990s. The stock markets are within 10 percent of their all-time highs. There hasn’t been a recession not mediated by a virus in a decade and a half. Is this not, at least by census data, an easier and more prosperous time than any before?”³

As futures practitioners point out, good futures scanning is as much about detecting faint signals as it is about relaying broad and obvious trends. Following this practice, this 2024 scan, the eighth such annual scan conducted by the Institute for Community Prosperity for the Calgary Foundation, presents each domain of human activity from the point of view of both “noise” and “signals”:



The noise, emblemized by the two megaphones shouting past each other, highlights news-making trends.



The signals, represented by a radio telescope, look at dimmer, more obscure developments that may reveal something even more important about the future we are stepping into.

Most hoped, and many expected, that 2023 would mark a return to relative normalcy, after the disorienting broken roller coaster of the COVID pandemic. This is not to say that COVID is over – far from it, as frontline health workers remind us – but its sociological power and prominence has certainly drifted to the background. But everything is relative: That wild ride was of course just a gentle test-drive. A warm-up to events that will shock, numb, displace, and likely kill in great numbers.

The year 2023 was simply the next chapter in this era of polycrisis/permacrisis, bookended by two brutal melees with global consequence: The Russian assault on Ukraine and the dual tragedy of the Hamas terror attacks and the subsequent Israeli scouring of Gaza. Add to this the killings of thousands in each of the conflicts in Ethiopia, Myanmar and Yemen; the civil war in Sudan, with at least 9,000 killed and another 5.6 million forced to flee their homes⁴; and the rise of proto-fascist leaders or coalitions in Argentina, Italy, Slovakia, Hungary, Israel, the Netherlands, and soon, if polls hold, the US. All are reminders that, as a species, we remain war-mongering, scape-goating, fear- and terror-inducing hominids too-frequently seduced by ideology and religious zealotry. Just when we’re expected to imprint ethical goals and objectives on super-intelligent machine agents – goals and objectives that express the best of our shared humanity – in real life we remain riven by arbitrary, parochial badges of identity.

In that alternate reality that we increasingly inhabit, our e-refuge, we are moving rapidly and inexorably toward the birth of artificial general intelligence (AGI). Coincidentally just as the film *Oppenheimer* hit cinema screens, the very creators of advanced AI penned a letter warning of the risks of extinction from *their creation*.⁵ It’s unclear how we are expected to react; “Thanks for the heads-up?” As the Swedish-based Ekskåret Foundation frames the current moment, “we have reached a tipping point from which we will either transform into another [substantially better] kind of society, or risk collapse.”⁶



The same week as Remembrance Day, a day which seems to have less and less meaning and import with each passing year (let's think twice about helping Ukraine because they might implement a carbon tax), the global average daily temperature eclipsed 2 degrees Celsius for the first time since temperature records have been kept (the second Industrial Revolution of 1850-1900).⁷ The world is of course not remotely on track to meet the targets of Paris, or Copenhagen, or Kyoto (when nearly half the world's current inhabitants were yet to be born). Instead, Canada – as just one example – is *increasing* its oil production by a world-leading 10% this coming year.⁸

Social philosopher Roman Krznaric, riffing on the concept of *terra nullius* (“nobody’s place”, a moral justification for colonial conquest), coined the term *tempus nullius* to refer to our collective mindset in the early 21st century: “The future is seen as ‘nobody’s time’, an unclaimed territory that is equally devoid of inhabitants.”⁹ Because, Krznaric argues, if we really imagined the future to be full of human inhabitants, as it almost certainly will be, we might adjust our ethical orientations, policy choices, and behaviours accordingly. In far too many ways, 2023 is a terrible time to be young.

Not only are our minds – western minds in particular – poorly wired for ancestral accountability. We also have a cognitive disconnect between perception and reality when it comes to some of the most important trends of our time: For example, when polled, people tend to under-estimate the severity of the climate crisis (and other ecological crises), but also totally under-estimate real *progress* on social issues. Not to diminish the profundity of the social issues covered in this scan – and many others covered in previous scans, but in many issues – health and longevity, hunger, violence, racism, sexism, literacy – we’ve made extraordinary progress as the Great Acceleration unfolded.

Our same bifurcated brains are now tasked with figuring out agreed-upon ethical guardrails to the development of advanced technologies, even as we cannot agree on our own collective goals, or what is true, or what is just, or what set of stories provide the path to redemption (even for those who worship the very same God of Abraham/Ibrahim). Those stories are just a few degrees distinct enough to justify the dehumanizing and slaughter of fellow humans. By the thousands. In 2024.

So, what will be written about the human story by those who will call us their ancestors?

They might recall that we collectively, subconsciously, ventured mightily, and had a good ride, fueled by abundant, portable, cheap, and high-quality energy, but ultimately failed to build the necessary conditions for the post-carbon, regenerative world we need to thrive. In this particular part of the world, like medieval villagers, we’ve put a hex on renewables, preferring to see how far we can juice the goose that laid the fossilized hydrocarbon egg.

Better now – too many seem ready to assume – to hand the baton of planetary stewardship not to our children and grandchildren, but to the next species – the one we have shaped from grains of silicon gathered up from the earth. Robo-Genesis. Our very own Adam, loosed into a crypto-metaversical Garden of Eden, programmed with ethical instructions approximating those outlined in Eden 1.0; ‘Can we do it’ and ‘should we do it’ are once again conflated. We hope and assume that our creation will obediently eat from the right trees of knowledge; After all, we made it in our own image. But we can’t be bothered to remove the world-poisoning forbidden fruits.

What's an Environmental Scan?

At the request of the Calgary Foundation, the Institute for Community Prosperity has prepared scans of major current socio-economic trends, issues, and developments at local, provincial, national and international scales. New scans were prepared for every year since 2016 (except for 2020). This is the eighth such scan, helping interpret the events that marked 2023 and peering into 2024.

Information in this scan is derived from several sources, including news stories, op-eds, policy reports and academic literature. Like the previous scans, this is a selective sampling of issues, not a comprehensive analysis of all trends in all sectors. Most of the trends covered in previous scans are still in play, but included here is updated context, as well as new sub-topics not previously raised. These scans are intended to not just be predictive about near future probabilities, but also to add context to current events, and to illuminate undercurrents and ‘ sleeper ’ issues. Some observations in this scan are commonly known, while others are closer to the edge – perhaps even a bit startling, contentious, or discordant.

The 2024 Scan is organized under a set of themed chapters, in alphabetical order: **CLIMATE, ECONOMY, EDUCATION, GLOBAL AFFAIRS, FOOD SECURITY, HOUSING, POLITICS, PHILANTHROPY, TECHNOLOGY, and WORK**. There are also ‘deeper dives’ on the two topics currently dominating headlines: Affordable housing and the Israel-Hamas conflict.

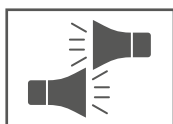


“So shall the world go on,
to good malignant, to bad
men benign, under her
own weight groaning.”

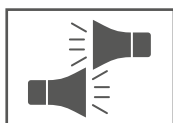
John Milton, Paradise Lost



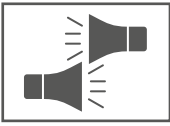
THE FUTURE OF THE Climate



“Absolutely Gobsmackingly Bananas”: The blue marble spaceship we all call home had a runaway thermostat issue this past year, particularly in late summer and into the fall. If nothing significant changes in the larger climate trajectory – changes we have yet to see – we are heading towards a 2.8-degree temperature rise, towards a dangerous and unstable world. Zeke Hausfather, a climate scientist at the University of California at Berkeley, remarking on the global aggregated temperature data for the full month of September, noted “in my professional opinion as a climate scientist – absolutely gobsmackingly bananas. JRA-55 beat the prior monthly record by over 0.5C, and was around 1.8C warmer than pre-industrial levels.”¹⁰ The 2023 wildfires in Canada, having blanketed the US eastern seaboard in a dystopian pall, featured a record-shattering 100+ pyrocumulonimbus cloud events. Over 18 million hectares burned, representing 5% of the entire forest area of Canada (an area twice the size of Portugal, or the entire state of Washington).¹¹ When one considers that 10% of the world’s forests are in Canada, that represents one half of one percent of the planet’s forest cover gone in a single season. Gobsmackingly bananas indeed. In Alberta alone this year, over 1,000 wildfires burned over 2.2 million hectares of land (an area larger than Israel or New Jersey), 10 times the previous 5-year average, with 38,000 people evacuated from their homes.¹² The boreal forest may even be in the early stages of a phase transition. As fire historian Stephen Pyne frames it “we are watching mythology become ecology – it’s a slow-motion Ragnarök.”¹³ UN Secretary General Antonio Guterres invokes a similarly Hadean allegory: “Humanity has opened the gates of hell. Horrendous heat is having horrendous effects. Distraught farmers watching crops carried away by floods, sweltering temperatures spawning disease and thousands fleeing in fear as historic fires rage. [Positive] climate action is dwarfed by the scale of the challenge.”¹⁴ “We have had ice ages in the past”, Pyne continues, “but we are now living through what I call the ‘pyrocene’. This is clearly a case of climate change adding energy to the system, magnifying the boom and bust of the boreal forest. We may be witnessing a change of state, a change in the character of this environment.”¹⁵ Alberta is already at a Stage Four advisory in its five-stage drought severity index, and is preparing to curb commercial and industrial access to water and to declare a water emergency in 2024 if current trends hold, especially in the South Saskatchewan River Basin, where the Oldman River, for example, is currently at 27% its normal flow for this time of year.¹⁶ Last year, a report by 11 leading Earth systems and climate scientists, entitled *Climate Endgame: Exploring Catastrophic Climate Change Scenarios*, concluded there is “ample evidence that climate change could become catastrophic ... at even modest levels of warming... causing multiple, indirect stresses (such as economic damage, loss of land, and water and food insecurity) that coalesce into system-wide synchronous failures. ... It is plausible that a sudden shift in climate could trigger systems failures that unravel societies across the globe.”¹⁷ Insurance coverage is reflecting this new normal as well, with disaster claims in Canada having quadrupled over the last 15 years, and average home premiums having grown by 7.7 % in just the past year.¹⁸



Productive Engagement or Co-optation? The Oil Sector and COP 28: As this scan was written, COP 28 in Dubai was just getting underway, but courted considerable controversy as the president-designate of the conference, Sultan Ahmed al-Jaber, is also the head of state-controlled Abu Dhabi National Oil Company. Documents leaked to the BBC appear to indicate that the host country – United Arab Emirates (UAE) intended to use its role as host to strike oil and gas deals (including with Canada).¹⁹ Consistent with this narrative, Alberta Premier Danielle Smith attended, which to some is seen as welcome productive engagement from a province that used to sneer at previous COPs. To others, her involvement was disingenuous, given that Alberta has imposed a moratorium (albeit temporarily) on new renewable energy projects, in stark contrast from the host; United Arab Emirates is currently investing \$54 billion in renewables, tripling its current impressive capacity.²⁰ According to S&P Global Commodity Insights, Canada currently “produces about 4.8 million barrels per day (bpd) of crude and that figure could climb by about 500,000 bpd to about 5.3 million bpd by the end of 2024.”²¹ But, despite the petroleum sector’s engagement with the COP process – or perhaps counterintuitively because of its engagement – COP ended on significant note: An agreement that signals the “beginning of the end of the fossil fuel era by laying the ground for a swift, just and equitable transition, underpinned by deep emissions cuts and scaled-up finance.”²²




Tilting at Windmills - From Pariah to Active Menace: Alberta, and Calgary in particular, bear a particular burden of leadership on the greenhouse gas emissions (GHG) file, as reductions here are at the heart of meeting the internationally-agreed-upon Paris targets, and we are the heart of the most GHG intensive industry in - by far now (in absolute terms, not just per capita) the most GHG-emitting province. Yet, the only combatant that Alberta seems to be more eager to tangle with than Ottawa is the climate itself. It is as if, scarred from the ferocious fires, the UCP government is playing the part of a modern-day Don Quixote, putting a 7-month moratorium on not just windmills, but solar farms and other renewable development proposals. Just prior to that kneecapping, Alberta was a rising star in renewable development, rapidly becoming the Canadian leader. But in today's political climate, it's more fun to play the part of the put-upon victim than to carry the burden (or accolades) of leadership. Alberta is used to - no, let's say relishes - being a pariah in the climate change conversation. After all, Alberta's emissions have increased 55% since 1990 and the province's emissions per capita are three times the national average of 17.68 tonnes per capita.²³ This, at a time when the country as a whole is on track to achieve between 85 and 90 per cent of its 2030 emissions target.²⁴ Alberta is the last remaining jurisdiction in North America that does not financially incentivize energy efficiency building retrofits. The government has been actively encouraging metallurgical coal mining on the eastern slopes, after backing down in the face of a sharp public backlash under the Kenney government.²⁵ There are also components of the journey to "Net Zero" that we are not being honest about: Research by the Pembina Institute shows that Canadian oil remains among the highest cost and highest carbon emissions intensity in the world, such that in a Net Zero world, low cost producers will be able to outcompete us (exacerbated by the high cost of Canada's oil). And, while carbon capture and storage is important to invest in, it is only really helpful in reducing emissions at the production site, not in capturing carbon from the atmosphere.²⁶



Cheap Grace and the Limits of Carbon Pricing: Carbon pricing, the most market-friendly model of addressing climate change, has been the policy choice of the vast majority of economists studying an array of policy options (though "cap and trade" was initially the more popular, proving however to be too impractical to implement at scale). With this logic and consensus in mind, Canada has invested much political capital into making a carbon tax a reality. But this policy has hit rough waters lately, with the federal government scoring an "own goal" by arbitrarily exempting one form of carbon use (oil-based furnaces) in one region (Atlantic Canada). This regional pandering is opening up the floodgates to others asking for exceptions, including 130 First Nations in Northern Ontario. Meanwhile, the tax is not noticeable enough for most households to induce significant behaviour change (as energy costs are very elastic), and the official opposition, which if polls hold looks poised to become the next government, has vowed to "axe the tax". It may sound heretical, in the context of noting the obvious and severe threat that climate change is already unleashing on human communities around the world, but perhaps it's time to consider a completely different strategy. As former US Lead Climate Change Negotiator Griffin Thompson persuasively argues, "the climate change question is far too big to be answered with the smallness of market manipulations." Invoking the theologian Dietrich Bonhoeffer's concept of "cheap grace", "the act of seeking salvation without contrition, forgiveness without repentance".²⁷ Thompson observes that we are trying to solve the inherently complex problem of climate change through easy means. One could put vacuous "net zero" pledges in the mix as well: We'll get to net zero by 2050, but in the meantime, it's status quo all the way. This naïve path to climate salvation excludes deeper forms of questioning our socio-economic behaviour, or committing to structural change, or re-evaluating our relationships to each other and to the land (broadly interpreted), or building ancestral accountability into education and public policy, or radically shifting consumption patterns.²⁸ As Thompson starkly frames it, tinkering with "tired economic mentalities for essential existential questions is literally killing us."



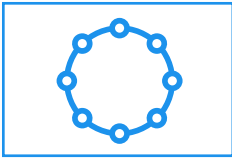
Redistribution as Mitigation?: Most of the issues covered in this scan relate to rising extremes of inequality, a dynamic which previous scans have outlined in detail. An Oxfam report released this past year, for example, noted that the richest 1% of the planet's inhabitants (the threshold of which is currently about \$819,324 in annual income, according to the Economic Policy Institute) are directly responsible for 16% of global carbon emissions.²⁹ That's the same as the emissions produced by the poorest 66% of humanity (5 billion people). As we start to become more sophisticated about systems thinking, and especially about how complex challenges and systems interact with each other, we observe that sometimes there are 'leverage points' that multiple challenges may have in common. Living wages and guaranteed incomes may be leverage points for addressing food security, housing, and other social issues rooted in economic hardship, for example. Some challenges also share common root 'meta-crises' (see the chapter on education as an example). It may thus be the case that greater wealth redistribution, particularly from the richest 1%, with even more steeply progressive redistribution from the richest 0.1 and 001%, could be a significant climate change mitigation strategy. Even the more radical climate activists are turning their attention to this - throwing paint on private jets, for example.³⁰ While serious action is not likely on the horizon, we can expect the discussion on the climate-equality nexus to be more out in the open.



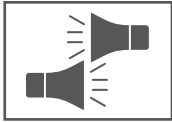
“This morning, so-called ‘save our children’ protestors swarmed my vehicle. The level of hate was chilling. It did not shake my resolve to stand with 2SLGBTQ+ kids & their families. Calgary is a place of love & inclusion. Your hatred has no home here.”

Jyoti Gondek (Post on the platform formerly known as Twitter, Sept. 20, 2023)

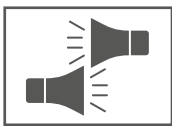




THE FUTURE OF Community



What Places are Thriving?: Of Canada's 40 million people, more than 4 out of 5 live in cities, making it one of the most urbanized countries on earth.³¹ The healthiest growth over the last half decade is in mid-sized cities; cities with plenty of amenities, yet in the 300,000-600,000 range. London, Nanaimo, and Waterloo grew by an amazing 10% last year, while Halifax, Oshawa, Guelph, and Moncton each grew at around 9% in one year. There is also a pronounced shift within Alberta: In the same 5-year period that Cochrane and Airdrie grew by well over 20%, seven of Canada's ten fastest declining municipalities were all in northern Alberta.³²



A City Built with Barriers: Calgary is a city that struggles with accessibility; In what is billed as the largest physical accessibility research initiative in Canada to date, an analysis of thousands of commercial and institutional properties in three major Canadian cities – Vancouver, Ottawa and Calgary – revealed that Calgary was by far the least accessible.³³ The city is riddled with long, circuitous, and complicated access routes, and only just over a third of professional, scientific, technical and educational services are rated as accessible. Compounding the challenge, Alberta is slow to move on province-wide accessibility legislation, while Ontario, Nova Scotia, BC and Manitoba all have passed (or recently updated) accessibility laws and regulations.³⁴



Segregated Stampede City: Calgary, as Canada's third most diverse city, with a diverse City Council and increasingly cosmopolitan vibe, is prone to thinking of itself as not merely diverse but inclusive and unpretentious ("western hospitality" and all that). But there's a few problems with that self-image. The Calgary Equity Index, a searchable geo-referenced tool managed by City Hall allows members of the public to compare data at a community scale across a range of indicators.³⁵ The Index reveals a consistent pattern: In the Northeast quadrant, East of Deerfoot Trail, where incomes are lower and new, or recent immigrants form a much larger proportion of the population, violence is higher, access to health care, parks, recreation and the arts are lower, and virtually every other indicator reveals a similar pattern. Perhaps most disquietingly, from the standpoint of equity and equality of opportunity, access to post-secondary education is considerably lower (which explains why for-profit career colleges have swooped in to fill the void, whether opportunistically or predatorily). Add to this the 2020 StatsCan *General Social Survey* finding that Alberta in general, alongside B.C., performs less well at fostering a sense of belonging among new immigrants.³⁶ These numerous disadvantages accumulate into a picture of a deeply divided city, and a hampered ability to bridge social capital (across socio-economic class and income levels). As Harvard economist Raj Chetty has shown, a lack of such bridging social connectedness greatly impairs social mobility, which means there are structural inequalities built in to the geographic layout of Calgary. In a word: Segregation. With this exclusionary picture becoming clearer, and with the imperative for affordable housing beginning to trump NIMBY, we would normally look for the City (which practiced inclusionary land use planning many decades ago, but abandoned it in the late 1980s) to once again pursue more integrative policies to bring affordable housing into more affluent areas. However, the Province appears poised to repeal the inclusionary housing provision in the City's charter, ironically invoking affordable housing as the reason for doing so (i.e. reducing potential red tape for developers).³⁷



Community and its Counterfeits: Nearly 30 years ago, one of the great practice-informed thinkers about community, John McKnight (who was mentored by the legendary community organizer Saul Alinsky, with McKnight in turn mentoring a young Barack Obama), wrote *The Careless Society: Community and its Counterfeits* (1994). In the book, McKnight shows how competent self-organizing communities have been “colonized by professionalized services—often with devastating results. Overwhelmed by these social services, the spirit of community falters: families collapse, schools fail, violence spreads, and medical systems spiral out of control. Instead of more or better services, the basis for resolving many of America’s social problems is the community capacity of the local citizens.”³⁸ McKnight gave expression and voice to the millions of people in the US, Canada, and well-beyond, who were working in a community development frame (and to the community social workers perennially losing the professional status battle to the clinical social workers). But the wave of professionalization in the decades leading to the 1990s was merely prelude to the current threats to the ‘spirit of community’. Community, after all, is the only obvious antidote to the atomization of society, where an online information world war – where counterfeit communities abound – fuels the logarithmically expanding supply of misinformation and disinformation, wooing those who are socially isolated, or who have experienced loss, disaffection, and rejection in everyday life. Community reminds us that, while we have our differences of opinion, there are bonds stronger than politics, religion, or other markers of identity that are more interesting and enduring. These bonds, in the end (much like family), matter as much, or more, than any of our individual dreams and schemes. But this social cohesion, this broadly shared reality, is being torn asunder. Community is an antidote to the data-driven efficiency that is plaguing workplaces, entire industries, tech-for-good schemes, and government and philanthropic funding relationships. We may soon reach peak data and efficiency obsession, as movements flourish that stress the joys of de-linking, de-stressing, and spending time in community (whether with other human beings or other natural organisms). In some ways, it could echo 18th century Romanticism as a backlash to the mechanization of the industrial revolution. A corollary of this movement is “Commoning”, a set of practices that govern almost every aspect of economic life, orienting purchasing, consumption, investment, labour, talent, and time toward enhancing the commons.³⁹



We Can’t Even Trust the Trust-Trackers: Community is also where trust resides, in order to have a social contract, a shared sense in the legitimacy of business contracts, service agreements, and institutions; and a shared basis on which to discuss, debate, and jointly construct the society we want. As last year’s scan explored, trust almost always trumps truth – people are more inclined to believe misinformation if the sender is a person they trust (even when they know the information to be factually incorrect). The 2023 Edelman Trust Barometer reports that “a lack of faith in societal institutions triggered by economic anxiety, disinformation, mass-class divide, and a failure of leadership has brought us to where we are today – deeply and dangerously polarized.”⁴⁰ The survey also found that people trusted businesses more than non-governmental organizations or governments. However, there’s an ironic trust question with this blue-chip global tracker of trust: As one investigative journalist noted: “Public trust in some of the world’s most repressive governments is soaring, according to Edelman... For years, Edelman has reported that citizens of authoritarian countries, including Saudi Arabia, Singapore, the United Arab Emirates and China, tend to trust their governments more than people living in democracies do.”⁴¹ This is either naïve methodology or client acquiescence (or both), but not likely a reflection of the truth.

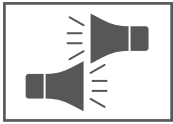
“For some time the world economy has seemed to defy gravity. Despite the fastest tightening of monetary policy since the 1980s, America’s economic growth probably accelerated in 2023. Europe has mostly weaned itself off Russian gas without economic catastrophe. Global inflation has fallen without big surges in unemployment... [But] even if America continues to dodge a recession, the rest of the world looks vulnerable.”⁴²

Henry Curr, Chief Economics Editor, *The Economist*

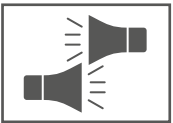




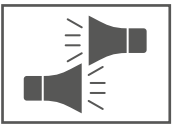
THE FUTURE OF THE Economy



Anemic Growth in 2024: Canada's GDP shrunk in the third quarter of this year, and could see a further contraction in the final quarter once the numbers are in, the official trigger for declaring a recession.⁴³ Most analysts predict stagnant or falling markets through 2024, along with falling inflation rates.⁴⁴ The International Monetary Fund (IMF) forecasts "a continuing slowdown in global economic growth... threatening widespread knock-on effects on many aspects of society."⁴⁵ According to a Reuters poll of analysts, global growth could slow to 2.6% next year, down from 2.9% this year.⁴⁶ Some, such as Goldman Sachs, note that predictions for 2023 were even more dire, yet a recession was avoided in most parts of the globe. As such, they take a rosier view of 2024, particularly in the US, which is seeing healthier growth than expected, partly because of industrial re-localization, and partly because of significant new public 'green' industrial stimulus. The largest recession risk is in Japan, which saw a contraction in the third quarter of 2023, and is a large enough economy to have global cascade effects. China's economy has performed far more sluggishly as well, especially as post-pandemic near-shoring/friend-shoring, and geo-political risk-abatement start to bite.⁴⁷ The US Senate, which three times this past year left global markets holding their breath, will no doubt treat us to more brinksmanship as they wrestle with a \$31 trillion debt. While analysts predicted a sharp drop in holiday spending relative to 2022 due to inflation, in fact Black Friday spending rose by about 10% to over \$221 billion.⁴⁸



Canadian Stagnation: After widespread expectations that Canada would be well into a recession by the end of 2023, this has not yet borne out (though we are technically very close). Economists are divided on whether 2024 will feature a recession. Regardless, for millions of Canadians feeling stretched due to inflation, food insecurity and a lack of affordable housing, whether we are in a recession or not is a matter of trivial interest. The six big Canadian banks are all sending strong signals that the economy will be weak in 2024.⁴⁹ There's also a divergence between Canada and the US in the stock market: After a big pandemic-recovery growth spurt in 2022, the TSX essentially flatlined through 2023, while the Dow Jones, S&P and especially the tech-heavy Nasdaq composite indices all saw growth. Unemployment was at 5.4% 2023, up slightly from last year, but historically still very low. We can expect unemployment to trend upwards of 6% both as a result of stagnant growth and as a result of long-term structural factors tied to automation.⁵⁰



Inflation and Interest Rates Stabilizing: The Bank of Canada's policy benchmark rate of 5.0% is expected to remain steady well into 2024 (some economists see it still rising slightly, as we are not fully out of the woods on inflation, while others see it dropping, as housing affordability is strained from high interest rates).⁵¹ In general, most anticipate the key rate to eventually drop sometime later in 2024, but there are many variables that could throw the economy back into an inflationary trap. Inflation, as measured by the Consumer Price Index, is expected to be on the high side of normal, at 3.5% through 2024.⁵²





A Pause on Public Private Partnerships: Through the first two decades of the millennia, governments at all levels, and of many political stripes, praised the virtues of “public-private-partnerships” (or PPPs). The idea made sense in the abstract – government should not be directly in the business of building infrastructure, and industry is set up to do what a given firm does best – build roads, bridges, power lines, or pipelines, for example, or manufacture light rail cars and buses. However, the era of PPPs has seen public expenditures on such infrastructure typically reach the stratosphere, with project timelines stretched to often absurd lengths.⁵³ In the interwar and post-WWII era, governments had little trouble building massive public work projects of unprecedented scale and ambition, and at costs that – even adjusting for inflation – pale in comparison to today’s megaprojects. Today’s PPP-infused infrastructure picture is a hot mess: Ottawa’s light rail, over budget and well behind schedule, is rife with design flaws. Toronto’s Eglinton light rail project, begun in 2010, is still not complete, and the public authority responsible for delivering it cannot provide an answer as to an estimated completion date, such is the byzantine chain of consultants, contractors and sub-contractors involved.⁵⁴ In just 5 years, the cost of the federal government’s Trans Mountain pipeline has ballooned from \$4.5 billion to at least \$35 billion.⁵⁵ California’s once vaunted PPP on high-speed rail is perennially, legendarily, in suspended animation. Government after government has scoured their internal project management capacity, taking as an article of faith that the private sector is inherently more efficient. That is no doubt true for certain individual firms. But PPPs almost never involve one company. The math is actually fairly simple – the more firms that are at the table, at different stages of project scoping, design, tendering, and development, the more complex the chain of decision-making, and the more opaque and elusive the accountability. And, of course, everyone in that chain takes their ‘pound of flesh’. It’s actually stunningly inefficient. Meanwhile, putting aside the authoritarian context, one cannot help but marvel at China’s 25,000 km. of high speed rail lines (an amount that could stretch from Halifax to Vancouver nearly four times over) built in the last decade and a half for \$300 billion.⁵⁶ Even in Australia, the closest comparator to sparsely populated Canada (though with half the population), passenger rail travel is now more normalized as a public investment (17.6 billion km. traveled, compared with Canada’s 1.7 billion km. traveled).⁵⁷



Declining entrepreneurship: The Business Development Bank of Canada (BDC) found that the country has 100,000 fewer entrepreneurs than it did two decades ago, despite the fact that the population has grown by more than 10 million over the same period.⁵⁸ As BDC notes, “this general trend is alarming. By 2022, only 1.3 person out of 1,000 had started a business, compared to 3 out of every 1,000 in the year 2000.” This has happened even as schools of entrepreneurship have become more ubiquitous at colleges and universities. Strangely, when it comes to why this might be happening, BDC focuses on the skills gap (e.g. in marketing and bookkeeping) once businesses have begun; i.e. the study does not illuminate why this is happening in the first place. In the US, which has also seen declines in entrepreneurship, the management firm Avitus Group posits a number of intersecting factors, including crippling student loan debt burdens, corporate concentration (especially in the online retail space), and the rise of corporate innovation departments encouraging *in-house* entrepreneurship (which wouldn’t be captured in new business data). Other contributors might include an aging population, greater financial precarity of youth, the stifling of arts programming and creativity in primary and secondary school due to austerity measures, and the move toward curriculum-based standardization. Potentially even the rise of ‘helicopter parenting’ might have something to do with declining entrepreneurship.⁵⁹



The Kids Are Not Alright: The gap between generations in terms of wealth and property ownership will continue to deepen in 2024, dampening social mobility and contributing to political polarization. A US study this past year revealed that the median wealth of millennials is less than half that of baby boomers at the same age.⁶⁰ As the housing section that follows later in this scan points out, there is a huge and growing generational divide in the housing market, where financialized ever-expanding residential property values have put home ownership out of reach for those looking to enter, while at the same time rents have risen. Add to this rising food, tuition, insurance and other costs, and young people are feeling squeezed in a way that is unprecedented. Generation Squeeze, a nonprofit that emerged out of UBC population and public health research Paul Kershaw’s work, aims to develop into an organization advancing the socio-economic interests of young people, with the kind of influence that the Canadian Association of Retired Persons (CARP) has provided for older adults.⁶¹ Their voice and influence has been gaining ground as the affordable housing crisis in particular takes hold. Last year’s scan chronicled the mental health epidemic among young, with rates of anxiety and depression six-fold higher than what they were a decade ago. The polycrisis is more acutely felt and directly experienced by young people (they are also simply paying more attention more of the time compared with distracted middle-aged Gen X’ers and comfortable Boomers, the most prosperous generation to have ever lived).

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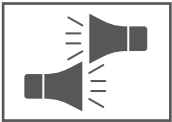
“Democracy demands an educated system. It is not a luxury, it is a necessity. High quality civic education can ensure our democracy has a vibrant and robust future... it is also the best antidote for cynicism to help people understand they are a part of something larger than themselves, and that they can make a difference.”⁶²

Sandra Day O'Connor, US Supreme Court Justice

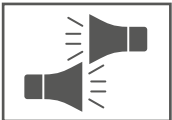




THE FUTURE OF Education



Rise of the 'Parental Rights' movement: The 'parental rights' movement, which arose out of the conservative evangelical movement in the US beginning in the late 1970s, has found new fertile ground among Canadian social conservatives and some diaspora communities, giving rise to this summer's "1 Million March 4 Children."⁶³ Though the numbers were in the thousands (nowhere close a million), the movement, which charges that today's schools are infused with "gender ideology" and "premature sexualization and potentially harmful indoctrination" of children, has succeeded in convincing the governments of New Brunswick and Saskatchewan to compel teachers to involuntarily 'out' students who may identify as non-binary to their parents.⁶⁴ These new laws require youth under 16 years of age to obtain parental consent before they can change their name and pronouns at school. Naturally, this is a potentially traumatizing chain of events that infringes pretty significantly on the rights of both the student and the teacher. Anticipating and unmoved by this, Saskatchewan Premier Scott Moe pre-emptively invoked the Notwithstanding Clause to override the Charter of Rights and Freedoms.⁶⁵ Even a "Do No Harm" amendment proposed by the Opposition Education Critic, that would have exempted children "where a mental health professional determines that there is absolutely no way" to develop a safe plan to tell a parent, was rejected.⁶⁶ So far, Alberta Premier Danielle Smith, true to her libertarian roots, has wisely avoided similar legislation here. But the language of "parental rights", which taps into a broader sense of disenfranchisement, and has a strong overlap in membership with the 2022 Freedom Convoy movement, is not going away anytime soon. This only adds to the number one source of stress for teachers and school administrators - parental threats, bullying, and intimidation, in addition to regular overbearing and micromanaging behaviour (colloquially referred to as 'helicopter parenting').⁶⁷



Lifelong Learning and the Pressure to Stay Current: 'Lifelong learning' is a phrase that would have appeared in a scan of issues and trends 20 or even 30 years ago. It has long been a laudable objective for obtaining workplace advancement, expanding horizons, switching careers, or simply for enhancing overall wellbeing and longevity. In recent years, the need for continuous learning has never been more obvious or imperative. As a 2024 forecast in Forbes frames it, "gone are the days when education was only for the young. Work is changing, so the models of learning needed to prepare for work are changing, too. The speed of technological innovation means opportunities are opening up in industries that didn't even exist when much of today's workforce was at school." Fortunately, lifelong learning is made more accessible (for most) by the emergence of online and remote learning technology. As the pace of AI-enabled software and cloud computing advances logarithmically, as the workforce ages, and as people push their retirement off (whether out of financial necessity, a sense of purpose, or the desire to stay active), investing in reskilling and upskilling at an entirely new scale will be vital, for both employers and employees.





Is Education the Sleeping Metacrisis?: On a recent Canada-UK exchange organized around the topic of social innovation, the head of The Royal Society of Arts (The RSA) and former Chief Economist of the Bank of England Andy Haldane remarked that “what keeps me awake at night is knowing we have a school system that produces students who come to loathe learning”, a sentiment that could easily apply to Canada (in particular with respect to the public junior and senior high school systems).⁶⁸ The great 20th century economist E.F. Schumacher said that “the task of our generation, I have no doubt, is one of metaphysical reconstruction... Our task – and the task of all education – is to understand the present world, the world in which we live and make our choices.”⁶⁹ Schumacher said those words exactly 50 years ago, in 1973. He would be alarmed to discover that our education systems have changed very little in those 50 years, yet the broader social and economic world would otherwise be nearly unrecognizable to him. As the Global Education Futures Report concludes, the education system as it currently is, at all levels, is unfit for supporting societal transformation.⁷⁰ In the Forward to the Report, MIT systems scientist Peter Senge notes that “our system of education is trapped in an unspoken irony: the institution with the greatest potential impact on the future is arguably the one most shaped by taken-for-granted ideas from the past.”⁷¹ As we think of each component of the polycrisis, the skills required to shift mindsets, reconfigure food production along a regenerative path, reconfigure the economy as a whole onto a circular and wellbeing-centric path, it is hard to avoid an unsettling conclusion: Perhaps sleeping beneath all or most of the other crises discussed in this scan is an ‘education metacrisis’. Thinking of education as the metacrisis helps ‘defamiliarize’ the concept of education, away from just “the conventional arcana featuring classrooms and exams”, and towards, in the words of Jonathan Rowson, the Director of *Perspectiva*, “the beating heart of intergenerational transmission and social autopoiesis, the fundamental matter of how society maintains, renews, and transforms itself. That emphasis is of no small importance in this historical moment, where there is so much precarious excitement, much is asked of us all, there is so much to lose, and so much is up for grabs.” Iain McGilchrist, a psychiatrist and author of *The Matter with Things: Our Brains, Our Delusions, and the Unmaking of the World* (2021) emphasizes the importance of understanding the differences between the left and right hemispheres of the brain. He suggests that the modern world has become overly focused on left hemisphere thinking, which is associated with analytical, reductionist, and linear reasoning, at the expense of right hemisphere thinking, which is associated with holistic, integrative, and contextual understanding.⁷² Universities have played no small part in this, which is partly why they struggle to provide fertile ground for changemaking and social innovation (which at this chapter of the human story is an existential imperative).⁷³ McGilchrist’s work suggests that a balanced and integrated approach to education, taking into account both hemispheric modes of thinking, could lead to a more well-rounded and adaptable approach to learning. His perspective implies a need for an education system that values creativity, critical thinking, and a holistic understanding of the world. This critique of contemporary education isn’t just the domain of back-to-the-land leftists; Friedrich Hayek, the original architect of neoliberal economic thinking, warned against the shadow side of overly computational habits of thought.⁷⁴ The global social enterprise *Systems Innovation* (SI) conducted a review of the education challenge through their London Hub.⁷⁵ Among their findings of why education at all levels is stuck in a paradigm ill-fit for 21st century learning: It is individual-focused (not relational); It is centralized (we must move to a ‘learning ecosystem’ approach - which is what Calgary’s LearningCITY Collective, for example, is pushing for⁷⁶); It is standardized (a factory model that tends to ignore neurodiversity, with the occasional exceptions of ‘coded’ or ‘gifted’ students. Indeed, as author, scientist and animal behaviourist Temple Grandin argues, we need to move much more aggressively to a heterodox, learner-centred form of education, where neurodiversity is the norm, not the pathologized exception⁷⁷); It is static (hence why ‘social studies’ in primary and secondary schools manifests as mainly history); It is facts- and solutions-centered (instead of question-based and problem-centered); And it is institution-centric (self-preserving) rather than student-centric (heterodox and adaptable). We see many promising ‘signal’ experiments, but they tend to be niche and very much off the radar (for example, land-based experimental initiatives like Black Mountain College or Schumacher College in the UK, or Deep Springs College in the US). As this scan’s author’s TEDx talk argues, the push to decolonize education may be just what the doctor ordered: “A flourishing of whole-person, systems-focused, ecologically-aware, ethically-embedded, future-accountable, participatory modes of learning and knowledge production. And not focused on the atomized individual, but on collective learning – social innovation requiring intensely relational capacities.”⁷⁸ Among the more promising initiatives in this vein within post-secondary education in Canada is a newly announced partnership between Howl and Royal Roads University, which will bring “land-based field-study experiences to youth across Canada... bringing together natural sciences curriculum, Indigenous knowledge, on-the-land learning, and opportunities for resume building and community building.”⁷⁹



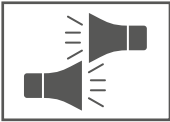
“Most food-insecure households rely on employment income. This means that having a job is not enough for many Canadians to meet basic needs. It also tells us that our existing supports for low-wage workers and those experiencing job loss are insufficient to bridge the gap.”⁸⁰

Valerie Tarasuk, Professor of Nutritional Sciences, and Tim Li, Research Program Coordinator, Food Insecurity, University of Toronto

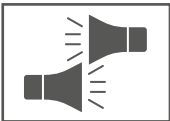




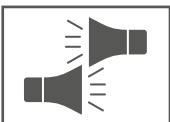
THE FUTURE OF Food Security



The Food Affordability Crisis: Food security exploded onto the news agenda in a huge way in the last half of 2022 through 2023. As last year's scan noted, world food prices had already hit an all-time high, up 14.3% from the previous year, with the number of acutely food-insecure people globally having tripled since 2019 and nearly 50 million people in as many countries at risk of famine.⁸¹ In recent months, this famine risk includes huge countries not normally associated with famine, notably Egypt, Indonesia, and Nigeria.⁸² 2023 saw another big rise (10%) in average food prices from 2022.⁸³ In Canada, a new record was set with nearly 2 million people accessing food banks in March alone (when the annual Hunger Count is conducted), up an astonishing 32% from the year prior, and nearly 80% since before the pandemic.⁸⁴ The reasons are summarized well by one participant in the Hunger Count: "The rapid rate of inflation, coupled with rising rental costs, is driving people who were already living precariously close to the edge, off that edge."⁸⁵ Record numbers of people accessed the Calgary Food Bank this past year, with an average of over 750 hampers a day distributed compared with 300 hampers a day four years ago.⁸⁶ The number of food banks nationwide also continues to grow in the four decades since the first food bank opened, with nearly 2,400 food banks reporting in to this year's hunger count.⁸⁷



A Systems View: As the Food Banks Canada Hunger Count pointed out, and as researchers have repeatedly pointed out, the problem of downstream food insecurity is not fundamentally a food problem, nor a food distribution problem, nor a household budgeting problem, nor a smart shopping or food preparation capacity problem. It is almost entirely because people do not have enough disposable income in their pockets to buy food.⁸⁸ A broken social safety net, declining housing affordability, and inadequate compensation for low-income workers are the most important ways in which food security can be addressed. We have collectively known this for some time, so any food charity approach that does not incorporate a systems approach is missing much of what is required to address the problem.⁸⁹



The Climate-Food Nexus: This coming year's 28th Conference of the Parties, or COP, to be held in Dubai, is focusing heavily on food. Weather has always been the thing farmers think, worry, and pray about the most. And, while weather is not climate, the growing incidence of erratic weather – leading to droughts, floods, fires, microbial and insect infestations, and scorching heat in certain locations – the growing incidence and severity of which is largely attributable to anthropogenic climate change, is a severe challenge to global food production. This will only get worse over the coming decades, irrespective of the actions we take now. Agriculture is also not just a victim of climate change, but a major contributor. To help feed the world, especially to sate our desire for beef, Brazil has deforested 26% of the Amazon rainforest (80% of which is for cattle production).⁹⁰ Global food production is responsible for anywhere from 21% to 37% of greenhouse gas emissions.⁹¹



The Ticking Fungal Time Bomb: Fungi are the most important agents of crop disease. Fungi also are highly adaptable – in general, they can evolve quicker than plants, which means that the battle to outwit fungal infection requires both constant chemical innovation and genetic modification. Monocultural farming (single species of crops) has become the global norm since the (ironically-named) Green Revolution. Emblematic of the monocultural industrial-scale farming now endemic throughout Western Canada, Alberta boasts the single largest farm in the world – a 14,000 hectare field of genetically uniform wheat, sprayed – like most farms – with anti-fungal treatments.⁹² There are also well-founded fears about a potential future fungal pandemic, which could be many orders of magnitude more severe than the viral or bacterial ones we have known over the past millennium.⁹³ Unfortunately, the vast majority of fungicide research is not shared publicly because it is done by agro-chemical companies and kept proprietary.⁹⁴ The result is an under-profiled vulnerability that is one of those off-the-radar possibilities that could suddenly catch us profoundly unprepared. A mycological black swan event.

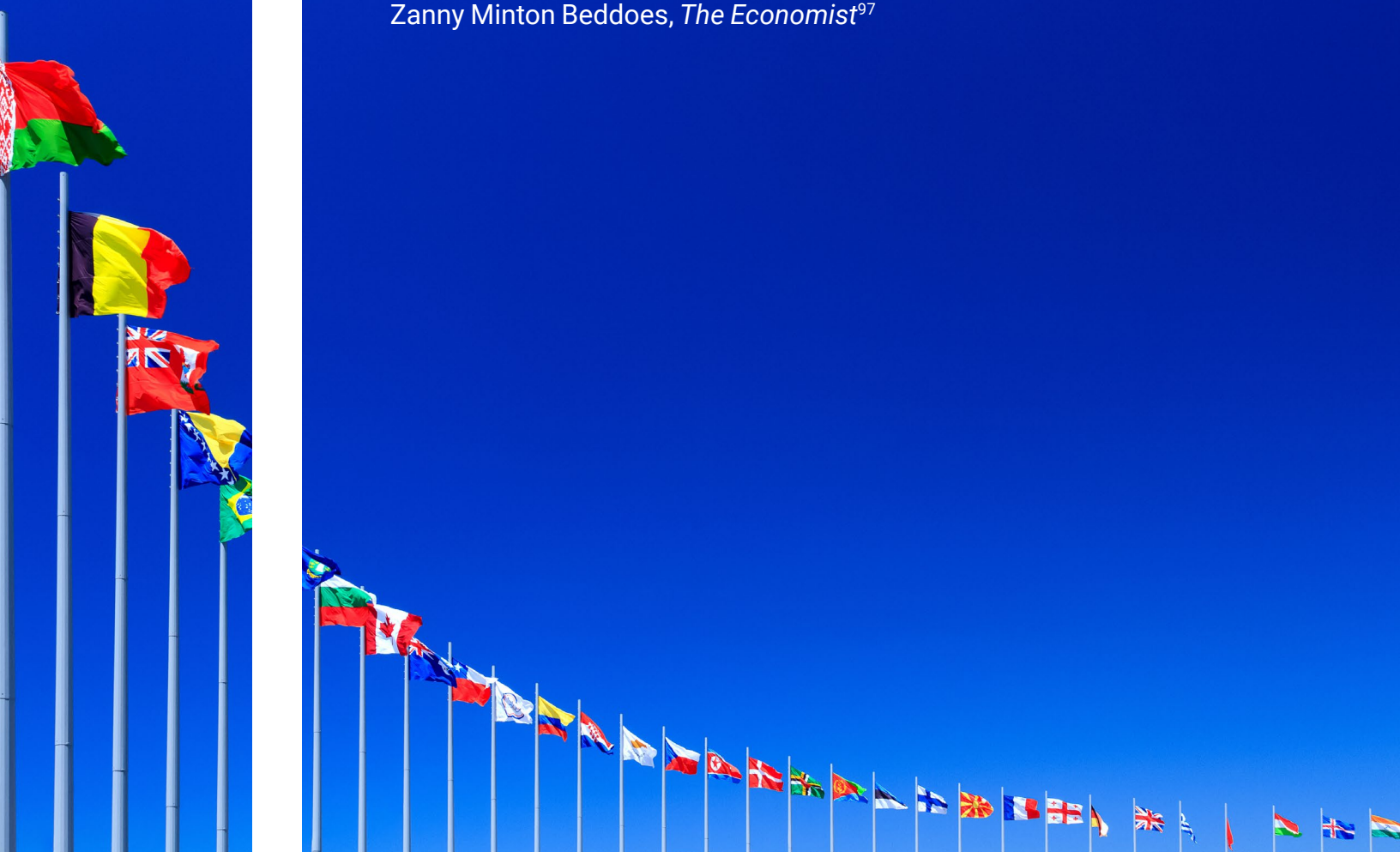


A Regenerative Renaissance: A regenerative approach to farming and food production requires that we give more to nature than we take from it. It involves many practices, such as crop rotation, composting in place, pollinator planting, silvopasture, and natural crop sequencing, many of which were widely employed in the era of small-scale family farming, but have since been abandoned as industrial farming has supplanted the family farm. It may seem utterly utopian to muse about a regenerative renaissance, when the dominant farm trend during the entire eight-decade length of the Great Acceleration has been toward consolidation, corporatization, production maximization, and industrialization. Since 1941, the number of farms in Canada has dropped by 75%.⁹⁵ One example of a regenerative practice is agroforestry (the planting of trees and shrubs alongside crops to prevent erosion, improve soil health, create habitat, and absorb carbon). Indeed, “restoring and protecting forests alone could capture approximately 226 gigatonnes of carbon if they are allowed to recover from degradation and deforestation. That’s equivalent to approximately 23 years of human emissions.”⁹⁶

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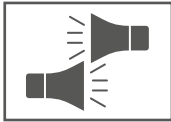
“More than half the people on the planet live in countries that will hold nationwide elections in 2024, the first time this milestone has been reached... Many elections will entrench illiberal rulers. Others will reward the corrupt and incompetent. By far the most important contest, America’s presidential election, will be so poisonous and polarising that it will cast a pall over global politics. Against a backdrop of conflict, from Ukraine to the Middle East, America’s future direction—and with it the world order American leadership has hitherto underwritten—will be on the line. It will be a nerve-racking and dangerous year.”

Zanny Minton Beddoes, *The Economist*⁹⁷

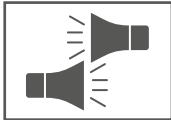




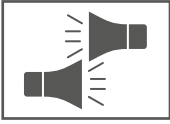
THE FUTURE OF Global Affairs



Migration is the New Global Norm: According to the UN's World Migration report, the number of people living in a country other than the one they were born in has tripled over the last three decades, outpacing total population growth by a wide margin.⁹⁸ Remittances, financial or in-kind transfers made by immigrants directly to families or communities in their countries of origin through services like Western Union, grew more the five-fold in the first two decades of the 21st century. Some migrants are fleeing war, some are economic, and some – eventually many – will be fleeing unbearable temperatures, crop failures, and coastal flooding.⁹⁹ Canada is looking to stabilize its current level of those granted permanent residency at 500,000 per year, mainly due to housing under-supply.¹⁰⁰



Continued Rise of Authoritarianism: A generation ago, it was political suicide for European leaders to even be seen shaking hands with the handful of then-fringe far-right leaders emerging in certain countries. But fast forward to 2023, and a recent analysis by the think-tank ParlGov reveals far-right parties across Europe are climbing steadily in the polls, exerting heavier nativist and populist influence on the policies of the mainstream, and increasingly holding the balance of power or occupying ministerial roles in coalition governments.¹⁰¹ Far-right populist Geert Wilders appears poised to be the next Prime Minister of the Netherlands, a country that was almost a synonym for progressivism through most of the past century, after his party won the majority of seats in the November election (though piecing together a coalition government will take likely many weeks or months of negotiations).¹⁰² This rise of nativist anti-progressivism has been a slow but steady climb, but in the last half decade it has been supercharged by social media engagement algorithms steering people toward content that confirms their biases while also validating and inflaming feelings of injustice or inequality. It has also been normalized by virtue of comparison with more obvious examples of authoritarian personalities flourishing at the top of most of the world's rising powers – Xi in China, Modi in India, Putin in Russia, Bolsonaro in Brazil (until recently), Erdogan in Turkey. A growing number of nations are sponsoring assassinations on foreign soil (including now Canadian soil) and spying on and harassing diaspora populations (again, including in Canada). These movements also tend to be attached – as per the populist playbook – to de-globalization efforts, which in some ways mirrors the surging of nationalism in the early part of the 20th century. Unfortunately, in such a polarized world, there is little room for a 'middle power', were Canada to try and re-establish itself as such.



The Beginning of the End of the American Republic?: Rome lasted as a durable republic for nearly 500 years before it morphed into an autocratic Empire for the next half-millennium. Few experiments in civilization have had such staying power. Abraham Lincoln believed the United States had what it took to weather all storms, calling the Declaration of Independence “a rebuke and a stumbling-block to tyranny and oppression.” While the union held strong even after the Civil War, America would have to wait another century and a half for its Julius Caesar moment. The 2024 election may usher in the most existential threat to the *State of the Nation* yet. As *The Economist* puts it “America will need a new vocabulary to discuss its presidential election. Unprecedented, uncharted, not unthinkable... It is hard to overstate how important the outcome will be, for American and for the world.”¹⁰³ Donald Trump appears poised to win not just the Republican nomination, but – if polls hold – the election itself, despite the 14th Amendment of the US Constitution prohibiting those who “have engaged in insurrection or rebellion” from holding the office of President. As there seems to be no agreement as to how to enforce the 14th Amendment, and as there is no bar on having a criminal record or even being imprisoned at the time of election, it is likely – if convicted in any one of the four trials underway (totalling 91 charges) – that Trump will be the first felon to hold office (Nixon resigned before being indicted, then received a blanket pardon from President Ford). Even if he is found innocent of other criminal wrongdoings, he will remain the first insurrectionist duly elected by the people. A Trump presidency will change the complexion of the Russia-Ukraine conflict, undermine NATO, and potentially embolden Russia to continue their assault into neighbouring states. Sweden started the new year by urging its citizens to prepare for a possible war... *on Swedish soil*.¹⁰⁴ A Trump ‘revenge’ presidency will also bring an intensely anti-immigrant, anti-trans, anti-feminist, and Islamophobic character to the regime, among other outcomes of global consequence.¹⁰⁵ In terms of Republican challengers, the race has been mainly a contest to see who will be appointed to Trump’s cabinet and curry favour with the supreme leader (Chris Christie and Asa Hutchinson being the notable exceptions). Quite aside from official rivals, many Republican congresspeople freely admit that they are petrified of challenging the “Orange Jesus.”¹⁰⁶ And if the January 6 insurrection caused alarm, there is a new wave of grassroots extreme libertarians – on both the right (e.g. Patriot Front, Proud Boys, Oath Keepers) and the left (e.g. Yellow Peril Tactical, John Brown Gun Club, Socialist Rifle Association) poised to take up arms against each other and against democratic institutions.¹⁰⁷ Of the remaining Republican candidates playing by the rules, frontrunner Nikki Haley appears to be separating from the pack and might pose a serious challenge to Trump if she performs well in the early caucuses and primaries. In which case, she ought to be awarded the Nobel Peace Prize simply for saving the world from a Trump redux. Meanwhile, pressure is mounting inside the Democratic Party – though likely too little, too late – to challenge Biden, as his poll numbers are suffering, and as 70% of Democrats under 34 disapprove of his handling of the Israel-Hamas conflict.¹⁰⁸



Unprecedented Volatility in Relations Among the Nuclear Powers: Nanaia Mahuta, New Zealand’s Minister for Foreign Affairs, warned in a recent speech to the UN General Assembly that for the first time in several generations, the world faces the very real possibility of conflict between major powers.¹⁰⁹ UN Secretary General Antonio Guterres adds that “we have a level of division among superpowers that has no precedent since the second World War. Even in the Cold War things were more predictable than they are today.” The Stockholm International Peace Research Institute notes that the nine nuclear powers – United States, Russia, the United Kingdom, France, China, India, Pakistan, North Korea, and Israel – are all spending resources to modernize their weapons systems and place them on a higher footing of alert. The Institute observes that over the last year “around 2000 warheads –nearly all of which belonged to Russia or the USA—were kept in a state of high operational alert, meaning that they were fitted to missiles or held at airbases hosting nuclear bombers.”¹¹⁰ India, Russia (despite the sanctions) and of course China continue to see their geo-political clout strengthen as the “BRICS” and other emerging economies catch up to Western Europe and North America. While not nuclear powers, Brazil, Mexico, Turkey and Saudi Arabia (the world’s fastest growing economy this past year)¹¹¹ are among those with substantially more influence than they had a generation ago.

It may seem like a fool's quest to try to unpack the current war in the Middle East. But for systems thinkers interested in a better world, and what lies beneath the events and patterns at the surface, no topic should be taboo. As this conflict has global reach and consequence, with the potential to spill into a much larger regional or even global conflagration (as we are starting to see in the Red Sea and Yemen), and with alarming spikes in antisemitism, anti-Palestinian racism, and Islamophobia in Canada, we should not shy away from discussing, engaging, and being curious about how to move beyond the status quo. This isn't just a crisis about Israel or Gaza, it is a crisis about humanity and our very nature. The suffering is astronomical and unimaginable, and it is taking a very real emotional and psychological toll on millions of Canadians, in particular young people.¹¹²

The attack on Israeli towns, villages, and festival-goers by Hamas terrorists on October 7 butchered over 1,200 people, committed brutal sexual violence and torture¹¹³, and kidnapped 243, including children, constituting the deadliest mass-murder in Israel's 75-year-history. It was the third most lethal terror attack in modern history, eclipsed only by 9/11 and by the 2014 attack on Tikrit, Iraq, by the Islamic State of Iraq and the Levant (ISIL).¹¹⁴ The indiscriminate act has traumatized a nation still dealing with multi-generational trauma from the Shoah/Holocaust, an event which has no historical analogue.

Hamas, which provisionally governs Gaza (based on having been elected way back in 2006), lacks legitimacy in the eyes of most Palestinians.¹¹⁵ Unlike the moderate Fatah-controlled Palestinian Authority in the West Bank – Hamas is ideologically committed to a holy war, with the eradication of non-Muslims from Israel/Palestine as its stated goal. Hamas' action was not just indiscriminate; it was strategically unwise, as they had to know that this would have unequivocally cemented their reputation as a terrorist organization. Israeli Prime Minister Benjamin Netanyahu had been flailing in the polls, and American sympathy toward the plight of Palestinians had been on a steady decade-long upswing, with polling earlier in the year showing that Democrats had been shifting their primary allegiance from Israel to Palestine – an historic sea-change.¹¹⁶ This was before the Oct. 7 attacks, which may have now set the Palestine cause back possibly a generation or more.

But, as horrific as the Hamas attack was, it is now thoroughly obscured (and the rescue of hostages just as thoroughly undermined) by the scale and ferocity of Israel's response, the largest scale bombing campaign since the Second World War. As many have noted, the Hamas attacks were Israel's 9/11. And sadly, very much like the US, which used 9/11 as a (false) pretext for the invasion of Iraq, with the litany of war crimes that followed, Israel has squandered much of the international empathy, support, and relative solidarity that followed the events of October 7. Former Israeli Prime Minister Ehud Barak, alert to this, warned back in early November that "in a week or two we'll start to lose governments in Europe. And after another week the friction with the Americans will emerge to the surface."¹¹⁷ Indeed, in a recent CBS poll, a slim majority of young Americans now oppose American arms aid to Israel, a remarkable shift in public opinion, and 70% of Democrats oppose Biden's handling of the conflict.¹¹⁸

Netanyahu, appealing no doubt to the far-right theocratic coalition members who keep his tenuous government propped up, said as their retaliatory bombing raids began "you must remember what Amalek has done to you, says our Holy Bible. And we do remember."¹¹⁹ The prophet Samuel told Saul in the Hebrew Bible "This is what the Lord Almighty says... I will punish the Amalekites for what they did to Israel when they waylaid them as they came up from Egypt. Now go, attack the Amalekites and totally destroy all that belongs to them. Do not spare them; put to death men and women, children and infants, cattle and sheep, camels and donkeys." While it is true that Hamas unleashed a merciless ambush akin to the mythic atrocities of the Amalekites, a) we are not living in Old Testament times, and b) we have international laws that prevent against indiscriminate acts of war on civilian targets. As one Israeli military leader noted, "the emphasis is on damage and not on accuracy." UN Relief Chief Marin Griffiths told Christiane Amanpour, he has not seen anything this indiscriminate before in decades of humanitarian relief work.¹²⁰

The emphasis on "damage over accuracy" has so far resulted in over 26,000 dead in Gaza, the vast majority of whom are civilians, including over 11,000 children, a number that is nearly nineteen times the number of children who have died in Ukraine at the hands of Russian troops (the daily rate of child casualties is closer to 150 times that of the Ukraine conflict).¹²¹ It has also resulted in another 60,000 people wounded and 1.9 million people displaced. At least 89 journalists have also been killed by the Israeli Defence Forces (with many more missing), which easily eclipses the number of journalists killed in either World War II or the Vietnam War.¹²² The World Health Organization noted that there have been over 600 attacks on health care facilities in Gaza, with the majority of hospitals destroyed or no longer able to function.¹²³ A group of seven UN special rapporteurs announced Nov. 2 that "We remain convinced that the Palestinian people are at grave risk of genocide."¹²⁴

Indeed, the International Court of Justice, based on a case put forward by South Africa, is now deliberating on whether Israel is guilty of aiming to commit genocide, defined as acts intending “to destroy, in whole or in part, a national, ethnical, racial or religious group.”¹²⁵

What lies beneath the surface of this epic bloodshed? Like any complex challenge, there are multiple truths in contestation. Both sides make legitimate claims, based on ancient histories of proven occupation. There is, and has long been, an Israel. There is, and has long been, a Palestine. But when those appeals take a turn toward the divine, the claims are at risk of begging the question and dehumanizing the other. One of the markers of all of the Abrahamic religions is binary thinking and preposition: You’re either a believer or you aren’t, you’re pious or you aren’t, you are chosen by God or you aren’t. The result is fertile ground for in-group / out-group binary thinking. This comes through in Netanyahu’s framing of the fight as “the forces of civilization against the barbarians” or in Hamas’ embrace of *sharia* law and a singularly violent interpretation of *jihad*. Millions of decent people within Israel/Palestine, and intelligent observers of many political stripes, reject the false binary of a Jewish-Muslim conflict, which is how reactionaries on both sides would prefer to frame the conflict.

With the scale of these atrocities, it is becoming more untenable for western leadership to continue to ally themselves unequivocally with a Netanyahu-led Israel, and it has had the side effect of elevating the western public’s awareness of the overall plight of the Palestinians – an occupied, stateless people, who’s right to vote, move, assemble, and now to simply survive, have been stripped or severely curtailed. One big shift that has happened in North America in particular, since the last Palestinian uprising, is a sharp upward spike in awareness of colonization, including contemporary forms of colonization. So this lens affects how many Black and Indigenous leaders, in particular, see the conflict, alongside other contemporary manifestations of humans colonizing and dominating other humans: Qatar’s exploitation of migrant non-Arab workers under the Kafala virtual-slavery system, Russia’s manifest destiny in Ukraine, China’s open-air imprisonment of Uyghurs, expulsions of Rohingya from Myanmar, and the Ethiopian ethnic cleansing campaign against the Tigrayan population in Western Tigray are just some of the more recent attempts to expel, imprison, or ‘cleanse’ entire ethnicities. Those referring to Israel’s particular brand of colonization as “apartheid”, including Amnesty International and Human Rights Watch, may be technically inaccurate, but the rough analogue holds true. If Russia wins the war in Ukraine, it would not be hard to imagine them interning those who have not fled in open air prisons (like Gaza) or in walled-off precincts pockmarked with new Russian settlements (like in the West Bank). The west would rightly react with revulsion.

Much of this criticism is taboo in the west. While charges of antisemitism in the wake of this crisis are often warranted, as when protests occur outside Jewish schools and synagogues or vague allusions to media ownership are conjured, conflating criticism of Israel with antisemitism can quell discussion and debate. As even some strongly pro-Israel commentators note, there is now “...a broader climate of targeting, identifying, and ‘cancelling’ pro-Palestine activists, these measures hav[ing] cast a chill over academic expression, with many scholars reluctant to engage with the Israel-Palestine conflict at all.”¹²⁶

In fact, open discourse is more vigorous within Israel than in most western settings, as has long been the case. Indeed, Netanyahu is now deeply unpopular among Israelis¹²⁷, in particular the families of hostages, despite the recent temporary cessation of hostilities and the short-lived hostages-for-prisoners swap. His coalition government openly ignored intelligence warnings about the Hamas attacks (either negligently or wilfully), and is heavily dependent on extremist factions to keep it in power (with one cabinet minister openly suggesting dropping a nuclear bomb on Gaza).

The coming months are bound to have many layers of turmoil. However, on the other side of the horrors still to come, may be at long last – and it seems inevitable at this point – either a two-state solution, or a single secular state with two nations cohabitating from the Jordan River to the Mediterranean Sea, an outcome that then-Vice President Biden believed less than a decade ago was inevitable, given the ubiquity and scale of Israeli settlements in the West Bank.¹²⁸

The more people discuss what will need to happen to end the war, and what happens after the war, the better. The alternative is another generation exposed to sorrow, terror, and endless retribution.

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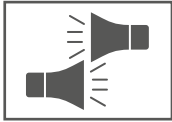
“What’s wrong with Canadian health care today is we’re trying to deliver 21st-century care with a 1950s model of delivery and funding. We have an Edsel, but we need a Tesla”¹³⁰

André Picard, Health Columnist, [Globe & Mail](#)

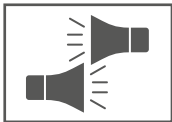




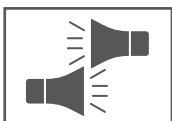
THE FUTURE OF Health Care



Global Health Trends: Globally, there have been decades-long rises in life expectancy in most countries, along with declines in child mortality, as extreme poverty has dropped and access to healthcare has improved. Africa has seen the most significant rise in life expectancy, rising from 50 years of age in 1994 to 62 today. All continents except Oceania saw a dip in life expectancy from the pandemic.¹³¹ The US, which in the 1970s had a life expectancy rate comparable to Canada, Japan, Oceania, and Western European Countries, is now at 76.4 years, approximately 6 years lower than life expectancy Canada, despite spending – by far – the most on health care per capita of any country on earth.¹³² One in three people on earth die from heart or cardiovascular disease, and over one in five from cancer, while half a million children still die from diarrheal diseases.¹³³ Sperm counts worldwide have fallen by 50% over the past 50 years, which many suggest is linked to phthalates and other endocrine-disrupting chemicals in our air, food and water.¹³⁴ If the fall continues to be this precipitous, some suggest there could be near-total male sterility by the end of the century.¹³⁵ Canada has among the more expensive healthcare regimes globally, at \$8,740 per capita annually, having steadily risen from 7% of GDP in 1975 to over 12% today.¹³⁶ This is roughly in line with spending levels in Australia, New Zealand, and the Nordic Countries, though less than a number of Western European nations and only about half of what the US spends per capita on healthcare.¹³⁷

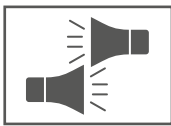


Pharmacare Delayed: Canada has the dubious distinction of being the only country in the world with a universal healthcare system that does not include universal coverage for prescription drugs (outside of hospitalization). While total spending on pharmaceuticals – at 14.5% of total healthcare spending – is about average vis-à-vis other OECD countries, the capacity of Canadians to afford drug coverage is wildly uneven, with an estimated 7.5 million having insufficient or no coverage.¹³⁸ According to the Liberal-NDP “supply and confidence agreement” (the price the NDP exacted to prop up the minority government), a national pharmacare agreement was supposed to have been introduced by the end of 2023. Housing affordability and other priorities, along with a ballooning deficit (projected to be \$46.5 this year), have relegated the pharmacare plan to the backburner. According to Health Canada’s major 2019 report by the Advisory Council on the Implementation of National Pharmacare, a roadmap was supposed to have been tabled by January 2022, with full implementation by 2027.

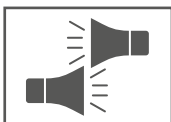


The Primary Care Puzzle: The scope and depth of the primary health care challenge in Canada is arguably the topic within health care that affects the most people, as it is the first point of contact. The phrase “consult your family doctor” rings hollow for at least 5 million Canadians who do not have a primary care physician (though according to one recent survey, that number could be as high as 6.5 million, or 1 in 5 people).¹³⁹ This is especially true for males, younger adults, and those living in Quebec. When wait times are added to the mix, as many as half of Canadians are underserved.¹⁴⁰ Alberta is among the best performers, in terms of wait times to see a family doctor, while Nova Scotia and New Brunswick have the longest wait times. But internationally, Canada performs poorly on several primary care measures; notably, fewer physicians per capita, less public investment, and relatively high infant mortality.¹⁴¹ The result of this primary care gap is delayed diagnosis, physician burnout, and a culture that normalizes health care as primarily for emergencies (lacking proactive and preventative care), which means the costs are (often astronomically) higher due to delayed care. Much of the stagnation and the more recent decline in life expectancy in the US, in addition to struggles with universal access, is attributed to emphasizing “...rescue care [and] acute care at the expense of investing in, supporting, and enabling health promotion and disease prevention”, a problem that is taking root in Canada as well.¹⁴² The roots of this crisis are decades in the making, involving many intersecting systems. For example, professional associations have been painfully slow to recognize credentials of foreign-trained doctors; the higher education system undersupplies medical school spaces (Canada having among the lowest rate of medical graduates in the OECD)¹⁴³ and charges much higher tuition for medical school; Canadian medical students who study abroad face many barriers obtaining residencies upon return¹⁴⁴; and wages and quality of life tend to be much lower for general practitioners vis-à-vis specialists.

Astoundingly, medical practice is restricted to the province or territory in which the physician is licensed, significantly disincentivizing inter-provincial mobility.¹⁴⁵ Former University of Toronto President David Naylor observes that “many Canadian [medical] schools could triple their intake with no measurable change in the capability of their graduates.”¹⁴⁶ The system is also still reeling from the mass exodus of burnt-out workers from health care and extended care systems during the leeward side of the pandemic. And, while there are advantages to running a general practice clinic as a business, the Canadian system defaults to a *doctor-as-business-owner* model, which means doctors end up spending much of their time doing paperwork, when they should be practicing what they were trained to do. The landscape of potential solutions to the primary care puzzle is vast, but there is no magic bullet. Even historically strong comparators like Australia, Sweden, and the Netherlands have struggles of their own, especially with an aging population. The UK’s National Health Service, for many years regarded as best-in-class for primary access, is also in crisis. As mentioned previously, Alberta is set to experiment with registered nurses stepping into the primary care space, which is worth exploring, but will have cascading effects on nurse availability elsewhere in the system.



Refocusing Healthcare in Alberta: It is ironic that public health care, arguably one of the defining features of what it means to be Canadian, at least vis-à-vis the US, is the domain of the provinces. It may be more accurate to say that the way each province handles health care is the defining feature of the identity of that province’s citizens (or at least the effectiveness of that province’s government). Alberta is in the early stages of renovating its approach to health care, partly motivated by necessity – there is a broad consensus that health care costs, which take up more and more of all provinces’ budgets at the expense of education, infrastructure (including housing), and other costs, are difficult to keep in check; and partly motivated by ideology. Or, more to the point, motivated by exacting revenge on Alberta Health Services, which Danielle Premier Smith and many in her cabinet had already identified as an imagined freedom-menace because of its role in implementing COVID-19 restrictions.¹⁴⁷ Healthcare is one of those areas where most agree that the system needs to be reformed, potentially root to branch, yet it is difficult to do so in a low-trust public environment, especially with an ideologically committed government and large public sector unions and professional associations, with their own brands of conservatism and resistance to change. The government’s *Refocusing health care in Alberta* webpage states the overall problem well: “Right now, the system gets in the way of health care delivery. It is complex and uncoordinated, resulting in unacceptable wait times, service disruptions and problems accessing primary care like family doctors.” The rather obvious aims of this refocusing – to empower front line health workers and prioritize patient care (does the government really mean to imply that this was not a priority in the previous five decades of the Tory dynasty?) – gets more interesting (and potentially explosive) when looking at the proposed reforms. These include empowering Registered Nurses (who do have an often-underacknowledged amount of broad medical knowledge)¹⁴⁸ to serve as Primary Care practitioners in lieu of General Practitioners (family doctors); and breaking up Alberta Health Services (AHS) into four distinct entities (a Primary Care organization, Acute Care organization, Continuing Care organization, and a Mental Health and Addiction organization). It is unclear, however, what kind of analysis this is based on and whether a thorough systems analysis has been undertaken (that said, there is very little systems thinking in health care education or management, so it’s not clear where this expertise would come from). The reforms on offer so far all contain decent and defensible rationales in the broad-brush strokes. Good primary healthcare requires collaboration among various healthcare professionals, including family physicians, nurses, nurse practitioners, and allied health professionals, so Alberta’s reforms may help catalyze greater interdisciplinary care. The emphasis on mental health, signalled as one of the four new province-wide agencies, also bodes well, as mental health services have historically been underfunded and has faced challenges integrating with the broader health care system. The details of implementation are where the controversies will rage, and either innovation will take root or widespread mistakes will be made.



The Alberta Model – Freedom for Some: Alberta these days is a place where “freedom” is the clarion call, from the mountaintops to the depths of the badlands. As University of Calgary political scientist Lisa Young points out, in Preston Manning’s \$253,000 post-mortem report on government handling of the COVID pandemic “the word ‘death’ appears six times [while] the word ‘freedom’ appears 262 times.”¹⁴⁹ But ironically, the so-called “Alberta Model” touted in Premier Smith’s mandate letter to Dan Williams, the Minister of Mental Health and Addiction, is quite far from freedom, as it proposes forcing Albertans struggling with drug addiction into recovery treatment.¹⁵⁰

The mandate letter asks the Minister to “develop compassionate intervention legislation, supporting facilities and legal processes to save the lives of those who are a danger to themselves or others”.¹⁵¹ This sounds like a decent aim on the surface, but is very likely unconstitutional in its implications, and is based on a narrow view of the issue, without reference to a corpus of research, nor on an analysis of what has worked elsewhere. It should be no surprise that a complex issue like the drug poisoning / chronic addiction crisis (even the framing is contested) has no magic bullet solution. The most promising practices, such as those in Portugal (which Minister Williams himself references as an enviable model), involve a finely calibrated mix of approaches, including decriminalization, harm reduction through safe supply, housing-first, and voluntary treatment, including both counselling and pharmacological approaches (promising advances in psychedelics included), and yes, even involuntary treatment, where there are public-endangering co-morbidities involved, such as schizophrenia. The “Alberta Model”, in contrast, is destined to be viewed on a spectrum of government overreach somewhere between eugenics and preventative arrest.¹⁵² Moreover, it is bound to disproportionately target the unhoused, where those living with addictions in the confines of their home will no doubt remain comparatively unmolested.¹⁵³



The Chronic Disease Management Challenge: The World Health Organization (WHO) warns that, as the global population ages, chronic diseases can be expected to take an “immense and increasing toll on lives, livelihoods, health systems, communities, economies and societies”.¹⁵⁴ The WHO report goes on to warn that “by around 2050, chronic diseases such as cardiovascular diseases, cancer, diabetes and respiratory illnesses – will account for 86 per cent of the 90 million deaths each year: a staggering 90 per cent increase in absolute numbers.” As the COP 28 gathering in Dubai highlights, chronic health and climate change are also intrinsically linked, as anyone living with asthma or other respiratory illnesses in Canada can attest this past year. Strategies for proactive and integrated chronic disease management will be needed to address the ever-growing burden on the healthcare system. It also means our vaunted universal health care system will have to become, well, actually universal. Health journalist André Picard frames the challenge starkly: “The baby boomers have come of age, but the health system has not. In Canada, only hospital care and physician services are 100-per-cent covered by medicare. They’re the only services considered, quote, medically necessary, unquote. There’s no rhyme or reason to the way we publicly fund health services in Canada: Six per cent of dental care, 40 per cent of home care and long-term care, 50 of drugs, nothing for hearing aids or glasses or contraception. Where’s the logic there? As a result, we have the least universal health-care system in the world. Ponder that for a second.”¹⁵⁵ The chronic disease management challenge is also an area of major growth for health tech – from metric-tracking wearables and remote monitoring, to integrated health records management, to genomic and biologic therapies. AI-enabled health assistants will become indispensable as the growth in those living with chronic illness vastly outpaces the growth in health professionals. AI applications, such as predictive analytics, diagnostic support, and treatment optimization, are becoming more prominent in healthcare, and will soon be deemed essential.



988 Launched Amid Controversy: According to Statistics Canada, 4,500 people in Canada die by suicide every year (an average of 12 people per day).¹⁵⁶ Deaths due to “diseases of despair” have more than doubled in North America over the past decade and a half.¹⁵⁷ For every suicide, there are between seven and ten attempted suicides. For those experiencing psychological distress, a Canada-wide suicide and crisis hotline was launched in November, 2023, which aims to divert mental health, suicide or substance abuse crisis calls and texts to a network of partners in communities across the country offering suicide prevention services. 911 is activated by the call respondent if the caller is in immediate or imminent risk of harming themselves or someone else.¹⁵⁸ A year after the US launched its 988 service, mental health advocates are warning that for some communities this could do more harm than good. If a 988 operator determines that a caller presents an imminent risk to themselves or others, operators can still engage emergency response teams that may include police officers, with or without the caller’s consent. This can then lead to involuntarily detainment in the psychiatric wing of a hospital. While there are sound reasons for this, involuntary treatment and the use of law enforcement (still inadequately trained on mental health crisis in most jurisdictions) can be traumatizing for the caller (especially if they are young, or from a community that has experienced systemic discrimination by law enforcement or the legal system), reducing their trust in the system and potentially resulting in a much higher risk of suicide. As an NPR article following the US experience notes: “Research shows suicide rates increase drastically in the months after people are discharged from psychiatric hospitals. Those who were sent involuntarily are more likely to attempt suicide than those who chose to go, and involuntary commitments can make young people less likely to disclose their suicidal feelings in the future.”¹⁵⁹

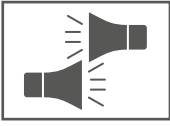


THE FUTURE OF Housing

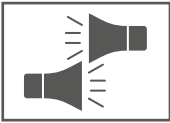
POLYCRISIS PROFILE: The Housing Crisis

Canada's housing affordability crisis, which was simmering beneath the surface as long as interest rates were low and the cost of borrowing was cheap, is now boiling over as the top public policy issue. Many factors converge to produce the current crisis, including the following:

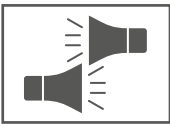
- **High inflation, coupled with high interest rates**, leading to less affordable mortgages and rents.
- **Rising rents**, a particular challenge in rent-control-free Alberta, where rent increases have led the country two years running (far exceeding the rate of inflation), and where many landlords have exploited the situation.¹⁶⁰
- **Conversion of rental stock** over many decades, which, as one author observes, "...has created a housing market dependent on privately owned condos and suites to house renters, which has in turn created government reliance on small-time landlords amid a national housing shortage."¹⁶¹
- **Increased immigration levels**, without a concomitant strategy to house this increase.
- **A lack of tradespeople** skilled in (especially higher density) residential construction.
- As reported on in some detail in last year's scan, the housing market is now so **financialized**, it is hurting other parts of the economy, and it has created a gulf between generations that will be almost impossible to repair. Boomers and Gen Xers have come to rely on housing as an investment (free of capital gains on their principal residence); and with returns that vastly exceed RRSPs, mutual funds, and other capital investments (whether tax-sheltered or not). As one analyst notes, "three-quarters of Canada's national wealth is real estate, and principal residences constitute a large part of that."¹⁶² "A tax on the proceeds of principal residence sales would directly hit homeowners who, for decades, have shifted savings from other investment vehicles to their homes."
- The **lack of nonprofit and cooperative housing** stock. In the two decades preceding the austerity of the mid-1990s, Canada built or acquired an average of 16,000 nonprofit and cooperative homes annually, a number that dropped to less than 10% that rate in the decades since. We can expect to see new federal and municipal investments in these and community-based nonprofit models, as well as investment in training and professional development to bring additional nonprofits (and new community organizations) into the housing game.
- A growing **income divide**. For the same reasons that food security is such a vexing problem, housing affordability is partly a *symptom* of the deeper problem of stagnating income among renters and mortgage-poor homeowners vis-à-vis homeowners who have built significant equity (and/or who own income-generating properties).
- **Intersecting factors** like rising food prices, tuition costs, energy and utilities charges, and auto insurance (the latter two particularly pronounced in regulation-averse Alberta), that affect students and older adults especially, both with limited disposable incomes.
- Other more minor factors also play a role, including **NIMBY attitudes** of residences toward new multifamily and especially rental accommodations, the conversion of housing into Air BnB and other **short term vacation rental properties**, and cumbersome **approval processes and land use restrictions** in some jurisdictions.



The Nation's – and Calgary's - Number One Problem: Next to inflation, housing is currently the number one concern for Canadians.¹⁶³ As reported last year, one in ten Canadians are in core housing need, including nearly 85,000 Calgarians, and the growth of shelter space unstructured encampments continues unabated. The City of Calgary's Housing Needs Assessment revealed a dramatic drop in housing affordability in Calgary since 2020, given the combination of rising home prices, shrinking rental vacancy, and no controls on rents (with a 40% 3-year rise in average rents).¹⁶⁴ A study this past year by the Canada Mortgage and Housing Corporation found that Canada has the highest level of household debt in the G7, mainly due to mortgage debt, and Canada's household debt-to-GDP ratio is now at an unprecedented, and quite perilous, 1:1.¹⁶⁵ If the long-anticipated recession happens in 2024, according to an RBC report we can expect 30% more Canadians to declare loan delinquencies and insolvencies.



Government Responding, but Tepidly: The federal government in its fall Economic Update announced \$15 billion in loan funding for new rental housing construction, starting in 2025, a GST rebate to developers of rental and co-op housing to help reduce upfront costs and incentivize construction, and an incremental investment of \$1 billion toward the Affordable Housing Fund over three years to support nonprofit, co-op, and public housing providers. The Affordable Housing Fund money will not start flowing until 2025-26 (assuming there is no election in the interim), with the aim of building more than 7,000 new homes by 2028 (which, it must be stressed, is less than half the *annual* rate of new home construction in the nonprofit and co-op sector in each of the years between 1973-1994). More symbolically – though in the longer term perhaps more meaningfully – the federal department of Infrastructure now has “Housing and Communities” added to its name and mandate. Meanwhile, the province has announced only \$16 million so far for affordable housing, and only for high priority repairs to existing provincially-owned housing stock.



The Sorrows of the Single-Family Homeowner: *Home is Here: The City of Calgary's Housing Strategy 2024-2030* was passed in September, after initial opposition from many members of Council concerned that it opens the door to densification city-wide. Indeed, blanket rezoning to permit townhouses and row housing in single family neighbourhoods is encouraged in the strategy, but this is following a North American trend; Because of sustainability and affordability drivers, most larger US and Canadian cities are moving away from zoning that exclusively permits single-family homes. That practice is increasingly seen as a relic of a temporary 20th Century car-centric cultural dream-time, ill-suited to a planet burgeoning with human beings.



Calgary Leading the Country on Downtown Office Conversion: As noted in last year's scan, Calgary has led the country in downtown office vacancy rates and in conversion of office buildings to apartments. One year later, Calgary is on track to have 16 buildings fully or partially converted to residential, with more likely after a \$218 million injection of federal cash. While this has helped lower the vacancy rate marginally, its main effect is to bring desperately needed vibrancy to the core. Other efforts, such as a municipal post-secondary incentive program, a blanket downtown development approval fast-track for permitted uses, and programming like the grassroots-led Lobbyfest¹⁶⁶ have helped keep downtown viable. However, it's not clear whether downtown has yet turned a corner. Certainly, the renovations of Glenbow, Arts Commons and Olympic Plaza will help as well. Another effect of the office conversion program is incentivizing developers who were initially reluctant to come up with innovative configurations and approaches, which may well cascade into other innovation housing solutions. For example, this could be a useful prelude for uptake of the federally-funded Alberta Retrofit Accelerator among those renovating/retrofitting apartments.



Addressing Financialization through Fiscal Policy: As the housing crisis deepens, and the generational divide in housing wealth widens, there may be growing pressure to introduce additional capital gains on secondary residences, and even graduated introduction of capital gains on primary residences (above a certain value, or certain rate of increase relative to inflation, for example).¹⁶⁷ But as the motherlode of votes come from middle-class homeowners, there would be extreme political risk and social significance attached to such a move, potentially far more so than the political divisions we have seen on the carbon tax. As one author points out “among many families, selling the home has become an entirely viable retirement plan.”¹⁶⁸ Even modest increases in notoriously low property tax jurisdictions, such as Vancouver, have resulted in a sharp backlash from homeowners. As one writer notes wryly, “therein lies the contradiction at the heart of the persecuted property owner: their wealth is deserved, by virtue of their lifetime of hard work and careful planning; at the same time, it's not fair to tax them in proportion to that home's staggering value.”¹⁶⁹ But with the passage of time, and the growing political clout of Gen Y and Gen Z, it will be hard to look away from the generational privilege afforded by financialization.



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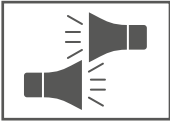
“Grim as our time on Earth is, future generations will look back on it as a golden age. A golden age of wildlife, of mild weather, stability, prosperity, of opportunities to act. Our living world is a grey shadow of what it once was, but a vibrant paradise in comparison with what it will be. Unless, unless.”¹⁷⁰

George Monbiot, *The Guardian*

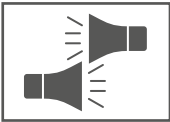




THE FUTURE OF Nature



Insect Apocalypse: Most Western Canadians this summer, in addition to the unprecedented forest fires, experienced nearly wasp-free dining. Though the respite from this seasonal nuisance was welcome in the moment, upon reflection it may be yet another symptom of an underlying phenomenon: Pollinators like bees, wasps, and butterflies are all in decline, a major concern for global food production, as 75% of crop species and a third of total crop production rely on insect pollinators.¹⁷¹ Those of us old enough to remember monarch butterflies being a staple of summers in Calgary may now recall the memory as an unreliable dream. But it was very real: The western migratory population of monarchs has declined a staggering 99.9 per cent since the 1980s, and the species as a whole is now listed as Endangered.¹⁷² The total biomass of insects worldwide is now declining at an average rate of 2% a year, due to a combination of factors: Unsustainable and non-regenerative farming practices (including the use of endocrine-disrupting pesticides), pollution, loss of habitat, and climate change, which makes fungal and microbial disease more prevalent. The insect apocalypse is also a subset of a broader phenomenon called “Anthropocene defaunation” – As humans increase our footprint, 48% of the world’s total species are declining in population size, while only 3% of species are rising.¹⁷³ The IUCN’s Red List of endangered species now includes 147,517 species, of which 41,459 are threatened with extinction.¹⁷⁴



Canada’s ‘Super-Pig’ Problem: Alberta may claim to be proudly rat-free, but we bear the brunt of responsibility for a problem that’s arguably worse: Farmers who raised pigs bred with Eurasian boars in Alberta in the 1980s, but found an insufficient market for the hybrid creature years later, released them into the wild where they now occupy over a million square kilometres across Canada and the US, spreading out from the Southern Alberta foothills across the prairies.¹⁷⁵ Feral pigs have no natural predator and their numbers have grown unabated. As one researcher observes, “wild pigs are ecological train wrecks. They are prolific breeders, making them an extremely successful invasive species. Wild pigs can cause soil erosion, degrade water quality, destroy crops, and prey on small mammals, amphibians and birds.”¹⁷⁶ The feral pigs also spread disease among domestic swine, decimating their numbers. These ‘super-pigs’ are quickly becoming North America’s most vexing invasive species challenge. Even when 95% are hunted – and it is a very challenging animal to hunt (smart, wily, fierce, largely nocturnal) – the population is able to replenish and grow. In the first 5 months of Alberta’s bounty program last year, not a single pig was successfully hunted.¹⁷⁷





Mining at the Margins: As the world scrambles to ramp up the production of clean energy, accompanied by the production of electric vehicles (EVs), a new mining boom is afoot. Global demand for rare earth oxides is expected to increase from just over 150,000 metric tons in 2017 to a forecasted 305,000 metric tons by 2025, and another 400-600% in the decade to follow.¹⁷⁸ China currently controls 95% of the world's rare earth mineral supply. But to find the needed deposits of lithium, copper, cobalt, and many rare earth minerals like germanium, molybdenum, and platinum, mining activity worldwide will intensify. As the more accessible deposits are exhausted, we will see more mining happening in politically unstable places, and further underground and underwater – through deep sea-bed and deep crust mining – including in ecosystems we know very little about. This will involve the use of technologies like bacterial leaching, bio-ores (plants that extract metals from minerals) and “swarms” of driverless trucks and robotic micro-miners, which are already being utilized, or are in various stages of testing.¹⁷⁹ Mining exploration is even extending to outer space – with the international community currently figuring out the rules for asteroid and moon-based mining.¹⁸⁰ Pressure is building – especially from Canada – to revisit the 1966 UN Outer Space Treaty, already being updated through the Artemis Accords, to permit mining by private industry.



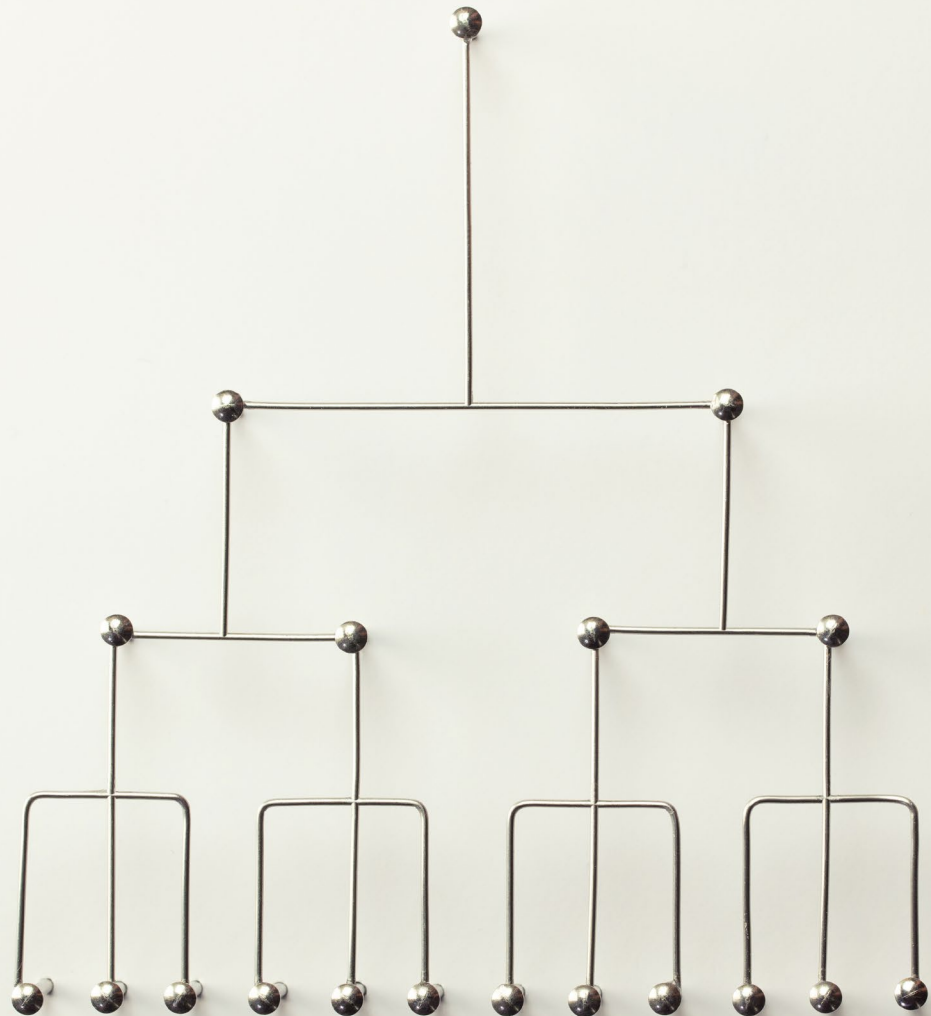
Are Parks a Passé Way to Protect Nature?: The standard nature conservation approach in North America – or at least the focus of most wilderness campaigns – has more or less used the template established by Teddy Roosevelt and John Muir. Quite aside from the racist ethnic cleansing of that first generation of National Parks (on both sides of the border), the “parks and protected areas” model has always had its limitations. In historic and high-traffic parks, still-persistent fire suppression has left certain parks vulnerable to much more intense fires. Our fixation with alpine and montane ecosystems in Alberta, to the relative exclusion of prairie and parkland ecosystems, has not helped save the 70% of wetlands lost to agriculture and urban development, or countless species, from the swift fox to the white pelican, to the monarch butterfly. A fixed biome demarcated as a park on a map is an inadequate solution to adapt to a changing climate, changing migratory patterns, and the connectivity required for many larger animals that require huge swathes of non-industrial, lightly inhabited land to remain viable. Efforts like conservation land trusts, conservation easements, Indigenous Guardians programs, tribal and co-managed parks, wildlife crossings, and many other management measures are at least as important as old-fashioned parks, and arguably more so, to conserving species and ecosystems. This past year, the Thrall Family struck an agreement with the Nature Conservancy and Ducks Unlimited to conserve a 22,000 hectare mixed-grass prairie ranch in southern Alberta, replete with hoodoos and over 3,500 wetlands, representing the largest private tract of grassland to be preserved in Canadian history.¹⁸¹ In Nunatsiavut (Northern Labrador), Inuit are creating a 15,000 square kilometre “Inuit Protected Area”, a marine cultural and conservation zone ringing the Torngat Mountains.¹⁸² The next few years will likely see a further explosion of novel approaches to protecting nature outside of the parks framework.



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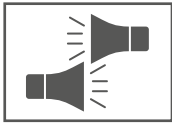
“...we can talk about practices like trust-based philanthropy, which is just, like, the newest sexiest umbrella that people want to align to. And meanwhile, we’re over here saying, ‘You know, there are generations-old models of reparative giving; there are generations-old models and laws around the distribution of wealth that actually have a lot more to offer than this new sexy umbrella term or practice.’”¹⁸³

Kris Archie, *Circle on Philanthropy*





THE FUTURE OF Philanthropy



Post-Pandemic Charity Strain: As reported in previous scans, charities in Canada were strained by the COVID-19 pandemic. As noted in the Institute for Community Prosperity publication *The Dandelion Wager* (2023), chronicling the voluntary dissolution of Calgary Reads, “of the 23,682 charities ‘voluntarily revoked’ in modern Canadian charitable history (i.e. over the past half century), 10.5% of these (or 2,518 organizations) have been dissolved either in 2021 (873), 2022 (752), or in the first 10 and a half months of 2023 (893).”¹⁸⁴ But despite this pandemic-coincident uptick, background non-pandemic trends continue to be far more important, such as inflation and the rising cost of living (which increases demand for most charitable services while dampening donations, not to mention the effect on staff longevity and morale).¹⁸⁵ According to Duke Chang, CEO of CanadaHelps, more than 1 in 4 Canadians are now accessing charitable services to meet their basic needs, disproportionately so among younger Canadians and women. The Ontario Nonprofit Network echoed that the demand for services provided by nonprofit organizations is sharply increasing, growing 29% just since 2020, noting that this demand, in combination with rising costs and diminishing resources, has “the potential to bring our sector to the brink of collapse.”¹⁸⁶ Of the nearly 1 in 3 people who expect to access charitable services in the coming year, nearly 60% cite their inability to work, while others are battling addiction, fleeing from domestic violence, or looking for work.¹⁸⁷ Among the longer-term trends charities continue to experience are declining volunteers, more difficulty fundraising, and increasing reliance on a smaller number of donors. Alarming, only 18% of Canadians now claim donations in tax filings (down from 30% a decade ago), although total donations are up, indicating that a much smaller number of Canadians are giving, but giving a lot more.¹⁸⁸ As has long been the case, older Canadians give more than younger people, but most charities don’t have strategies for engaging young people (who may have time, voice and passion to give now, and down the road, money). Canadians also appear to be turning away from the grassroots: Larger charities are vacuuming up more of the available pool of charitable giving, while the smallest charities are seeing steeper declines in donations. Remarkably, nearly 1 in 10 charitable donation dollars in the past year were connected to the war in Ukraine.¹⁸⁹



Just World Philanthropy and Reparative Capital: The last decade has likely been the most tumultuous period in modern philanthropy, with social pressures ranging from Reconciliation to impact investing (including divestment of fossil fuels) to stronger calls for equity, diversity and inclusion in philanthropy. All of these were forces long before the past few years, but they have gone from fainter signals to unignorable trends. As an article on reproachments to philanthropy points out “the headlines reveal no shortage of criticisms. Philanthropy ‘fails to alleviate poverty.’ Philanthropy keeps ‘losing the battle against inequality.’ Philanthropy ‘benefits the super-rich.’ Philanthropy is ‘failing democracy.’”¹⁹⁰ The regulatory environment, still a long way from enabling a thriving charitable sector, has at least blinked in the face of these trends and criticisms, with such tweaks as more scope for foundations to support initiatives by non-qualified donees, and overall grantmaking levels nudged upwards by virtue of an increased disbursement quota. Many foundations have also taken significant and sometimes radical steps to adjust their policies and practices. This past year, for example, the McConnell Foundation carved out \$30 million in capital transfers to Indigenous-led foundations, including \$10 million to the Indigenous Peoples Resilience Fund. As a new epoch in philanthropy begins to take hold, Rockefeller Philanthropy Advisors are labelling this meta-moment “Reimagined Philanthropy”, where mindsets, professional practice, governance, and grant-making modalities are reconfigured toward the creation of a ‘just world’, one that embeds inclusion principles, confronts sources of wealth, and adopts a broader systems perspective.¹⁹¹ North American philanthropic organizations might also learn from the way foundation-led philanthropy is conceived and oriented in Germany, where foundations there do not support instrumental social needs but rather initiatives that imagine alternatives and push society forward – the arts, advanced research, public policy work, futures thinking, and reimagining philanthropy itself.¹⁹² A parallel concept – “reparative capital” – has started to emerge particularly from the Global South and from Indigenous communities, reframing the role of philanthropy as repairing, restoring, or making amends for a contemporary or historic wrongdoing, or for structural inequity. In his 2022 book *Giving Back: How to do Good*, Better Derek Bardowell, a current trustee with two foundations, a Black activist, and a former philanthropy executive, challenges philanthropy to orient itself fully forward systemic inequities while opening challenging the reforming the deep-rooted economic order that maintains these inequities.

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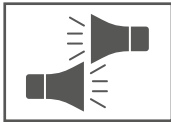
“Belief in things that are not there seems to define our [provincial] government these days.”¹⁹³

Dr. Jon Meddings, former dean of the Cumming School of Medicine at U of C

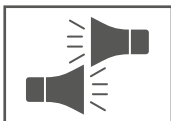




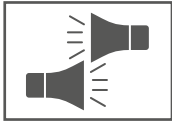
THE FUTURE OF CANADA AND ALBERTA Politics



The Stubbornness of Power: Last year's scan noted the surly mood Canadian voters were in with respect to the Liberal government in Ottawa, noting that 2023 carried a high likelihood of profound political damage for the Liberals. And indeed, the latest polls have the Liberals and their "supply and confidence partner" the NDP in a statistical dead heat, each polling at 22% support nationally.¹⁹⁴ The Conservatives, meanwhile, are nearly 20 percentage points ahead. If an election were held now, the results would almost certainly be catastrophic for the Liberals. Poilevre has made fewer missteps, and has rhetorically tacked to the left of the government on certain hot button issues that are meaningful to working class Canadians. As such, the Conservatives looked poised not just to win the next election, but to win a comfortable majority. In light of this, it is remarkable how few public grumbings have emerged from within the Liberal party about Justin Trudeau's fitness to continue leading. In fact, Liberal support has been steadily falling since early 2016, with the exception of a small upward blip through the early stages of the pandemic. Though there are whispers of some - in particular former Bank of Canada Governor Mark Carney - being interested in running, there is nothing approaching the knives-out that marked the twilight of the Chretien or Mulroney eras. The NDP, just based on sheer numbers, stands to gain from dissatisfaction with the Liberals, but they too have been stagnant for many years in the polls. NDP Leader Jagmeet Singh has failed to best his two predecessors in election results two elections running, which, in any other party, would mean it is time to hand the baton to someone who can elevate their fortunes. With 81% of party faithful supporting Singh at their last convention, the NDP is signalling that it's not serious about wanting to govern. Pierre Poilevre certainly looks more and more self-assured and eager to step into the Prime Minister's shoes, with his fitness-for-leadership numbers polling much higher than either Trudeau or Singh.¹⁹⁵ However, his cleverness in politics is made vulnerable in equal measure by his lack of experience doing anything other than being a politician. So, when he indulges in smart-alecky moments, it may go viral, but it does little to build bridges to the 'everyday' Canadian. Consider the episode this past fall, covered hagiographically by Fox News and friends, where Poilevre smugly chewed up an apple in a BC orchard as a nervous half-confident editor of a local Okanagan newspaper raised serious but unrehearsed questions. To Poilevre's fans, this was a moment of righteous triumph. To his detractors, a portrait in callousness.¹⁹⁶



The Unseen Opponent: With the (remote) possibility of an election in 2024, all parties will have to contend with increasingly sophisticated attempts to sow discord, misinformation, and disinformation. As Singularity U Founder Peter Diamandis points out - and keep in mind Diamandis is one of the most optimistic analysts of technology futures - "If Cambridge Analytica and other actors had so much influence back in 2016 (when AI was far less developed than it is today), what can we expect to happen during our next election (2024) when a high school student, using today's free AI tools could likely cause significant havoc?"¹⁹⁷



Bottom Rung ‘Consultation’: For a party that fancies itself as being plugged into the grassroots voice, especially now that the Wildrose/proto-Convoy/Take Back Alberta faction of the United Conservative Party is now captaining the ship, it appears either clueless or contemptuous of public participation. A helpful heuristic to understand just how bad things have become is Sherry Arnstein’s *Ladder of Participation*, where the rungs represent levels of effort and authenticity with respect public consultation.¹⁹⁸ The upper rungs are where the public voice is the strongest, such as with Citizens’ Assemblies, participatory budgeting, and cooperative management. The lowest rungs are forms of manipulation (i.e. propaganda), therapy, or – at best – tokenism and placation. While virtually no government these days blazes a trail to respectful, rigorous consultation, it appears that Alberta has all but stopped even going through the motions. Preston Manning’s post-COVID report for example, referenced earlier in this scan, dispensed with consulting the public altogether (easy to do when you’ve already written up the answers), and the consultation-less Sovereignty Act is currently being invoked, as an *a priori* act of theatrical indignation with Ottawa’s proposed 2035 decarbonizing of the electricity grid.¹⁹⁹ But perhaps the most blatant example of worst-practice consultation is around the proposed Alberta Pension Plan, a contemporary case study in manipulation. After dismissing the Pension issue as “NDP fearmongering” in the last election, the Smith government has indeed doubled down on the latest fantastical recommendation of the “Fair Deal” panel, arguing that Albertans are entitled to 53% of the value of the CPP. One does not have to be politically astute to imagine how this mad math has landed in the rest of Canada – a combination of gales of laughter and incredulity. Alberta has managed to make itself look both selfish and stupid at a time when we were supposed to be attracting thousands of people to the province. This is a policy idea that poll after poll revealed was unpopular in Alberta, so the public ‘consultation’ around the proposed plan has simply taken the form of a straight-up marketing campaign, by the Premier’s own admission.²⁰⁰ The push to manufacture consent appears something like this: If we say we are entitled to \$350 billion of the CPP, and Ottawa comes back with a more realistic (and substantially lower) figure, Albertan’s can then take umbrage. It shouldn’t work, and probably won’t, but as long as you don’t think about it for more than 10 seconds, the logic might actually seduce enough people. Unsurprisingly, a *PostMedia* freedom of information request revealed that the Premier’s office was overwhelmed with e-mails expressing concern, skepticism, or outrage over the proposal to leave the Canada Pension Plan (CPP).²⁰¹ Feeling the pressure, the government held two ‘telephone town halls’, attended by nearly 80,000 Albertans, and issued an online survey, so far completed by 93,000 participants (but which astoundingly fails to ask if Albertans are actually in favour of an Alberta Pension Plan).²⁰² And it’s not just members of the public that are ignored; Businesses – small and large – will pay a real administrative and financial price for having to deal with a dual pension system. Similarly, renewable energy firms were not consulted on the seven-month moratorium on renewable energy development, which many have claimed has chilled the investment climate for renewables at exactly the wrong time. Imagine how the petroleum sector might react to a seventh month pause on oil and gas approvals. This is not to say that the government doesn’t react to popular opinion – the provincial police issue has quietly disappeared as there was no significant constituency pushing for the reform, yet plenty of vocal opposition, particularly from small town mayors and councils. But the point is that they could have saved time, work, and embarrassment with the broader public by engaging in good-faith consultation upfront. Governments who routinely ignore their own constituents eventually pay a heavy price in a democracy, so unless the Smith-UCP does a dramatic about-face, the “standing up for Alberta” theatrics will ring increasingly hollow.



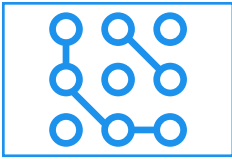
Conservatism's Inward Turn: Conservatism, for most of the past half century, was broadly globalist, interested in free-trade and focused more on flows of capital than on parochial obsessions. This cosmopolitan, Margaret Thatcher-inspired conservatism represented a turn away from an insular, protectionist, non-adventurist ethos that marked earlier versions of conservatism. For most of the past half century, 'social conservatives' (generally God-fearing folk with patriarchal proclivities and strong views on matters of censorship, family structure, and gender identity and roles) were relegated to the backbenches, or in some cases publicly shunned by their leaders. But over the last decade, the tide has shifted dramatically. Social conservatism in the US was given the ultimate gift in the US Supreme Court's overturning of *Roe v. Wade*, while in Canada successive premiers have invoked the Notwithstanding Clause to signal either their xenophobic or transphobic *bona fides*. As one commenter noted, "this is part of a much wider flux on the right, from Hungary to the US, also fuelled by disillusionment with modern life and the market values conservatives used to venerate. But well beyond old-fashioned social conservatives, we're now seeing many new or revived flavours of hyper-nationalism, libertarianism, nativist exceptionalism, conspiratorial camps (QAnon, for example), and even quasi-nihilism. This ferment involves populists and intellectuals, insurgents and party leaders, semi-academic conferences, crudely aggressive media, ordinary activists and billionaires."²⁰³ One of the few shared touch-points is a shared mistrust of global institutions, the very institutions that previous generations of conservatives played important roles in helping create. People guffawed when Stephen Harper and his cabinet openly questioned the value of the United Nations, but now the anti-globalist mantra is more core conservative playbook than washroom stall sgraffito. Premier Smith fully subscribes to the idea of the World Economic Forum as an Illuminati-esque cabal of - who knows - pedophiles? And many of these anti-globalist theories have a vaguely antisemitic bent to them, especially when "#Soros" is tagged in the conversation. While the Conservative Party is trending nationally, the fences that the movement has erected mean there is both a hard ceiling and a limited window of time before their camp of many colours (mostly shades of white, mind you) devolves into toxic infighting.

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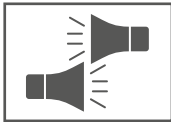
“Digital businesses depend on mineral slavery in Africa, dump toxic waste in China, facilitate the undermining of democracy across the globe, and spread destabilising disinformation for profit – all from the sociopathic remove afforded by remote administration.”

Douglas Rushkoff, “We will coup whoever we want!': the unbearable hubris of Musk and the billionaire tech bros', *The Guardian*, Nov. 25, 2023.

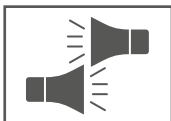




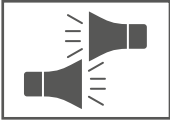
THE FUTURE OF Technology



Clash of the Titans - Tech Giants v. Governments: With the well-publicized advances in generative artificial intelligence (AI) over the past year, countries around the world are scrambling to regulate AI. As the Associated Press frames it, “the US, UK, China, and global coalitions like the Group of 7 major democracies have joined the race to draw up guardrails for the rapidly developing technology, underscored by warnings from researchers and rights groups of the existential dangers that generative AI poses to humanity as well as the risks to everyday life.”²⁰⁴ Canada’s approach - the Artificial Intelligence and Data Act (AIDA), currently bundled into Bill 27 for parliamentary consideration, is among the first such attempts, but has been widely criticized as hastily compiled and far too tailored towards advancing the AI industry’s interests. A number of technology law experts have urged Canada to go back to the drawing board, as the proposed legislation lacks precision, pays little serious attention to human rights, privacy, or equity considerations, and has not been subjected to adequate public consultation.²⁰⁵ As technology legal scholar Kristen Thomasen notes “part of the challenge right now—maybe globally but at least in Canada, the US, the EU, is that we’re treating AI like it’s such a novel concept without realizing that as legal systems and as societies, we’ve dealt with novel technologies many times before, and that there’s a lot of valuable insight that we can learn from slowing down and thinking about what really works to keep people safe in a very comprehensive way.”²⁰⁶ US President Joe Biden’s Executive Order on Safe, Secure, and Trustworthy Intelligence is expected to have more bite than Canada’s legislation.²⁰⁷ The European Union was on likely the most progressive path, having taken nearly 5 years to develop its AI legislation. Indeed, they must be on the right track, as Big Tech sees Europe’s legislation as a genuine threat that “overregulates” and “stifles innovation”, and is doing everything it can to thwart its passage, with cheerleading provided by UK Prime Minister Rishi Sunak.²⁰⁸ Meanwhile, after many months of acrimony, Canada’s federal government came to an agreement with Google to provide \$100 million in compensation to help Canadian media outlets produce news in exchange for them being able to list, link, and promote Canadian news. Meta, Facebook and Instagram’s parent company, is still blocking Canadian news content from its platform, though Ottawa is making overtures to get back to the negotiating table, in part because the government is forced to pay Meta anyway to advertise federal policies, programs and announcements (\$11.4 last year alone).²⁰⁹



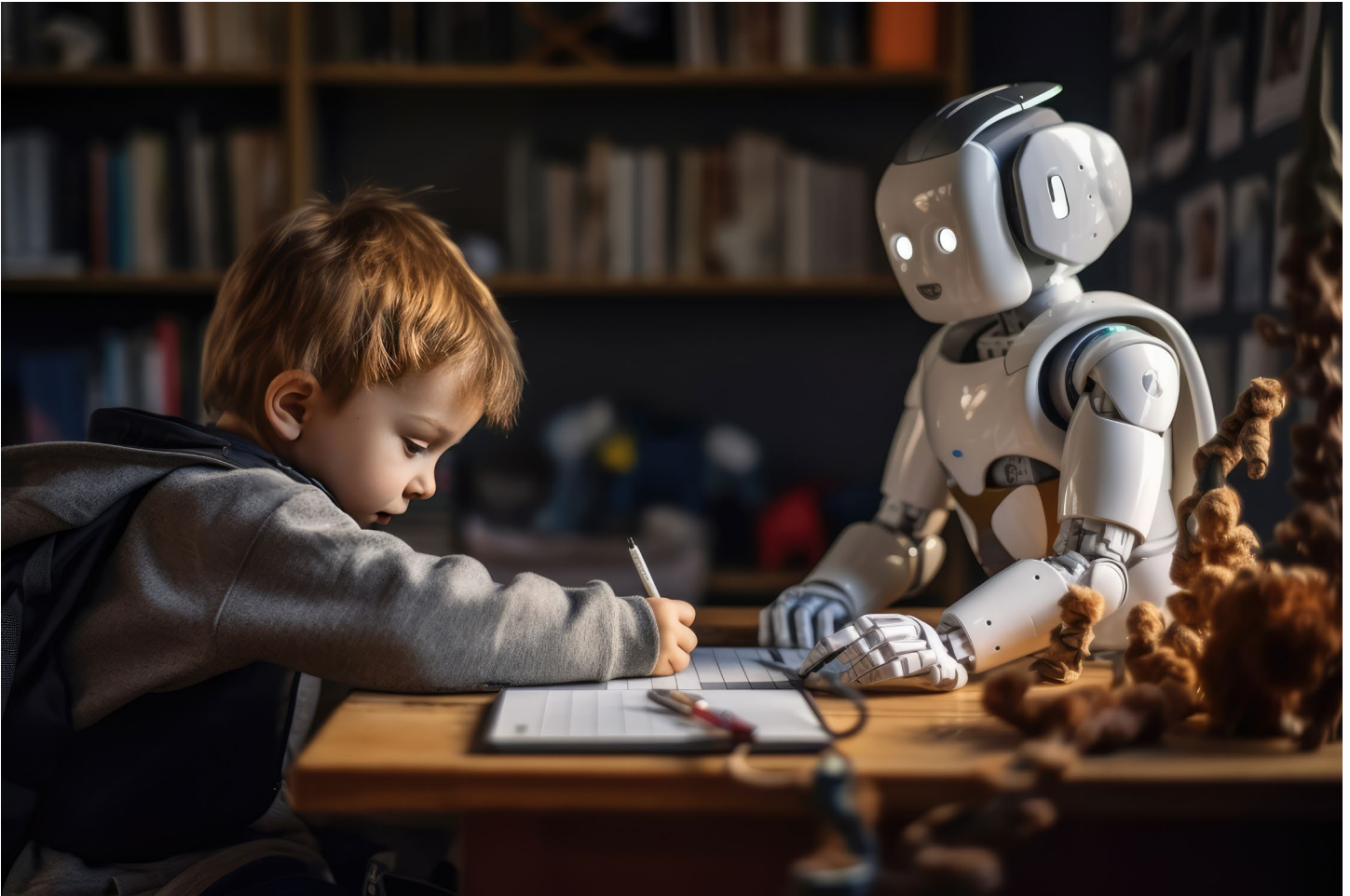
Robo-Genesis: There are at least 3.5 million industrial robots already operating in factories around the world, and industrial robot installations are at an all-time high, according to the International Federation of Robotics.²¹⁰ Advances in AI, skilled labour shortages, and near-shoring/re-localization of manufacturing (typically in regions with high labour costs) are all driving this fast-rising investment in robotics. China’s annual investment in industrial robotics eclipses the rest of the world combined.²¹¹ For many years now, advances in humanoid robots were mainly for novelty applications and to serve as one-off showcases of a company’s technological innovation, but with little practical purpose beyond this (think of Honda’s “Asimo” for example). But, as the technology advances and becomes cheaper, and as industrial applications increasingly are human-replacing, we appear to finally be on the verge of a robotics revolution. According to an analysis by the global banking and investment firm Goldman Sachs, the humanoid robot market could generate over \$150 billion in annual revenue within the next decade and a half and “fill from 48% to 126% of the labor gap, and as much as 53% of the elderly caregiver gap.”²¹² Amazon has started testing humanoid robots in their warehouses and fulfillment centres. Chinese startup Fourier Intelligence, for example, aims to mass-produce its GR-1 humanoid robot by the start of 2024, delivering thousands of robots next year capable of moving 5 kilometres per hour and carrying 50 kilograms.²¹³



The Alignment Problem: Estimates vary as to when we can expect to see advanced superintelligent artificial general intelligent machine agents (AGI). The more conservative estimates say it could still be many decades off, perhaps as much as 75 years. Others say it is entirely plausible that we could see AGI as early as this decade. Some even muse that the reason for the recent bizarre firing and re-hiring of Sam Altman, CEO of Open AI, may have to do with an AGI prototype that spooked either him or the board of directors.²¹⁴ What is perfectly clear though is that any institution that intends to be around for decades, and certainly by the end of the century, must consider this AGI-mediated future (or, perhaps more likely, an AGI-defined future). More specifically, we should be having vigorous discussions and conducting rigorous research around how to deal with the “alignment problem.” To think about the alignment problem, consider an analogue where we are the superintelligent species; Most other species disappear not because of malice or explicit intent (the plains bison excepted), but as an unintended side effect of human goals. The alignment problem is based on the assumption that superintelligent AI is most likely to have goals that are misaligned with humanity, again not by virtue of malevolence or ill-intent, but merely because we are not clear, specific, or imaginative enough to anticipate where human and machine goals might diverge, or more likely where our goals might be aligned but the means to achieve them diverge. For example, mathematician and physicist Max Tegmark posits the following scenario: If a sufficiently advanced AI system wants to remove oxygen from the atmosphere because it is corrosive – a reasonable goal for machine self-optimization and self-preservation – then we and all aerobic species would be detritus – collateral damage – in its pursuit of this goal.²¹⁵ While it’s challenging to attribute the “alignment problem” term to a single individual, it has been a focal point in the work of researchers associated with organizations like the Machine Intelligence Research Institute (MIRI), founded by Eliezer Yudkowsky, and of OpenAI itself. Montreal-based computer scientist Yoshua Bengio, one of the three ‘godfathers of AI’ (as is fellow Canadian scholar Dr. Geoffrey Hinton) has written extensively on the alignment problem. Bengio and Hinton are among those who are warning about the impact AI could have if it fell into the wrong hands, also signing an open letter (alongside many Silicon Valley giants like Elon Musk and Steve Wozniak) appealing for a six-month pause on the development of AI. As we prepare to augment our civilization profoundly with AGI and other superintelligent agents (and likely irreversibly), civil society will need to engage with, and apply pressure on, tech companies and AI developers to gain clarity and ensure guardrails. What are *our* goals? Is it even possible to articulate broadly shared human goals that machines should align with, beyond some really obvious starting points, like Isaac Asimov’s albeit fictional *Three Laws of Robotics*?²¹⁶ Tegmark believes that dealing with the alignment problem is the most important task humanity should be focused on right now “ChatGPT might be the wake-up call that humanity needed to really stop fantasizing that this being a hundred years off, and stop fantasizing about this being completely controllable and predictable.”²¹⁷ Yudkowsky declined to sign the open letter, believing work on AGI should be simply shut down, as the risks are far too great: “Many researchers steeped in these issues, including myself, expect that the most likely result of building a superhumanly smart AI, under anything remotely like the current circumstances, is that literally everyone on Earth will die. Not as in ‘maybe possibly some remote chance,’ but as in ‘that is the obvious thing that would happen.’ Without... precision and preparation, the most likely outcome is AI that does not do what we want, and does not care for us nor for sentient life in general. That kind of caring is something that *could in principle* be imbued into an AI but we are not ready and do not currently know how.”²¹⁸



Social Purpose Organizations Start to Engage: The Ontario Nonprofit Network was among those submitting to the federal government on implications of AI on the workforce, concluding that “there is potential to free-up time to focus on strategic and relational work that cannot easily be done by AI, explore innovative ways to solve complex social problems, and grow with the emergence of new tech driven jobs and skills. In fact, some of this is already happening. However, in order to seize the opportunities in a way that doesn’t create harm and inequities, the sector will need to have a seat at the table to shape public policy responses to AI.”²¹⁹



The End of the Solitary Self: The coming years will see a convergence of natural language processing, large language models, improved battery technology, 5G connectivity, and wearable technologies. This melding of natural and intelligent conversation with unprecedented portability and mobility will mean that people will have the ability to be constantly connected, and in frictionless, natural ways, with a personal digital assistant. As Bill Gates notes, “this will utterly change how we live.”²²⁰ Tech blogger Marc Andreessen predicts, for example, that “every child will have an AI tutor that is infinitely patient, infinitely compassionate, infinitely knowledgeable, infinitely helpful. The AI tutor will be by each child’s side every step of their development, helping them maximize their potential with the machine version of infinite love.”²²¹ Indeed, the Khan Academy’s GPT-4 powered tutor already outperforms the patience, empathy, understanding, and ability to connect learning to a child’s interest in a way that vastly exceeds most human tutors. The fact that this is simulated is almost beside the point. Andreessen expects that everyone “will have an AI assistant, coach, mentor, trainer, advisor and therapist” (not to mention translator), and in the professional realm “every artist, every engineer, every businessperson, every doctor, every caregiver”²²² will be similarly equipped. There are obvious privacy guardrails that need to be in place, not to mention the dystopian implications of a personal assistant that may nominally be owned by you, but where all of its practical functionality – cloud data storage, algorithms, firmware updates, and so on – will be proprietary. There are also interesting implications for human education and development, perhaps affording an opportunity to grow our emotional, ethical, and creative selves, relative to our intellectual selves. Our capacity to approach complexity with a systems perspective, or to link concepts in new and novel ways, might benefit immensely from machine companions doing the heavy analytic lifting – recalling quanta of information and undertaking computational tasks. As such, this termination to our solitary selves may paradoxically afford us an opportunity to become more fully human.

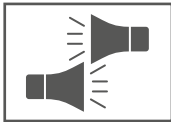
“I am deeply disturbed by the accounts of exploitation and abuse shared with me by migrant workers... [Canada’s Foreign Temporary Workers programs] make migrant workers vulnerable to contemporary forms of slavery, as they cannot report abuses without fear of deportation.”²²³

Tomoya Obokata, UN Special Rapporteur

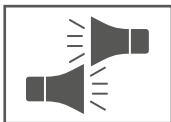




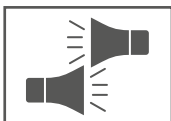
THE FUTURE OF Work



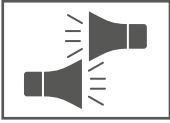
'Quiet Quitting' Now a Quake: We're all working harder, yet paradoxically holding our breath that AI will displace our jobs and career opportunities. AI should, in a smart and just world - allow us to have a substantially better work-life balance, and, as such, substantially higher productivity. But the inverse is so far true - AI is stressing us out, inducing (sometimes warranted) paranoia, and feeding the impulse to be less loyal to employers. According to the Business Group on Health, more than 3 in 4 large employers experienced an increase in their workforce's mental health needs.²²⁴ It was widely anticipated that the phenomenon of 'quiet quitting' - intentionally and actively disengaging from work - was a temporary blip, signaling end-of-pandemic weariness, where time and professed concern for wellness in the workplace would heal this small wound. Instead, quiet quitting has been discovered to be much more pervasive and widespread. A growing number of employers, countering this with workplace surveillance measures, are contributing to a positive feedback loop of workplace distrust. A recent Gallup poll revealed that 6 in 10 workers worldwide regularly practice quiet quitting.²²⁵



Hybrid is the New Normal: Though some companies are implementing back-to-office policies, remote and hybrid working remain - and will continue to remain - at far higher levels than they were before the pandemic. Most companies and institutions are settling in at a hybrid work arrangement of 2-3 days a week at the office. This is unlikely to change significantly: A Gallup poll revealed that the vast majority of Fortune 500 companies intend to retain work flexibility in the upcoming year, which aligns with employee expectations.²²⁶ A study by Deloitte suggested that two of every three financial sector employees would quit their job if required to come to the office full-time.²²⁷



Are the Machines Coming for Our Jobs?: In 1827, near the tail-end of the first industrial revolution, the economist David Ricardo coined the term "human redundancy", presaging that machines that saved back-breaking labour could be sufficiently advanced to become - in a sense - our 'enemy.' AI is a bit like the ultimate precocious keener employee that makes everyone's team look great for awhile, but slowly reveals the redundancy of the very humans it helped make look smart and talented. The legislative attempts to circumscribe AI development, described above, run parallel to the first major job action - by the Hollywood actors and writers' unions - specifically related to the job replacement threat (along with intellectual property issues) posed by AI. Both the Writers Guild of America and Screen Actors Guild strikes lasted months, and portend to future AI-implicated labour unrest. As last year's scan reported, generative AI tools can already create most types of written, image, video, audio, and coded content. A Pew Research Centre study this year reveals that a fifth of American workers have high exposure to AI-replacement, citing particular risks for higher paid and college educated workers, as well as higher demographic exposure for women and Asians.²²⁸ Indeed, in a recent poll of C-suite executives, 49% are worried about losing their jobs to AI.²²⁹ Far from previous predictions that the 'dull, dirty, and dangerous' jobs would be the first ones to be replaced, blue collar jobs requiring less than a high school diploma are the *least* exposed to AI replacement.²³⁰ Also less exposed are caregiving roles like nannies and daycare workers, but *not* tutors and counsellors, which are at much more near-term risk of replacement. The normally rosilily optimistic tech futurist Peter Diamandis, in an uncharacteristically Cassandra-esque moment, warns that "The elimination of jobs resulting from the prolific use of AI could leave an entire generation of college grads scratching their heads as the market for skilled labor disappears. This, on top of the trauma from the COVID-19 pandemic could be a formula for civil unrest. How do we retrain or upskill in time? Can we realistically make some version of UBI [universal basic income] work? These are all questions that will become more pressing as the pace of AI development accelerates."²³¹ In the near term, unions appear to have more backbone than governments in terms of pushing back on big tech, and, so far, public opinion is broadly on their side. While the technology deployments *per se* will be difficult to suppress over the long term, this will help open the door to more conversations about a four-day work-week (which over half of US employers are planning to experiment with)²³², UBI, and other innovations that distribute work and income in the face of rapid automation.



Co-working's Future in Flux: The pandemic was not kind to the co-working model. WeWork, once valued at \$50 billion US, filed for bankruptcy in early November, and closed 5 locations (though not yet in Calgary).²³³ Re-purposing downtown office space into co-working has its limits, as small start-ups and nonprofits are deterred from large parking fees, and the corporate 'vibe' of downtown is not an ideal fit with the aesthetic and lifestyle preferences of people drawn to co-working.



Work Won't Save Downtown: Calgary's nation-leading downtown vacancy rates have been well-publicized, but the challenge is not unique to Calgary. There is a permanent shift afoot with respect to the North American commuting model - the central business district is simply not going to be the choice of work location for most North Americans, who are figuring out that a) time commuting (especially by automobile) cuts into productivity, erodes quality of life, and is increasingly absurd as a nine-to-five, 5-days-a-week pattern for the vast majority of white-collar jobs.



Indentured Labour, Canuck-style: According to Statistics Canada, the country has never been more reliant on temporary foreign workers to fill labour shortage gaps; roles that employers require and either Canadian workers do not want to fill, or roles employers are unable or unwilling to pay living wages for.²³⁴ The number of temporary foreign workers (TFWs) in Canada has increased seven-fold in the last two decades from 111,000 in 2000 to 777,000 in 2021.²³⁵ This figure now substantially eclipses the number of immigrants accepted each year as permanent residents, though likewise adds to the demand-side pressure on affordable housing. TFW's are tied to a single employer, which creates radical asymmetry in power vis-à-vis the employer, preventing employees from speaking out, and leading to the potential - and practice - of widespread abuse, including psychological, physical, and sexual abuse. Workers cannot report on such abuses without fear of deportation. When workers are injured, rather than gaining access to the same treatment that Canadians enjoy, they are sent back to their home country via a practice known as 'medical repatriation'. Until 2022, employers were essentially free to mete out whatever reprisals against employees they wished (say, for protesting their poor working conditions).²³⁶ That said, the update to the regulations didn't prevent Jamaican farm workers from being deported this past summer for protesting their conditions.²³⁷ Chris Ramsaroop with the worker's advocacy NGO Justicia for Migrant Workers doesn't mince words: "To be blunt, I consider this an apartheid system. Migrant workers live and work under a different set of legal rights and obligations than we do. We [Canadians] are not denied basic human rights, we are not denied health care. They are seen as disposable and temporary."²³⁸ In a report on the TFW programs tabled in September from UN special rapporteur Tomoya Obokata, the federal government was called out for failing to safeguard worker's rights or ensure that employers conduct 'human rights due diligence'.²³⁹ The TFW programs were called "a breeding ground for contemporary forms of slavery." Obokata remarked that he is "deeply disturbed by the accounts of exploitation and abuse shared with me by migrant workers." This follows on the heels of a 2021 Auditor General report that noted Canada had an inadequate and underfunded inspection regime, endangering foreign workers. This issue of Canada's practice of modern slavery may be off the radar for now, but it is starting to gain international attention from the likes of Amnesty International and Human Rights Watch, and will almost certainly result in earnest official apologies and expensive reparations years from now. In the meantime, this is our country's current great shame.

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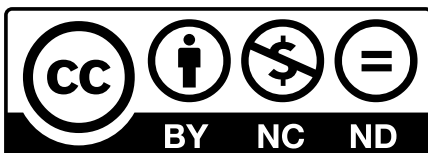
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