Policy Horizons Canada

Sense-making Futures

Changes in how we think, act, and behave

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Canada

Policy Horizons Canada (Policy Horizons) is the Government of Canada's centre of excellence in foresight. Our mandate is to empower the Government of Canada with a future-oriented mindset and outlook to strengthen decision making. The content of this document does not necessarily represent the views of the Government of Canada, or participating departments and agencies.

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Foreword

How people make sense of the world is undergoing a dramatic change. Emerging technologies, misinformation, and shifts in shared stories[1] continue to alter the kind of information we can access, how we interpret it, and whether we trust it. This in turn affects how we make judgments and decisions about ourselves, others, institutions, and issues. It is hard to imagine any domain—social, economic, cultural, or political—that could remain unaltered by such changes.

As we plan for the future, strategic foresight on sense-making can help policy makers manage risks, navigate social and ethical challenges, and design programs. More specifically, it can map out challenges and opportunities in areas such as strategic communications, data governance, platform regulation, social cohesion, national identity, and democratic institutions.

This report builds on our previous report, *The Future of Sense-making: Examining changes to the ways we think, act, and behave*. It maps out the key components of sense-making, identifies the forces driving change in sense-making, explores plausible futures that may arise from those forces, and highlights a range of policy-relevant implications that could emerge.

Policy Horizons Canada (Policy Horizons) does not provide policy recommendations or advice. Guided by its mandate, it explores what might happen in the future policy landscape, to help the Government of Canada develop future-oriented policy and programs, and to prepare for possible radical and disruptive change.

We hope you will find this report insightful and thought-provoking. By reflecting on what might happen, we can support Canadians and decision makers in considering which futures we want and which ones we want to avoid.

On behalf of Policy Horizons, I would like to thank those who generously shared their time, knowledge, and thoughts with us.

Kristel Van der Elst
Director General
Policy Horizons Canada

1 Introduction

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What is sense-making?

Have you ever watched a video and wondered if it is real? Or questioned whether a meme was created by a conspiracy theorist, a bot, or your best friend? If so, you have first-hand experience of the challenges created by our rapidly changing sense-making environment.

Sense-making is the process by which we gather and interpret information to give meaning to our world, make decisions, and take action. Examples of this can be as simple as considering which phone to buy, or as complex as recognizing and coping with disinformation.

In either case, we might think we are doing this on our own, but sense-making is never entirely separate from the context in which it happens. It is shaped by physical environments, cultural surroundings, social relations, and many other external factors. These factors shape the information we encounter and how we interpret it as the basis for decisions and actions.

Disruptions to how individuals and collectives learn, decide, and act will increase in speed and power, and deserve close attention. Some elements of sense-making have remained fairly constant, such as the cognitive potential of the human brain or the social aspect of learning. However, many others evolve more or less continually, like language, popular culture, or news media. The present is a period of especially significant upheaval in sense-making, which is likely to accelerate in the future. Novel digital information and communications technologies could drive much of this upheaval. But powerful social and cultural shifts, such as rising political ideologies or conspiracy theories, may also play a major role.

Why is strategic foresight on sense-making important for policy makers?

Current and future disruptions to sense-making are relevant to policy makers in two broad ways. First, governments are sense-making institutions. They generate knowledge and distribute it to help the public make sense of the world. Second, the success of many policies and programs, including those designed to safeguard public health or sustain a healthy democracy, depends on whether or how the public makes sense of them.

Strategic foresight on sense-making is a systematic way to explore how current and future changes may affect the sense-making processes of governments and the public. It can help policy makers consider how new technologies such as artificial intelligence (AI) could enhance the government's capacity to build stronger policies and programs. It also highlights how some types of AI could make it harder to know what sources of information to trust. It can illustrate the troubling implications of shifting views on things like science, expertise, and democratic institutions. And it reveals opportunities that might arise from the breakdown of old narratives and symbols that sustained various forms of discrimination and oppression.

This just scratches the surface. If your work involves communicating with the public, sustaining national identity, regulating communications infrastructure, shaping economic activity through tax policy, advancing reconciliation, integrating newcomers, or securing privacy, among many other things, then changes in sense-making matter to you.

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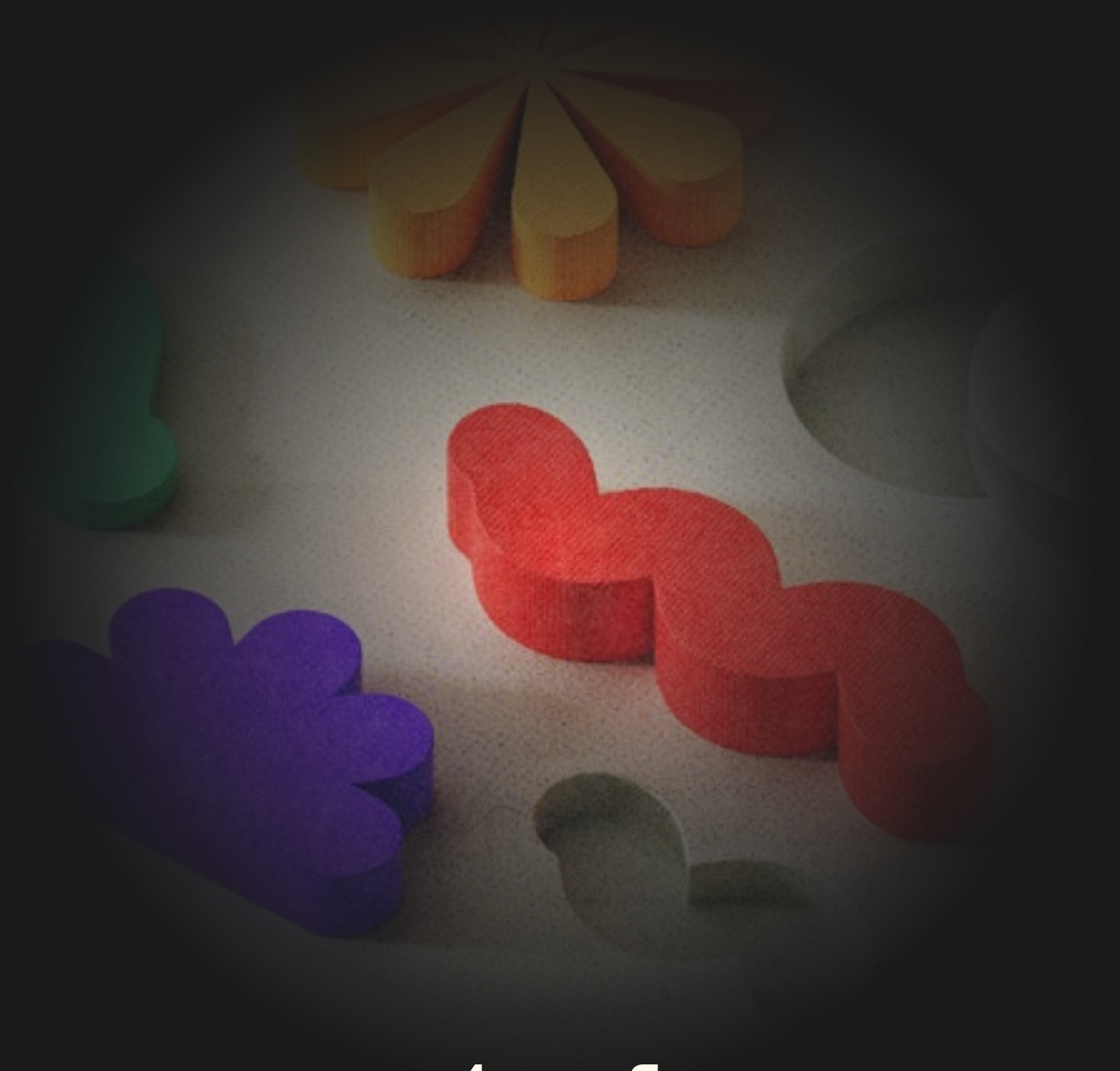

The components of sense-making

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There are six key components to sense-making: The information ecosystem; natural and built surroundings; institutions; culture; sensing, feeling, and thinking bodies; and mental models. Each component has a distinct function that is essential to the processes individuals and groups use to gather and interpret information, construct meaning, make decisions, and take action. Though distinct, they are also connected to one another in a dynamic relationship that is constantly evolving as the world changes. This means that significant changes taking place in one component of sense-making inevitably ripple through some of the other components, often with surprising outcomes.

Information ecosystem

The structures and spaces where we find and engage with information. Some of that information is raw and some is highly refined. It includes traditional information sources, such as the media, movies, and everyday conversations. However, it is increasingly dominated by digital interfaces and experiences, such as social media, online games, and streaming services. Today, despite unprecedented access to information, dominant digital technologies influence the information we encounter, and can interfere with our capacity to process and validate that information. Limited digital literacy means that some of the technologies (e.g. AI and Adtech[2]) shaping our experiences remain opaque and mysterious to most of us.

Natural and built surroundings

The physical environments that directly and indirectly shape our sense-making. Our senses, emotions, and cognition interact with our physical contexts in ways that affect how we experience the world. This includes built surroundings, such as public and private buildings, urban green spaces, and neighbourhoods. It also takes in natural environments, such as parks and wild spaces, and infrastructure, such as transit systems, electrical grids, and fibre optic networks, that shape how we access and process information.

Institutions

Organizations that produce and distribute knowledge as part of their core mission. Institutions take various forms and influence sense-making in different ways. They all share a degree of authority that derives from their inherent qualities, such as tradition, reputation, wealth, or age. An institution typically produces and distributes knowledge, while simultaneously championing a specific way of understanding the world. Familiar examples include traditional media, religions, governments, and universities. Novel entities, such as technology platforms and websites, are assuming the role of sense-making institutions—they are the new libraries, archives, and publishers.

Culture

The practices, customs, and material creations shared by a particular group or society. Culture includes common practices, activities, and ceremonies, and is a key determinant of sense-making. Its role is twofold. First, as the context in which we grow up, it sets a baseline of assumptions and expectations, including norms for understanding our world. This perpetuates unconscious biases by building them into future generations. Second, culture shapes the information we encounter. Some cultures share stories orally, others prefer text, dance, or visual media. Each of these media has a unique "language" with rules that shape the raw information we use to make sense.

Sensing, feeling, and thinking bodies

The internal systems that are humans' primary filters on information and experiences. We might expect our senses, cognitive processes, and emotional systems to be ideally suited to the information ecosystems we create. This is not always the case. A range of cognitive biases and emotional factors can thwart our attempts to be rational. Likewise, aspects of the present information ecosystem are designed both to exploit and confound our biological capacities through engineered addiction, information overload, and emotional activation.

Mental models

Frameworks that help people understand complex concepts and systems. Mental models include both concepts (e.g. nation, gender, capitalism) and knowledge norms (e.g. humanism, the scientific method, and Indigenous[3] ways of knowing). Most of us likely have hundreds of mental models that are internalized and operate without conscious application. Some of these paradigms are robust and others are flawed. Some probably contradict one another. But as a general rule, mental models function as sense-making "shortcuts" that help us deal with uncertain or highly complex circumstances.

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Forces of change

Our *Future of Sense-making* report identified 27 areas of change in sense-making. Continued research suggested that seven of these forces have the greatest potential to disrupt the processes we use to gather and interpret information, construct meaning, make decisions, and take action. **These seven forces are: intensifying social surveillance, quantification and sorting; pervasive mis/disinformation; more and more powerful AI; less hospitable natural environments; convergence of the digital and physical; revision of shared narratives; and displacement of traditional knowledge authorities.**

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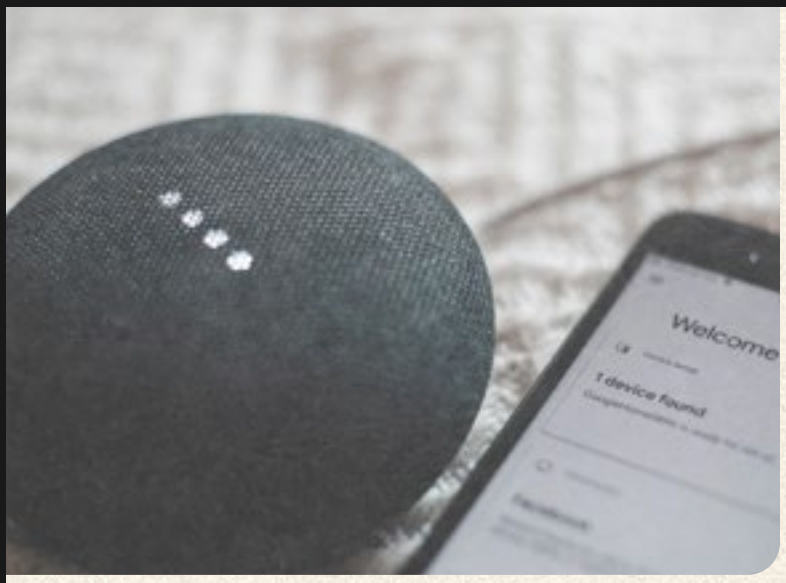


Intensifying social surveillance, quantification, and sorting

Our interactions with online tools and social media platforms entangle us in complex big data and surveillance systems. Public spaces and even social interactions increasingly subject us to recording and facial recognition systems.[4] Private spaces, increasingly integrated into the Internet of Things (IoT) via smart devices,[5] open our domestic lives to surveillance. DNA (Deoxyribonucleic acid) and other biometric identifiers are already used by some governments, and may someday be keys to accessing certain social and economic benefits.

These systems already help us make better sense, but not without some downsides. On one hand, they reveal screen addictions and provide personal health information, suggest fantastic TV shows, and help us find romantic partners or people with similar hobbies. But there are emerging concerns about the ways big data is used to generate actionable insights about us. These insights are used to sort us into groups[6] based on our preferences, evaluate us against criteria,[7] monitor us in the workplace,[8] spread disinformation,[9] and offer targeted ads for products.[10]

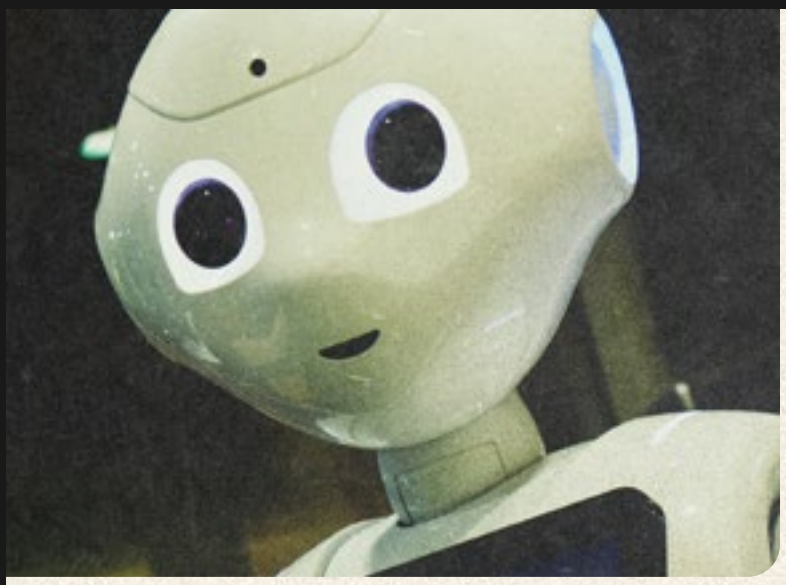
In the future, these systems could shape many aspects of our lives. They may determine access to things like education, insurance, employment, and dating opportunities, especially if they include biological data such as our DNA. They may also shape how institutions, corporations, and other people see and treat us. Enhanced surveillance and quantification could help track the spread of disease[11] in future pandemics, reach equity targets,[12] or support sustainability efforts.[13] On the other hand, they could intensify social divides by strengthening filter bubbles.[14] Or they might provide the raw materials for new or more effective kinds of manipulation and control, including private sector "reputation systems" and marketing chatbots with insights on our emotional and physical states.

Pervasive mis/disinformation

There is an abundant and growing supply of mis/disinformation. Creating sophisticated mis/disinformation is becoming easier and cheaper.[15] Networks of small, hyper-local,[16] and hyper-partisan media outlets[17] are emerging—some with links to political interests or foreign states. Many mix real and fake news. This shift in the media landscape has reduced protections against misinformation provided by traditional journalistic and editorial norms. At the same time, the speed of new media makes it hard to counter misinformation, because of the much slower pace at which traditional experts share their thinking. The rise of actors such as public relations firms that embrace mis/disinformation as professional services[18] only amplifies the problem. New forms of expression such as memes[19] and deep fakes[20] are another factor. Originating as pure entertainment, they have been put to use as successful vehicles for mis/disinformation.

Demand also appears to be growing among a large part of the public. Growing anxiety about the future paired with the disruption of stabilizing rituals,[21] traditions,[22] and institutions[23] may also be amplifying demand for certain kinds of mis/disinformation, especially conspiracy theories that offer the comfort of certainty. The communities[24] these theories generate appear to be spreading. As the unconventional knowledge norms they champion spread, so might demand for mis/disinformation.

Should supply and demand continue to grow, false content could flood the information landscape.[25] Emerging metaverses may be especially important in this regard. They could enable entirely new forms of mis/disinformation, including bots that impersonate people we know or fake news we can experience in three dimensions. In the future, even the most diligent and vigilant of people in Canada may struggle to differentiate real news from fake news, fact from fiction, and sense from nonsense.



More and more powerful AI

AI has become central to how we interact with the world and deal with complex, information-rich situations. Algorithmic search engines, advertising technologies, and content recommendation algorithms (e.g. Netflix, YouTube) have shaped what we encounter online for some time. More recently, AI has begun to perform more complex sense-making tasks once performed independently by humans, such as synthesis,[26] analysis,[27] and content generation.[28]

Among novel applications, AI is:

- creating financial and sports articles for news outlets[29]
- used in some hiring processes[30]
- analyzing crime scene photos[31]
- screening visa applications,[32] sorting refugee claimants,[33] and conducting border interviews.[34]

Some highly capable AI algorithms and machine learning models, like ChatGPT[35] and DALL-E,[36] may radically facilitate creating art,[37] writing diverse content,[38] and coding computer programs.[39]

The future may bring significant changes, as continued advances in machine learning improve AI's ability to understand context and create original content at a staggering rate. Powerful and accessible AI language translation[40] could empower us to make more sense of each other, enhancing trust and social connections.[41] New sensing technologies[42] could enable AI to give us a whole range of insights on our environments and how they affect us. Emerging augmented reality[43] (AR) and virtual reality[44] (VR) spaces could allow us to interact with AI partners in more natural and efficient ways that improve our sense-making abilities. At the same time, increasingly complex AI systems seamlessly integrated into our lives may make it harder to know how we reach certain conclusions.

Less hospitable natural environments

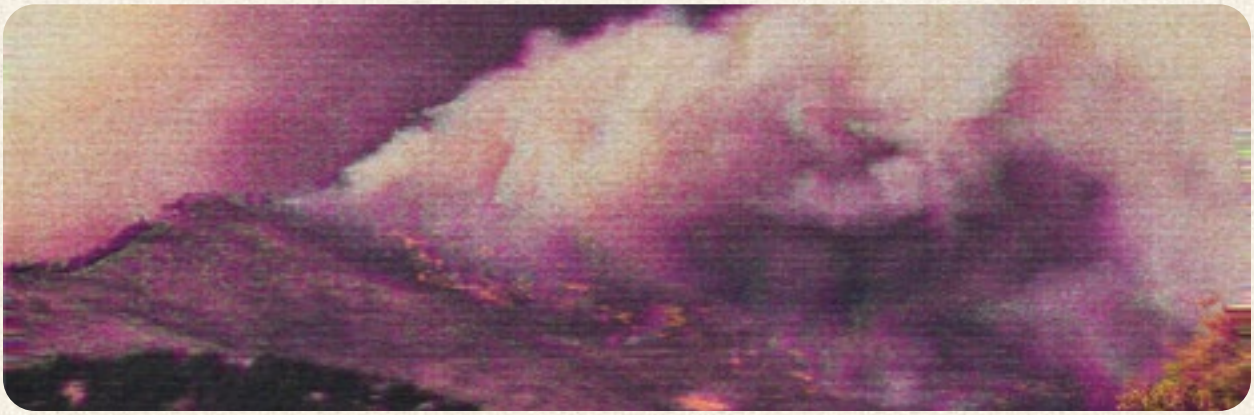
Environmental conditions help regulate our bodies and emotions, which in turn shape the sense we make. Climate change and other natural disasters create environmental conditions that disrupt our emotional stability, making it harder for us to think clearly.

Climate change seems to impact certain social behaviours, such as surges in aggression during heat waves[45] or the decision to have children.[46] New terms, like solastalgia,[47] eco-anxiety,[48] ecological grief,[49] and disaster fatigue,[50] have arisen to describe the psychological toll of changes in the natural environment. In the future, heightened anxiety[51] and emotional activation[52] due to changes in the climate conditions[53] we are accustomed to, could make it even harder for some people to discern scientific consensus from personal opinion.[54] And that could make evidence-based policy less effective.

Similarly, mental models of nature appear to be shifting. Dramatic doomsday narratives, including mythological storytelling,[55] highlight the risks of climate change with stories about famine, war, and conflict. Scientific predictions[56] about the consequences of climate change use language akin to end-of-the-world scenarios. Together, these shifts in how we talk about nature could lead more people to think of nature as threatened and threatening.

Going forward, these changing views of nature might drive some to push for stronger climate action and lead others to double down on their disconnection from nature. As a result, recreational patterns could shift away from the outdoors, sustainability efforts might see reduced support, and reckless exploitation of natural resources could seem far more attractive.

But there is a counter-narrative; new genres of fiction, like cli-fi[57] and hopepunk,[58] have emerged and are challenging apocalyptic narratives of climate change.[59] Should such positive visions of successful adaptation become dominant in the future, they may lead people toward solutions that promote synergy with nature rather than isolation from it. In this context, holistic views of nature and seventh-generation thinking[60] could become guiding principles when weighing the long-term consequences of our individual and collective decisions.



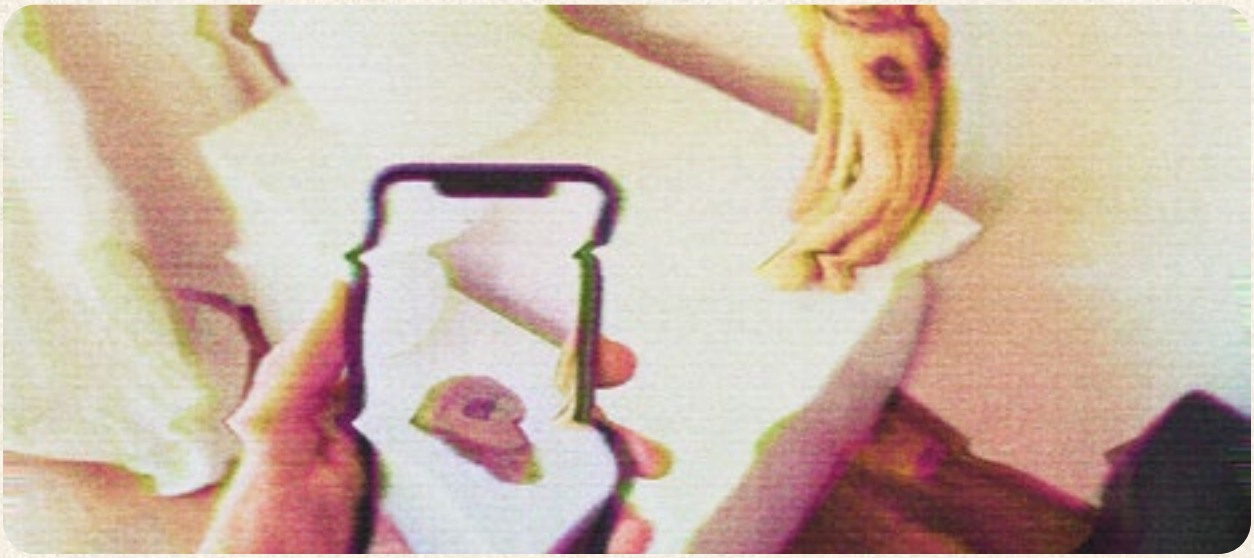
Convergence of the digital and physical

Our relationships with objects, people, and places are changing thanks to the growth of digital mediation. This process seems likely to accelerate in the future. Haptics, AR, and VR will allow us to experience virtual objects as tangible, and blur the lines between physical and digital worlds.

This convergence is already happening in immersive multiplayer games, which have become significant places for sharing social,[61] **intellectual**,[62] **and cultural**[63] **experiences**. From Minecraft's library of censored journalism[64] to I-SPARKS,[65] a game that incorporates elements of cognitive behavioural therapy, games are already important venues for self-expression,[66] work,[67] and learning.[68] On the medical front, prosthetics[69] and implants connected to the IoT[70] are blurring the lines between human and digital.

Over the next decade, game worlds, digital platforms, and the IoT are expected to merge and evolve[71] **into metaverses.**[72] If so, virtual enhancements and interactions may become everyday experiences. Serious changes to the value of face-to-face relationships, physical sensations, built and natural spaces, and material objects could follow. For example, public spaces layered with AR or recreated with VR[73] might become more important for social cohesion, as they come to life for visitors in new ways and offer new kinds of shared experiences. Fully virtual spaces for work, play, and information activities could be game changers[74] for those with mobility impairments, sensory disabilities, or social anxieties.

Access to digital infrastructure[75] **could become increasingly important**. Digital divides that limit access to metaverses could become key engines of inequality.[76] The same goes for divides in digital skills[77] and critical frameworks.[78] As people spend more time in digital environments, the ability to navigate them safely and effectively may become an essential skill.



Revision of shared narratives

Shared narratives, such as the "discovery" of the Americas by Europeans or the triumph of liberal democracy, are powerful cultural forces[79] that sustain collective identities.[80] They support ways of knowing that define shared realities and determine reactions to new information. They authorize the systems and institutions[81] that frame much of our social, political, and economic activity. These narratives are so fundamental that future revisions to them or changes in their popularity could alter social cohesion and attachment to the nation.

Some established[82] narratives face challenges[83] from compelling alternatives.[84] For example, stories about the Happiness Index,[85] sustainable finance,[86] and climate apocalypse[87] challenge neoliberal narratives of perpetual growth.[88] Stories highlighting anti-Black racism[89] and residential schools[90] challenge mainstream understandings of Canadian history. But they also face resistance, some of which takes the form of nostalgic narratives rooted in certain kinds of privilege.[91]

Stories that support discrete identities[92] rooted in particular anxieties,[93] geographies,[94] or worldviews[95] seem to be strengthening. For example, we have seen growth in conspiracy narratives that reject mainstream realities[96] in favour of alternatives that fulfill deep-seated emotional needs.[97] Stories representing a broader range of gender identities[98] are also shifting models of identity and belonging.

New digital technologies and media business models are shifting the form and content of narratives, making them more immersive and powerful, but not necessarily more reliable. The reach of individual narratives is extending, even as the tools to create and distribute viral stories become more democratic. New social media,[99] podcasts,[100] and online games[101] are transforming how and to what effect we experience stories.

Combined and pushed into the future, these changes could produce major disruptions. New or revised stories experienced in novel or more powerful ways could shift economic behaviour[102] or strengthen social connections within and between communities. They could tie people more closely to the idea of the nation. On the other hand, stories could emerge that erode collective identity, making it more difficult for people to find common ground and cooperate with one another.[103]

Displacement of traditional knowledge authorities

Knowledge authorities derive power from their influence over the production, validation, or distribution of knowledge. This power arises from—and sustains—certain ways of understanding the world. The fall of old authorities could make sense-making less top-down in the future, leading to two outcomes: more access to cutting-edge information for everyone, and more opportunities for non-elites to have a prominent voice in public debates. But in such a future, it may be harder for Canadians to agree on who or what to trust.

In the past, mainstream knowledge authorities were familiar experts distinguished by academic qualifications or professional experience, such as journalists, officials, and faith leaders. Until recently, trust in these authorities—and in institutions such as the press, universities, and courts—seemed unshakeable.

Technological and social changes are challenging that authority by disrupting familiar patterns of trust and power.[104] The Replication Crisis,[105] which suggests that some published research in the social sciences may be fundamentally flawed,[106] is one factor. Poor popular understanding of science,[107] and especially the ever-evolving state of scientific knowledge, is another. So is the relatively low profile of experts in the new, digital media system[108] compared to the legacy media system that gave them powerful platforms. Mastery of the new information ecosystem and its core technologies has become the leading source of knowledge authority.

As a result, today's rising knowledge powers bear little resemblance to their predecessors. Big Tech controls unprecedented masses of data[109] and shapes our information consumption[110] with devices, algorithms, and streaming content. Influencers[111] leverage charisma[112] and tech savvy to sway mass audiences.[113] And regular people enjoy easier access to the research ecosystem[114] than ever before, thanks to the open access movement[115] and to citizen science initiatives.[116]

In the future, individuals may have to take greater responsibility for their own sense-making. New sources of information and new tools could make this relatively simple. Previously marginalized voices[117] may find wider audiences,[118] which might popularize alternative ways of understanding the world.[119] Indigenous peoples, the environmental movement, and a variety of social causes might become more influential as a result. But the same could also be true for groups pushing extremist views,[120] conspiracy theories,[121], and mis/disinformation,[122] or for platforms pushing particular economic or political agendas. In the end, a more open information playing field could create more confusion by making it harder to know who to trust.

4 Exploratory futures

In this section, we explore plausible futures in light of the forces of change previously described. The goal is to help you imagine future realities you may face.

The following stories—narratives, and headlines—are the outcome of a variety of scenario processes, and were selected for the range of futures they offer as well as their relevance to policy making.

As you read, try to suspend your disbelief. Focus on what it would be like to live in a world where these scenarios are real.

If that is difficult—which it often is—ask yourself some of these questions: Does this feel like a comfortable future to inhabit? Why or why not? Could parts of this future present challenges or opportunities for your work? Could they make it harder or easier for your organization to achieve its goals? Is it a reality you or anyone else would desire or prefer to avoid?

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Canada Day revised

It was your favourite time of the day. Nightfall, the time when everything and everyone was still. Peering through the window, you could see your neighbour's holographic Canada Day display. Mesmerized by the lights, your mind wandered, and the day's events played back in your head.

It had not been quite as bad as you expected. Not that it had been perfect, but the predicted violent confrontations had not materialized. There was just this bizarre feeling of disconnection, of being alone, even though most of your friends, family, plus ten thousand strangers had been there. But because everyone could customize their experience, there had not been a unifying "look and feel" to the celebration. This was the first year official Canada Day festivities had moved to the metaverses. Anyone with a network connection could join the celebrations and participate with customized settings. You could pick an individual soundtrack, a preferred language, the virtual weather, and participation style, whether through an embodied avatar or through a bird's eye view as an observer. You had chosen a personalized avatar, of course. A smiling pumpkin head with green boots.

In Splinter, your preferred metaverse, you had to respect certain norms to participate in the community. Behaviour, speech, and content creation were monitored and analyzed. It seemed appalling to think that humans handled content regulation in the past. Humans! Content regulation was now handled by powerful AI that processed information in no time, and without human bias…at least on the surface. AI's understanding of context and human behaviour had improved throughout the years. But once in a while, something slipped. That had been the case today. Digital graffiti and hate symbols had been layered onto the Governor General's speech to the crowd. And deepfake copies of the speech had circulated far and wide in the metaverses—a 3D version of him that close-talked at bystanders, ranting maniacally about the end of freedom. In some ways, you missed the simplicity of misinformation on the two-dimensional Internet.

When you were growing up, and throughout early adulthood, Canada Day celebrations took place in person on Parliament Hill, or a local park. Not that it mattered all that much to you, since you had always opted to escape the chaos of the city and go on a canoe trip instead. Recently, there had been grassroots efforts to remake Canada Day. Organizers pointed out that a communal experience no longer required everyone to be in the same place. But you had to wonder whether it was really a shared experience when everyone was customizing it.

Your friend from work, Lorenz, had invited you to an after-party at his house in his metaverse. He bought it in 2023, when digital real estate was still burgeoning, and he paid nothing compared to what it was worth now. Akira, the biggest name in digital fashion, had just bought a piece of land further down the street from him.

Lorenz sparked up a conversation with you, trying to convince you to make the leap to digital real estate.
"This place is now worth more than $3 million!"

A contextual misinformation alert appeared that read "Actual value: $2.25 million." Lorenz frowned—or rather, his avatar did. You actually had no clue what Lorenz looked like in real life—you only ever met his avatar. And natural language processing was at the base of your relationship, since he only spoke Tagalog. A pop-up alert from your sister's avatar flashed, wanting to chat with you. You waved goodbye to Lorenz, promising to continue the conversation soon.

Before you could calibrate your emotional availability settings, she immediately started offloading. She and her partner had just had another argument about sending your nephew to summer camp. Here we go again, you thought.

She had said, “Don’t you get it? Nature is not the same as before. It is dan-ger-ous. Forest fires, floods, deadly mosquitoes—who knows what might happen if we leave him in the wilderness for a whole week?”

She did have a point—the storms were more intimidating, the temperature gaps were larger, and the frequency of climate events were high. But maybe it was also that people were less exposed to nature, spending more time in digital spaces instead. Ironically, natural parks were less maintained than before, but were more connected than ever through sensors tracking every mushroom and microclimate.

You paused and smiled, thinking of your own daughter. The days of worrying about summer camp enrolment had now evolved into stressing over post-secondary education. She was really growing up. From the second your surrogate handed her to you, she had been the centre of your world. Now, talks of choosing a post-secondary path had you flustered.

She had spoken to you about wanting to go to a traditional university. You felt uncomfortable with how universities were a symbol of old Canadian elites. Most were shrinking and fading, but a few were still strangely attractive. The cost of those was sky-high, since they had gone upmarket hoping to attract those who valued exclusivity and real-life instruction. Fine if you were rich, but…

Most people chose to get badges certifying their specific skills through corporate programs. It was cheaper and more efficient, even if it did mean giving up any claims on your personal data. But then you had heard that the universities—even the good ones—were equally awful when it came to surveilling and quantifying their students.

The lights across the street flickered and turned off. Guess the festivities were done for your neighbour. You found yourself alone in the darkness. Strangely alone, as you had been throughout the crowded day.

A day at the beach

You sink into your chair at the kitchen table and sigh. The house was finally quiet. So much for a day at the beach making for an easy bedtime with the kids. It had been a good day—even if it was a bit of a blur. You murmur to your Sidekik™ AI and it activates the table's projector. Images of your day fill the room and begin to play back.

Having left home before dawn, the beach had been almost empty when you arrived loaded down with cooler, towels, and toys. At least you got one of the newer shade pods, the big ones with the strongest connection to the beach's sensor networks. Good thing, too. The pod had advised you to get the kids out of the water when the algae bloom moved in and let you know when it passed. It also linked with everyone's Sidekiks, ensuring regular Ultraviolet radiation breaks through the day. That meant peace of mind for a high-risk activity like playing on the beach. Plus, it meant you knew exactly how long you had to meet your contractor, Gary, in the virtual design lab before the kids came back and chaos filled the pod.

The virtual walk-through looked good, except for the home office. Something did not feel right. Your Sidekik had picked up on it a moment later. It started flashing warnings about compromised cognitive ergonomics. The interaction between the lights and the ambient noise from the furnace was going to create sensory interference that reduced your productivity by 8%. So Gary was going to work up a new model with better sound insulation.

After signing off, you told Sidekik to set your information environment to "family time, non-commercial". It would handle basic communications and filter non-emergency news alerts, while blocking the ubiquitous contextual advertising that filled augmented spaces these days. No need to worry about your ailing parents either, as Sidekik knew to push their messages through.

During the next UV break, you took your eldest to see the new art installation in the shady green space bordering the beach. You stopped several times along the path, watching as your daughter darted off to examine a tree or rock, peering intently through her smartglasses. It took you a moment to realize she was following Elder Hill's avatar around as it pointed things out to her. Probably lichen or moss. She had been obsessed since her first walk in the backyard using the new Traditional Ecological Knowledge app. She could already identify more plants than you and your partner combined.

The sculpture had been a little overwhelming. Not the sculpture itself, which was an abstract personification of the province as a female figure, but the layers of digital artifacts attached to it. With augmented reality enabled, observers were supposed to see a digital twin of the figure spring to life and dance joyously through the trees. It was supposed to give passers-by a feeling of bliss grounded in the natural beauty of the park. But it had been tagged so many times that the effect was ruined. All manner of political slogans, non-regulated adverts, racist slurs, fake news, and sexist vulgarities defaced both versions of the statue. You asked your daughter what she saw and were relieved to hear Sidekik's parental controls on her glasses were working. There were a few ads, but nothing troubling.

Surveying the other visitors, you noted a wide range of reactions. Those without the latest high-end smart devices tended to breeze past the statue after a quick look. You remember thinking how bland their lives must be. Those wearing the devices lingered much longer and their faces revealed a range of emotions: revulsion, outrage, wonder, and laughter. You wondered which metaverses produced which expressions? Maybe it was time to opt for one of the stricter platforms yourself? It would mean a less vibrant life, but also less annoyance and stress.

By mid-afternoon, everyone else was napping in the perfect shade of the pod—except your eldest, who was in one corner, engrossed in the latest Bollywood simul-dance, their saree swirling around them. So you indulged your latest guilty pleasure: Newscape, the current events show that let you experience the news. Your first stop was Washington, to sit in on a press briefing where the tension was thick enough to cut with a knife. Your Sidekik gave four fake news alerts in as many minutes, as Newscape ported you through the instant analysis offered by news media influencers and journalists. You wondered how people who could not afford such systems managed, given the epidemic of disinformation and deep fakes. Your next stop was a warzone, where you found yourself in the middle of a firefight between warring factions. This time your AI directed a bias warning at you as you ported in and out of analysis channels. It had caught you opting out of two spaces where the commentary did not align with your political perspective. You told Sidekik to ease up on the bias notifications, then asked Newscape for something lighter. Moments later, you found yourself on a celebrity's yacht in the Seychelles. You enjoyed three whole minutes of sparkling waters and pristine, deserted beaches, before your youngest woke and made a beeline for the real-life water.

The pizza delivery drone arrived just in time to prevent complete meltdowns from children and partner alike. As your partner grabbed the last slice, Sidekik whispered that the car had powered up and reached the preset cabin temperature. Given current traffic levels, you could make it home for the kids' bedtime—if you left in the next 30 minutes.

As the playback shifted to images of everyone packing up, you told it to stop. You savoured the silence on your way upstairs. It *ha*d been a good day.

Future headlines

These fictional headlines describe specific aspects of plausible sense-making futures with concrete implications for policy makers.

For the first time in ten years, the Global Disinformation Index indicates a decline in disinformation.

A study shows that regulating data surveillance systems has had a positive impact on the behaviour of online users.

Anti-government conspiracy theory blamed for latest attacks on digital infrastructure.

New AI system helps municipal health authorities identify people at risk of being lonely.

Education ministers meet virtually to launch national metaverse literacies strategy.

An artificial intelligence is at the heart of an investigation after providing poor translations to a UN representative.

The Canadian History Museum's new exhibit on deepfakes from the early 2020s asserts that "Deepfakes have come a long way—they are now 3D and more realistic than ever."

Regina woman wins custody of family emotional support robot in landmark ruling.

Hearts and darts for streaming service's new experiential sitcom, where the setting and characters are drawn from each viewer's online profile.

New study suggests quality of AI assistant impacts life expectancy +/- three years.

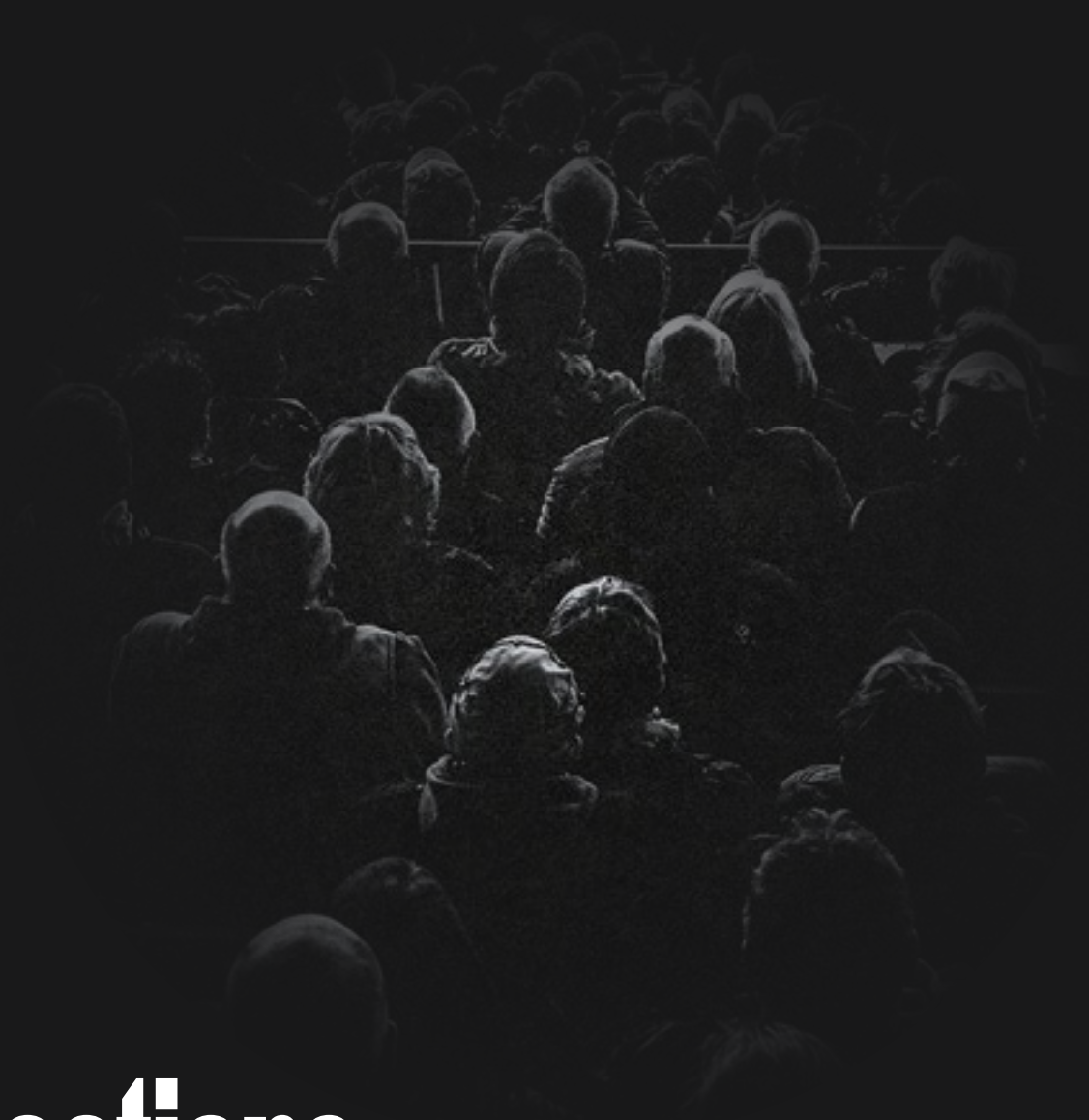
Record sales for *Apocalypse You*: new online survival game brings floods or wildfires to your hometown's digital twin.

Canadians divided on medalert chips: worries over safety and privacy cited.

Smart appliances hacked to change in-home sensory environments in ways that affect mood.

University mandates use of in-house AI learning mentor for all students: cites fairness and academic integrity.

Anti-road rage campaign: Police remind motorists to turn down assertiveness settings on AI assistants ahead of long weekend rush.



5 Implications

Sense-making is changing and will continue to do so in the decades to come. Disruptions to the ways we gather and interpret information, construct meaning, make decisions, and take action will affect the policy landscape. Each title represents an area of policy that could face disruption in the future. Exploring the different sense-making futures described in the previous section helped us identify these areas. Some of the implications listed here have direct relevance to policy and programs. For others, the connections are less obvious or immediate. Rather than shaping specific policies and programs, they shape the context—the ideas, mental models, biases, issues etc.—in which policy thinking happens or in which programs play out.

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Social cohesion

The issue: A combination of new technologies, changing social conditions, and evolving beliefs could affect our ability to understand and trust one another, and therefore our capacity for large-scale cooperation.

As forces such as social media, conspiracy theories, disinformation, and nostalgia drive the growth of distinct communities with conflicting ways of understanding the world, it may become harder to build broad social consensus or take collective action.

People may find it harder to agree on basic facts about the economy, politics, history, or the environment if society fragments into discrete groups with unique identities and incompatible ways of understanding the world. In such a future, productive debate on crucial issues might diminish. This may be because these groups retreat into echo chambers on separate digital platforms and therefore rarely encounter one another, or because their worldviews are so far apart that there is no starting point for conversation. Extreme fragmentation might make it almost impossible to design policies, programs, and messages that satisfy a majority of people. Similarly, establishing a national consensus on priorities and problems could be far more difficult than it is now—with societal mobilization toward any kind of common goal even less likely.

As technologies that make our emotions and thinking transparent become more common, social relations could become simpler or they could become much more challenging.

Massive amounts of new data about us will come online as the IoT expands, connecting digital systems more closely to our bodies via consumables and wearables. This data could provide real-time insight on the behaviour of those around us. So a perceived slight by a co-worker could be revealed as a manifestation of exhaustion driven by insomnia. An employee's poor work performance could be attributed to sensory interference in their environment rather than laziness. Such insight could ease social relations. It might even allow us to anticipate how our actions could harm others and modify our behaviour accordingly. Better understanding and treatment of others could foster deeper trust, which could help revive civil society and democratic institutions. On the other hand, awareness that our inner thoughts and feelings are constantly exposed to others might heighten some kinds of anxiety. Encounters with other people, corporations, and institutions could be deeply uncomfortable in such a future, with possible knock-on declines in social and institutional trust.

As AI technologies play a bigger part in our decision making, they could shape the tone of social relations based on whether they prioritize collective or individual benefits.

More powerful AI assistants could give users information-finding and processing superpowers that improve decision making in the future. The social impacts of these changes may depend on whether our AI helpers prioritize decisions that benefit the individual, society, or something in between. AI optimized for social good could drive increases in civility, philanthropy, democratic engagement, tolerance, and support for evidence-based policy. Alternatively, systems set to maximize benefits to the individual could produce negative outcomes for society overall. AI assistants calibrated to boost social status at any cost could recommend actions that harm others. AI designed to keep us in a good mood might point us away from alarming new evidence about climate change and toward disinformation that alleviates our fears of environmental disaster. Ultimately, the direction of these changes will depend on the priorities of AI designers, market forces, and regulations.

As digital technologies play a bigger role in our sense-making, they could lead people to understand the world in a similar way, making it easier for them to agree on priorities; or they could drive people into separate camps with competing worldviews.

The technologies that support our sense-making will have distinct features and rules that influence how we understand the world. In that sense, they may become the lenses that shape our view of reality. Search algorithms already shape the information we use to make decisions in ways that are frequently inconsistent from individual to individual. If the future's most popular sense-making technologies share enough features and rules to provide a consistent way of interpreting the world, they could foster a renewed sense of shared reality. This could make it much easier for people to talk to and understand each other, and therefore to build consensus. But there is no guarantee that these technologies will be consistent enough to promote any kind of common ground, much less the kind that reflects shared values such as multiculturalism. They may actually drive the spread of conflicting worldviews that produce misunderstanding, distrust, and intolerance.

Economy

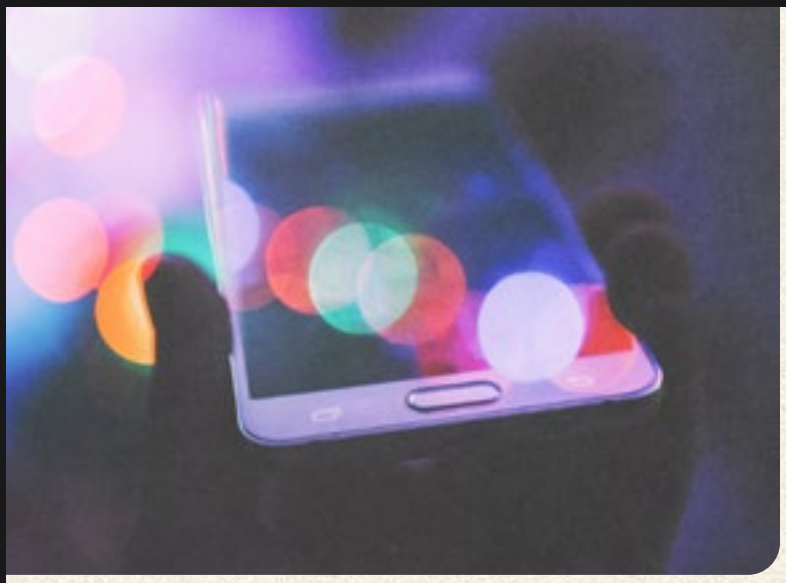
The issue: The uptake of new economic metrics and models could provide many benefits in terms of sustainability and social justice. But if this uptake is uneven, key economic players may find effective coordination difficult.

As interest grows in alternative economic metrics such as the Happiness Index, the economic calculations and priorities of individuals, firms, and governments might shift.

New economic metrics such as the Happiness Index, and new models such as the zero-growth economy are becoming more mainstream. On the positive side, this could drive changes in consumption and investment habits that enhance sustainability and social justice. Improvements in employment equity, working conditions, and work-life balance could follow. So could an ethic of conscientious consumption that boosts sustainable and ethical businesses, leads people to embrace long-term thinking, or encourages them to prefer digital goods over material ones. On the downside, an uneven uptake of these new paradigms could introduce confusion by disrupting the shared frameworks that have supported economic planning and cooperation domestically and internationally. Similarly, major changes in the economic behaviour of individuals following the adoption of these new models could have a range of negative consequences. For instance, widespread rejection of material goods and real-life experiences in favour of digital alternatives could spark massive contractions in the manufacturing, transportation, tourism, and retail sectors.

Metaverses may drive growth as they become more popular sites of economic activity; but other economic sectors could suffer, as could governments' ability to tax certain kinds of assets.

Shifts in recreational spending from "real" to digital spaces have been clear for some time. Video game platforms are branching out into other forms of entertainment such as movies and concerts. A similar shift in investment from real to digital assets is also underway, as seen in the widely publicized digital art and virtual real estate booms and busts. These patterns could accelerate as people spend more time in metaverses. As a result, these spaces could soon become major engines of growth. But they could also divert a lot of capital from the "real-world" economy—with implications for numerous sectors. The real estate market, which is increasingly out of reach for many people in Canada, could be especially hard hit. If a large number of people turn to digital real estate as an alternative, the value of physical real estate could decline, and with it the wealth of many households. Moreover, if these metaverses are foreign controlled, they may not be subject to tax treaties or financial regulation.



The information environment

The issue: Finding a balance between the benefits of the digital information revolution and keeping digital spaces and experiences safe might be even more important in the future.

As new digital spaces emerge, they could give rise to more powerful forms of mis/disinformation and more effective distribution methods.

Continuing advances in natural language processing, generative AI, and deepfake technology paired with the arrival of metaverses could mean new and more effective kinds of mis/disinformation. For example, the light and sound in these spaces could be manipulated to make people more susceptible to false content by making them anxious or upset. Or such spaces could be filled with digital artifacts such as holographic ads or 3D memes designed to convey disinformation. Disinformation actors, hidden behind avatars, could move freely through virtual or augmented spaces distributing false information through personal interactions. As a result, today's technical solutions to mis/disinformation may soon prove obsolete. Rampant disinformation might also limit the potential of those spaces to support innovation and improve access to experiences and information.

As new online spaces within the information ecosystem become even more important portals for all kinds of opportunities, people may consider access to them a fundamental right.

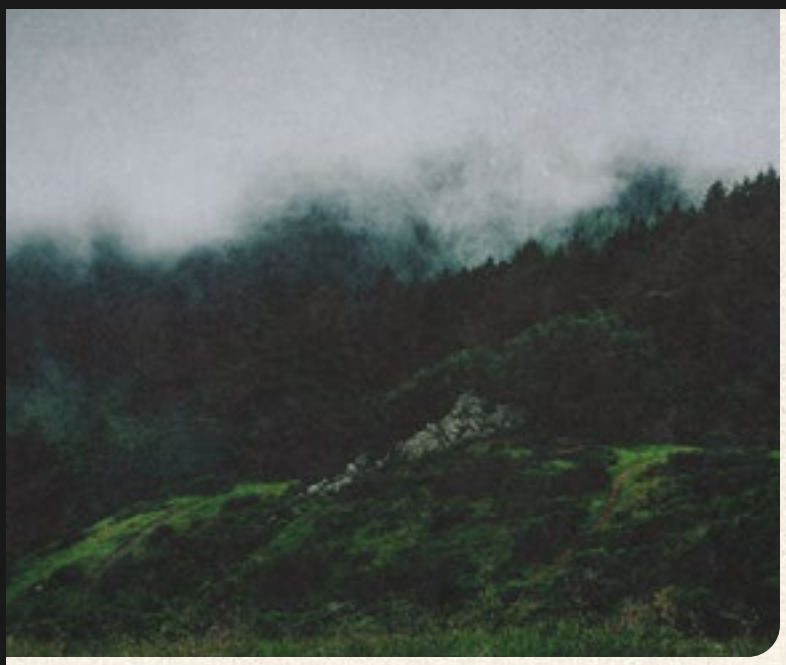
Emerging metaverses could become the primary places for information activities such as acquiring and distributing knowledge, political speech, and artistic interventions. This could make unequal access to the best version of the Internet an even more serious problem. The loss of opportunity caused by poor access to high-speed connections, devices, and even some platforms could provoke backlash against telecom giants, Big Tech, and governments. Anger could be especially strong among people in rural and remote areas, and those whose economic circumstances limit their access to the Internet. Beyond reduced trust in governments and corporations, such circumstances could also challenge social cohesion. The experiences of digital haves and have-nots could be locked into diverging streams—one largely restricted to "the real world" and one incorporating digital spaces. This could produce a belief that full access to the richest and most vibrant version of the Internet is a basic right. If so, governments may find their zone of responsibility expanding dramatically in the minds of the public.

Education and training

The issue: The range of digital literacies and skills needed to thrive in a world dominated by AI, metaverses, and the IoT may become broader and more complex.

As AI becomes more pervasive and more of our lives shift to metaverses, today's digital skills may not be enough to keep people safe, or allow them to exploit new social and economic opportunities.

Today's digital natives struggle to sort signals from noise or protect themselves from malicious actors online. Tomorrow's metaverse natives may struggle with things like AI that can pass for real people, connected devices that let others manipulate us with our private data, and new kinds of disinformation. Yet it may be difficult or impossible to avoid such dangers in a world where medical appointments, immigration services, research, vacations, and training involve AI and are primarily accessible in metaverses. In that future, knowledge of how AI, metaverses, and related technologies work may become basic life skills akin to literacy and numeracy. Widespread metaverse or AI illiteracy could allow disinformation and cybercrime to thrive. It could leave some people less informed and unable to make good decisions, and others unsuited for the workforce. It could also erect barriers between people and essential services that worsen long-standing inequalities or create new ones. On the other hand, strong AI and metaverse literacies could make people more competitive, protect them from mis/disinformation, and improve their decision making.



Reconciliation

The issue: Wider mainstream acceptance of Indigenous perspectives could offer new ways forward on reconciliation, climate action, antiracism initiatives, and social development, but any such shift may provoke strong negative reactions from some.

As colonial narratives and stereotypes are further dismantled, more people may find it easier to understand systemic oppression and support reconciliation.

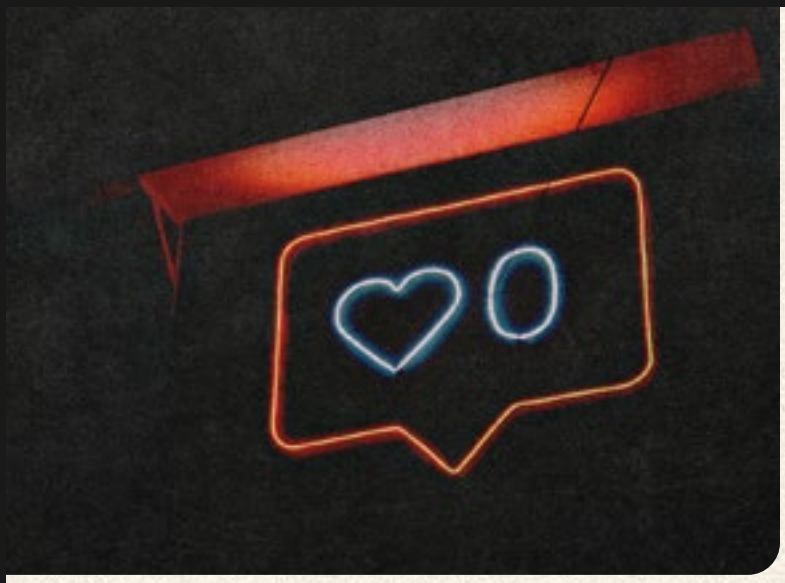
Some non-Indigenous Canadians are beginning to realize and question the dominance of colonial narratives. These narratives have shaped popular understanding of Canadian history, and supported structures of privilege and oppression. Subsequent generations may be more aware of colonial injustices and their consequences. And as new narratives emerge from Indigenous futurism, old stereotypes may give way to visions of a future where Indigenous peoples thrive and play a key leadership role in a much wider range of policy domains than at present. Changes in people's mental models of Indigenous pasts and futures may in turn raise public demand for faster and deeper action on reconciliation. This might extend to much broader support for recognition of land and resource rights, reparations for historical wrongs, and greater autonomy over infrastructure and social programs.

As Indigenous Knowledge and worldviews become more prominent, they could shift mainstream thinking about the economy, social supports, ecological responsibility, and technology.

Rising mainstream awareness and adoption of Indigenous knowledge and ways of seeing the world has the potential to transform popular views and expectations in a range of policy areas. For example, uptake of "seventh-generation thinking"—that the long-term impact of today's decisions must always be considered—could increase the public's tolerance of short-term sacrifices for long-term gains. Similarly, the Indigenous concept of putting humans at the centre—acting with the intent of having a positive impact on real people—could transform popular views on social benefit programs.[123] Applied to the world of digital technologies, this concept of focusing on human outcomes could reduce certain harms associated with social media, screen addiction, and information overload. Finally, widespread uptake of the idea that land is medicine—that the natural world sustains and heals all things—could accelerate the acceptance of nature prescriptions[124] into healthcare or the extension of legal personhood to non-living entities.[125]

As more non-Indigenous people embrace reconciliation and perhaps even adopt Indigenous approaches to major social and environmental problems, existing anti-reconciliation sentiments could become even more powerful.

Challenges to traditional views of the past and future, wider support for real reconciliation, and broad adoption of Indigenous perspectives or values are threatening to some groups. Certain corporations and some workers in extractive industries could see deeper integration of Indigenous Knowledge into policy[126] as a threat to their economic security. Some fringe groups might view mainstream acceptance of Indigenous perspectives on history as an attack on their version of national identity. At the same time, some Indigenous people may consider certain mainstream uses of Indigenous knowledge as cultural appropriation. Any or all of these reactions could deepen social divides and social conflict—between Indigenous and non-Indigenous communities, but also within both sets of communities.



Public communications

The issue: Shifts in media consumption and the growth of online social silos could present new challenges and opportunities for reaching the public with persuasive messages.

As society fragments into groups with particular perspectives, the need to tailor public messages might require new approaches to strategic communications.

Perspectives and opinions seem to be increasingly fragmenting, thanks to social media filter bubbles, the availability of information, and diverging interpretations of it. As people separate into groups with particular ways of thinking, it may not be possible to reach or persuade a majority of society with a single message. However, having to customize messages to reach different groups could reinforce filter bubbles. As a result, it may be difficult to sustain social cohesion as distinct messaging and divisions between these groups make it harder for people to understand one another and agree on facts.

As the public's media preferences continue to change, new opportunities to reach people with more persuasive messages may appear at the same time that traditional communications become less effective.

Users online today have become used to visual content like videos and memes as a way of communication. As we move further into this future, popular preferences for bite-sized or exciting content could make complex or challenging information disagreeable to many people. How users engage with what they see and read might also change as online experiences become richer and more immersive. The format and style of communication could evolve with the emergence of such spaces, which may have their own rules and linguistic codes. Expectations for official messaging could evolve quickly and in surprising directions in such a future.

If online games and metaverses become primary gateways to important messaging and data, some people could enjoy better access to such information, while others may be shut out.

Metaverses may enable new forms of communication with the public, such as AI helpers that offer Q&A sessions on services. They may also provide new and more meaningful ways to interact with data. For example, providing someone from Saskatchewan a virtual experience of sea level rise in the Maritimes could have a more significant impact than a series of data tables and graphs published on a website. Easier and richer public interactions with key messages and data could improve everyday decision making, while also improving trust in the institutions that provide that information. However, those who reject these spaces, or cannot access them for economic or geographical reasons, could miss out. Reduced opportunity might follow, along with growing resentment and distrust of institutions.

Environment

The issue: New environmental data and information may affect people's attitudes and beliefs, which may alter the consensus on climate change solutions.

As digital and biological systems converge,[127] the way people make sense of the environment and view climate change could shift.

More than ever, humans have access to tools and data that help them make sense of the world. For example, natural systems like forests are being equipped with connected devices that allow a detailed understanding of how they react to their environment in real time. Our understanding of natural worlds will continue to grow as emerging technologies offer new insights. Better understanding could increase calls to protect existing nature reserves or create new ones. These new technologies could enhance support for other kinds of environmental remediation as well. Increased awareness could also intensify calls for action on climate change.

If climate anxiety continues to grow, people may become so hopeless that they reject sustainability and climate action.

Climate change narratives might have an important impact on how people view and respond to this issue. Currently, an overwhelming number of negative climate change narratives circulate on a daily basis. Combined with scientific evidence that climate change is worsening, this may be contributing to growing eco-anxiety, solastalgia,[128] and climate grief. These emotional states may drive important long-term consequences, like worsening mental health, decreased productivity, and apathy toward climate change. Climate-driven anxiety or uncertainty could lead some to embrace conspiracy theories or disinformation in their search for answers. It might push some toward neo-religions like Witnesses of Climatology, and others toward scientific approaches to climate adaptation.[129]

Culture

The issue: Evolving social and technological conditions could necessitate changes to the cultural expressions, institutions, and funding mechanisms that support national identity and attachment.

As new types of digital media offer more opportunity for diverse voices to be heard, narratives that support a more inclusive national identity may become more prominent.

Expanding access to digital storytelling tools with the potential for large-scale sharing could further reduce the power of traditional gatekeepers, such as broadcasting networks, production companies, or publishers. A chorus of new voices telling powerful new stories could offer new takes on Canada's past, present, and future. This could make it easier for some to feel attached to Canada—especially if those stories are delivered in more powerful and easily distributed media. The rise of new voices and stories could feel like a chaotic unravelling of cherished stories and symbols among those most invested in a more traditional national identity. This could spark culture wars fought in metaspaces with new narrative weapons. However, in time, such conflict might open space to construct new, more inclusive national symbols and narratives.

As new digital spaces become increasingly important venues for creating, consuming, and sharing art, distinctly Canadian cultural expressions could either get lost in the noise or reach important new audiences.

Youth in the Gen Z cohort already consider online games as their preferred form of entertainment.[130] In the future, these spaces may become the main places where people create culture, learn history, encounter art, and have spiritual experiences. New forms of cultural expression and new ways of experiencing culture in these spaces could expand the reach of Canadian content. Heritage minutes, whether official or unofficial, could become immersive experiences that reinforce shared identity or destabilize it. Values like multiculturalism could be supported by attending a virtual Carnaval de Québec in a metaverse, or challenged by fringe groups using video games to advance an ethno-nationalist agenda. At the same time, these spaces might operate in ways that encode their creators' and owners' biases and values. Access to powerful new creation and distribution tools may not be equitable. Traditionally marginalized communities might find themselves once again sidelined in these spaces. The same might be true for virtually all Canadians if these spaces are exclusively foreign-owned and controlled.

As non-western popular culture grows in influence, traditional value systems may shift, including views on different models of social and economic organization.

People living in the Global North have more access than ever to cultural content created in the Global South, including television shows, music, and online games. This exposes them to new ideas and values, some of which are overt and striking and some of which are built into content. As the popularity of games and other digital spaces encoded with different ideas and values increases, cross-cultural understanding within and across national borders may increase. The popularity of non-western narratives and other forms of expression, especially among youth, may shift views on foundational concepts. For example, preference for individualist or collectivist models of political and economic organization might change. These shifts might lead some to expect more from the government and others to expect less, creating challenges surrounding shared views of the social contract.

Social contract

The issue: Diverging views on the role of the state, the rights and responsibilities of individuals, and what we expect from each other could transform the social contract.

As trust in institutions declines in certain communities, attitudes toward democratic norms and citizenship could become engines of social conflict in the short term.

Disagreements about basic democratic norms and values, such as losers' consent,[131] the extent of free speech, or the definition of acceptable protest are key factors in existing social challenges around polarization, intolerance, and incivility. Should divides on these basic principles widen, movements that deny government authority or seek to undermine democratic processes could become more popular. Such disagreements could leave others so frustrated or confused that they tune out. Coupled with polarization, this disengagement could drive electoral participation down to levels that raise questions about the legitimacy of democratically elected governments. Alternatively, after a period of disruption, conflicts surrounding democratic values and norms could produce a new majority consensus on the best relationship between the people and the state.

If trust in experts and research institutions continues to weaken, their advice may be disregarded and public support for research funding may fade.

Conspiracy theories, disinformation, anti-science, and anti-elite agendas are undermining trust in experts and research institutions in some sectors of society. A future of declining trust in research and researchers might involve even more widespread rejection of evidence-based policy and programs. It might also witness crashing levels of public compliance with official instructions when such advice is explicitly based on research or expert advice. Those who disagree with policies on these grounds could easily find themselves on a slippery slope that ends in the rejection of all state authority. Declining popular support for research and researchers could make an instant controversy of any policy or program involving research. Subsequent debates about the state's role in research funding could produce a range of outcomes. It could reinforce the status quo, lead public institutions to pull back from such funding, or lead them to expand public research support.

As metaverses enable new experiences and expressions, new forms of activism, protest, and crime may appear, potentially shifting views on rights.

Metaverses may enable new kinds of activism and protest—like virtual flash mobs at political events in a metaverse or persistent digital graffiti on public monuments. Similarly, these new spaces could become playgrounds for criminal elements using AI disguised as humans to run scams; or for hate groups that use biased but deeply immersive simulations of historical events to recruit new members. It is impossible to know whether people will be more or less tolerant of disruptive or dangerous activity in metaverses than they are in real spaces, or whether their views of rights will be the same in both spaces. Some people may want new digital spaces to share standards rooted in the *Charter of Rights and Freedoms* and very much tied to the real world. Others may not, preferring to let social pressure or corporate moderators keep behaviour within acceptable limits. Foreign ownership of such spaces could present another complication, making it difficult to use proactive regulation or retroactive enforcement to protect the rights and safety of people living in Canada.

As the gap between the data power of governments and firms widens, more people may look to the private sector for leadership in areas traditionally reserved for government.

Private tech firms have built unprecedented data collection and processing power, giving them access to more information about private individuals than most governments have. Governments that fall further behind private firms could appear inefficient, untrustworthy, or even irrelevant in the future. More people may start looking to large tech firms and their charismatic CEOs for leadership on major problems because they are seen to be "better informed" about the people, the economy, or the environment. While this kind of leadership might not necessarily undermine the legitimacy of governments, it could make it easier for some private-sector actors to sway public opinion and mobilize action. Private big data firms could provide many benefits to individuals and society, including solutions to problems like sustainability and public health crises. But it is not clear whether firms would prioritize such benefits in the absence of a profit motive.

Conclusion

Sense-making will continue to change. New kinds of information and experiences, and new ways of processing both, will change how we think and act. So will shifts in the stories we tell, who we trust, and the values we hold in common. **Collectively, these developments could challenge our shared reality, which is a key support for social cohesion.**

Shared reality and social cohesion are persistent challenges in pluralistic and multicultural democracies. Such societies promote the idea of openness to distinct group identities based on language, culture, region, etc., even if they do not always follow through on their promises of equality and inclusion. But they also depend on a degree of common ground of shared values, identity, and ways of knowing.

If this common ground gets too small—if distinct groups come to inhabit entirely separate realities—it may become difficult for different parts of society to understand each other. Governments could become unintelligible to some parts of the public and some parts of the public could become equally unintelligible to governments. In such a future, our ability to find broad social consensus on problems, much less design and implement solutions, could deteriorate.

On the other hand, as with any major challenge, disruptions of shared reality may present unexpected opportunities. So if the version of reality traditionally shared by the Canadian establishment has contributed to economic inequality, environmental degradation, and various forms of discrimination, disruptions to that reality might not be signals of social disintegration. They could be the first step in constructing a more equitable and inclusive shared reality—one that provides a stronger foundation for collective action addressing tomorrow's greatest challenges.

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