IN THE NAME AFFECTIVE POLARIZATION AND THE FUTURES OF SOCIETAL COORDINATION

Nicole Brkic OCAD University, 2022

IN THE NAME **OF JUSTICE**

AFFECTIVE POLARIZATION AND THE FUTURES OF SOCIETAL COORDINATION

by Nicole Brkic

Submitted to OCAD University in partial fulfillment of the requirements for the degree of Master of Design in Strategic Foresight & Innovation

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ABSTRACT

Affective polarization is a societal condition that, if left unregulated, can have detrimental effects on our ability to coordinate and make informed decisions, particularly in the face of challenging circumstances. The purpose of this inquiry is to uncover the driving forces behind the emergence and escalation of affective polarization. Using the principles and tools of design thinking, systems thinking, and futures thinking, the current state of the system is investigated in the context of three dimensions: our individual experience (identity), our relational interactions (coordination), and our material observation (knowledge), all of which interact to form an emergent property-decision-making.

This research reveals that our beliefs are fused to our sense of virtue, which provides a rationale for the hostility that arises when those beliefs are questioned by conflicting perspectives. It also presents evaluation criteria for assessing coordinative capacity, which is used to evaluate the state of the current system. A set of four alternative futures states are then envisioned to consider potential outcomes based on how Canadian society elects to deal with the problem we are currently facing. The four outcomes are based on a multilateral decision to exit the situation, a unilateral decision to adapt to the situation, a unilateral decision to force a situation, or a multilateral decision to collaborate. These scenarios are assessed with the same coordinative capacity evaluation criteria, where all five states (current and futures) are compared.

The assessment results produce a theoretical framework defined as the Four C's for Enabling Coordinative Capacity (curiosity, connection, courage, and collaboration), which are a set of proposed core values and corresponding guiding principles intended to underpin any strategic antipolarization or depolarization initiatives for increasing social coordination and informed decision-making.

Keywords: systems thinking, futures thinking, affective polarization, social identity, coordination, decision-making

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I am grateful for this land, the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples, and all the life that it has held, holds, and will hold. In my work today, and every day forth, I will do more to honor its past, uplift its present, and protect its future. As I envision the future, I do so through a decolonizing lens, and dedicate myself to continued growth.

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01-CONTEXT

Defining the project and research methods

United we stand, divided we fall

Project definition

Research scope

Research purpose

Research question

Project structure

Project guide

Report outline

Research methods and methodology

Research overview

Research process

01-CONTEXT

United we stand, divided we fall

Our political affiliations are becoming increasingly relevant representations of our personal identities (Van Bavel & Packer, 2021). On a global scale, studies suggest that political polarization is on the rise in Canada, the United States, and several other countries around the world (Boxell et al., 2021). In Canada, a study conducted in March 2022 surveyed a total of 1,011 Canadians and found that approximately 75% "believe that society has become more polarized" (Djuric, 2022). The two leading divisive issues identified by respondents were the COVID-19 pandemic and the 2021 federal election.

Canadian politics were traditionally dominated by "non-ideological¹ brokerage parties" (Merkley, 2020) until they began polarizing in the 1980s when the Conservative Party started to deviate more towards the right, and the Liberal Party towards the left. That is not to say that Canada hasn't had its polarizing moments in the past. Canadian political journalist Paul Wells (2019) recounts several peak polarizing moments throughout Canadian history, and attributes today's perception of "elevated mutual mistrust" as an "application of selective memory".

Polarization can be measured or conceptualized in a number of ways, and there are valuable insights to be gained about the populations within which it emerges-but research has, to date, been relatively limited in exploring these variations, particularly within Canada (Merkley, 2020). What has been recognized most conclusively within Canada is a rise in affective polarization.

Affective polarization is the degree to which expressions of outgroup hate surpass expressions of ingroup love (lyengar et al., 2019). An ingroup is a group of people united by one or more commonalities, which may include shared ideas, opinions, worldviews, interests, or objectives. Inversely, an outgroup consists of people that exist beyond the boundaries of a particular ingroup; those who do not share the commonalities of a particular ingroup. Interestingly, affective polarization can increase in some cases even as ideological divergence (the clustering of citizens on left-right ideological poles) decreases. Affective polarization may gain its own momentum, centered around discrediting, vilifying, and defeating an outgroup, its members, or both.

We could explore the historical context that has led to today's increasing hostile and polarized state, basing the inquiry on 'why now?', but considering this is not a unique circumstance for our society (or any society for that matter), it seemed more pertinent to ask 'why?' and 'how?'. Uncovering the answers to these questions may provide us with a better chance to intervene, mitigate, and prevent any further escalation, particularly as we move forward into an increasingly complex world. Without strong coordinative capacity², navigating evolving technology, values, information, and global connectivity can turn complexity into chaos.

Project definition

Research scope

Upon establishing where we are, and the rationale for choosing to bypass an inquiry into why we got here in favour of how we got here, there are a few details to clarify.

Additionally, while the influence of global politics is relevant to the state of Canadian affective polarization, it could not be comprehensively researched and analysed in the time frame of this project, and as a result, has been largely excluded.

Finally, polarization, partisanship³, or any form of allegiance to a group is not harmful in itself, even when the conflict is political in nature. In fact, there are plenty of benefits of ideological diversity, as we will discover throughout the report. Political parties simplify an otherwise complex system and aid citizens towards forming opinions and making decisions when voting (Mason, 2018). Partisanship also prompts political engagement, and it is desirable that people participate actively as members of a democratic society. What the report seeks to address are the potential risks of unregulated polarization⁴, namely, affective polarization. Unregulated polarization allows hostility to invade the political sphere without interventions in place to prevent or mitigate the effects. Consequently, they continue to worsen. In this circumstance, "parties

First, just as the report is not concerned with the historical context of affective polarization, it is also not concerned with the degree, nature, or validity of Canadian affective polarization. Rather, the focus is on the underlying driving forces behind the emergence and escalation of polarization in any context.

become a tool of division rather than organization" (Mason, 2018), and division within a society and singular government prevents the engagement and coordination required for effective democratic leadership and decision-making informed by collective truths.

Partisans are members and advocates of a specific political party or cause.

Going forward in the report, it is to be understood that any use of the word 'polarization', unless otherwise specified, refers to this interpretation: unregulated polarization and its negative outcomes.

³

⁴

Ideology is a system of ideas and ideals, especially one which forms the basis of economic or political theory and policy; the ideas and manner of thinking characteristic of a group, social class, or individual (Oxford University Press, 2010).

² Coordinative capacity refers to our ability to effectively orient ourselves towards collaborative initiatives in order to make collective decisions about how to move forward.

Research purpose

The purpose of this research is to meet the needs of those of us who have an interest or desire in making more meaningful connections in our lives and contributing purposefully to our invaluable resource of collective knowledge. Throughout this report, we will gain a deeper understanding of what it means to share a human experience as it pertains to our biological need for connection, in addition to uncovering a set of core values and guiding principles by which to conduct ourselves in our pursuit of a civil, ideologically diverse society. A successful outcome of this report for those of you reading, would inspire within an appreciation for dissent and a sense of curiosity and wonder.

This project aims to uncover:

The state of our current system: the interactions, conditions, behaviours, and traits which create and/ or contribute to affective polarization, as well as how perspectives are formed, how they escalate, and why they are retained and defended.

The states of potential future systems: trajectories from our current state to futures that might await us.

Potential leverage points: initiatives that intend to prevent or mitigate polarization by encouraging human connection and thus, coordinated decision-making.

Research question

effectively orient ourselves towards collaborative initiatives in order to make collective decisions on how to move forward.

referring specifically to affective polarization in the context of Canadian society and its liberal / conservative ideologies.

How might we coordinate a polarized society despite an increasingly complex environment?

a local and global context of conflicting interests, evolving technology, values, information, and global connectivity.

Project structure

The research question was investigated by identifying, exploring, and analysing three dimensions that inform decision-making: the individual dimension (experience), the relational dimension (interaction), and the material dimension (observation). Figure 1 represents these tiered dimensions that became the structure of the report and facilitated the project overall.

It is represented as three concentric and layered circles which are not distinct or independent of one another, rather they represent a multi-layered entity of fluid, interdependent layers. A wedge of the circle is isolated for notation purposes.

The dimensions are explained on the pages that follow, and for narrative consistency, are in the order that they appear in Chapter 2 of the report. Each dimension has been interpreted with its own directional force, marked by directional lines and arrows.

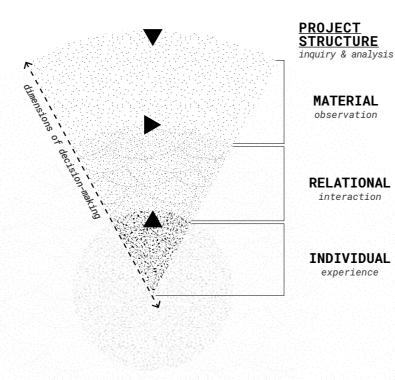


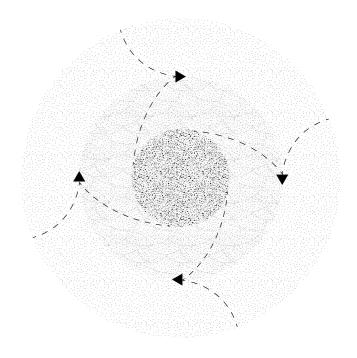
Figure 1 | Project structure: three dimensions of decision-making

overview and component elements

The second circle (middle ring) represents the relational dimension-the hub of human activity. It explores the interactions that exist and occur among humans, and in this report specifically, among a selection of key stakeholders relevant to polarization. Human interactions, for the purpose of this report, refer to a network of smaller and larger-scale interconnected and overlapping groups of people performing coordinated tasks on those varying scales. This dimension also includes the systems and structures within our society that result from our interactions.

Figure 2 depicts four arrows encircling the middle ring that are directed in a clockwise formation at the top, bottom, right, and left side of its outer edge, representing its circular, yet forward-bound (evolving) nature. Curved and dashed directional lines indicate the sources that fuel and enclose this dimension: the material domain, our environment, the source of all of our information, as well as the individuals whose experiences drive human interaction. The relational dimension is as a result, constructed from and influenced by these other two dimensions.

Forward-bound: the relational dimension





Inside-out: the individual dimension overview and component elements

The centre circle represents the individual dimension the vehicle of interaction. It explores the human experience, composed of biological and psychological functions that drive our needs, emotions, cognition, and behaviours as they relate to affective polarization.

Figure 3 depicts four arrows encircling the top, bottom, left, and right points of the centre ring that are directed outwards at the circle's outer edge. Straight and dashed directional lines continue from the point of each arrow and radiate out to the bounds of the largest circle (the material dimension), representing the force we exert as humans onto our interactions and the world around us as a result of our inner functions and experience.

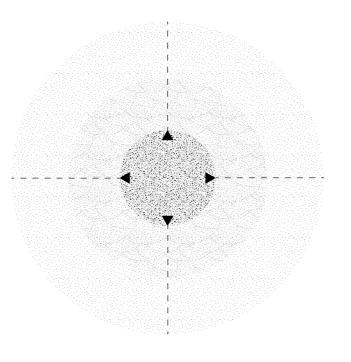


Figure 3 | The individual dimension in context

Outside-in: the material dimension overview and component elements

The third circle (outer ring) represents the material dimension-the domain of our environment, the source of all of our information, the target of our observation. It explores how knowledge is gathered, negotiated, and shared. The existence of this domain inherently questions the paradigms we operate within-our systems-and our human-constructed worldviews.

Figure 4 depicts four arrows encircling the top, bottom, left, and right points of the centre ring that are directed inwards from the circle's outer edge. Straight and dashed directional lines continue from the point of each arrow and radiate in towards the centre of the circle (the individual dimension), representing the journey that events and activities in the world take from an objective materialization to their subjective interpretation as they filter through our human lens and perception.

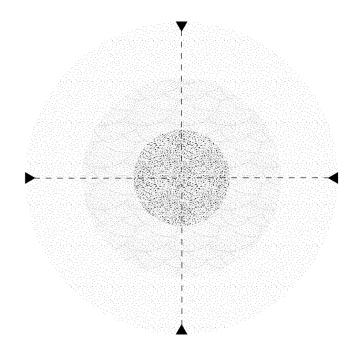


Figure 4 | The material dimension in context

Project guide

From this project structure, emerged a project guide. This guide, adapted from Simon Sinek's Golden Circle framework (2009), is mapped opposite from the project structure on the isolated wedge. It captured the essence of the project, clarifying its purpose by identifying who we are-identity, what we do-knowledge, how we do it-coordination, and why we do it-decision-making.

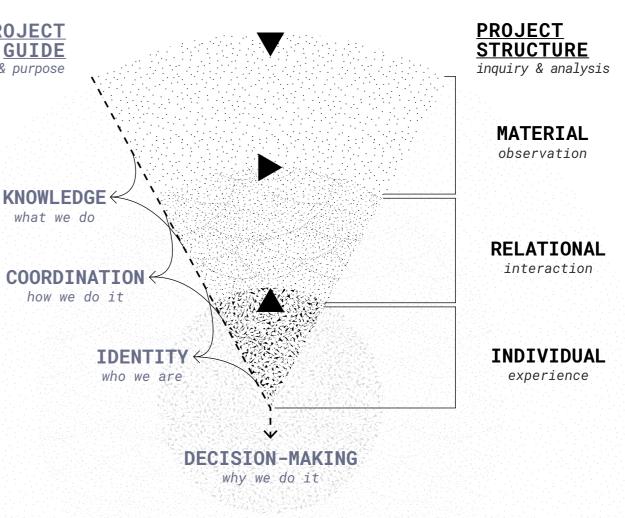
Identity is formed via the individual dimension (our experience) and the relational dimension (our interaction). Knowledge emerges from information sourced from the material dimension (our observation) crossed with the interactions that occur in the relational dimension. Finally, coordination is a compound of the relational and individual dimensions. The emergent property of these three dimensions is the why: decisionmaking. This core purpose validates the significance of this research, and consequently the research question: How might we coordinate a polarized society despite an increasingly complex environment? Addressing this question is pertinent to the quality of our decision-making, which cannot be successful without coordination, shared knowledge, and an understanding of our identities and their influence on our perceptions.

This project guide not only represents the concept of decision-making, it also informed decisions made throughout the project, including segmenting insights, evaluation criteria development, and the cumulative outcome of the project-a theoretical guide targeted at anti-polarization (prevention) and depolarization (mitigation) to support coordination and well-informed decision-making.

PROJECT GUIDE essence & purpose

Figure 5 | Project guide: decision-making, an emergent property

CONTEXT



Report outline

This report is segmented into [5] total chapters. The current chapter [1-Context] has so far defined the project scope, purpose, outcomes and objectives, the research question, the project structure, and the project guide. The chapter concludes with an explanation of the research methods and methodology to describe how the project will unfold.

Chapter [2-2022] explores why and how the system operates by uncovering the conditions, circumstances, behaviours, and traits which create and/or contribute to affective polarization, as well as how perspectives are formed, how they escalate, and why they are retained and defended. The narrative aligns with the three dimensions found in the project structure and is segmented into three subsections: [1] Forward-bound: the relational level, [2] Inside-out: the individual level, [3] Outside-in: the material level. These subsections include content gathered from the research, as well as several complementary tools used to synthesize and analyze the content. At the end of the chapter, the current state of the system is defined, and an evaluation criteria for coordinative capacity is revealed.

Chapter [3-2042] envisions potential alternative outcomes of our future by identifying potential indicators of change emerging today, and extrapolating today's context to develop a set of four futures scenarios.

Chapter $[4-2022 \rightarrow 2042]$ is the cumulation of the project. A comparative analysis of the current state and alternative states is conducted to reveal a theoretical framework: a set of core values and corresponding guiding principles that could form the foundation for future work related to anti-polarization or depolarization initiatives intended to encourage collaborative decision-making.

Chapter [5-Conclusions] provides an overview of the report, the findings, and highlights project limitations as well as potential future initiatives that might emerge from this research.

Research methods and methodology

Research overview

The research conducted throughout this project evolved from a combination of tools, principles, and methods from design thinking⁵, systems thinking⁶, and futures thinking⁷. Using the Input-Process-Output (IPO) methodology, the project was segmented into three phases: [1] The current state, [2] the future state, [3] the transition state.

The phases of the project are structured in alignment with a futures thinking approach, which presents a nonlinear concept of time in a way that an examination of the current context informs potential outcomes for future outcomes. These future outcomes may then be used to guide decision-making in our current context. Figure 6 is a visualization of this process.

All three phases emerged from a process of gathering secondary research sources, analyzing the data collected, and extracting key insights that would set a foundation for the next phase.

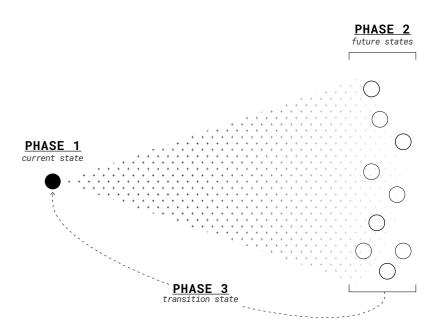


Figure 6 | Futures-oriented research methodology

Design thinking: a methodological approach to identifying and solving problems.

Systems thinking: a methodological approach to understanding complex, interconnected relationships.

Futures thinking: a methodological approach to extrapolating potential outcomes in the future.

⁵

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Research process

Figure 7 provides an overview of the research process: the methods used within each phase and how those methods relate to one another to form the research methodology.

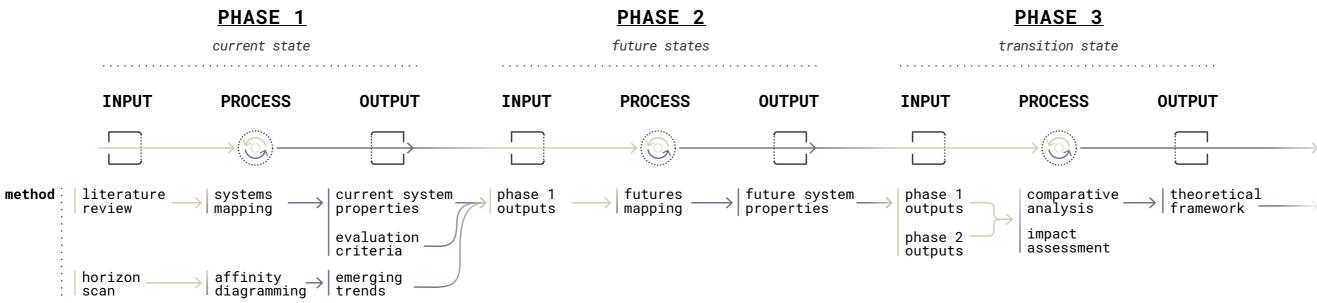


Figure 7 | Research methodology: input-process-output

CONTEXT

PHASE 1: current state

INPUT

Literature review. A scan and compilation of existing research and information relevant to the project focus was conducted, including an inquiry into the cause for the emergence and escalation of affective polarization, as well as potential solutions. Over 70 books, journal articles, news articles, academic papers, reports, podcasts, and blog posts were reviewed covering topics on social and group identity formation, belonging, knowledge and truth, rationality, group allegiance and conformity, group identity and sense of self-formation, human emotion, vulnerability, and collaboration. This inquiry was scoped using the project structure (three dimensions of decision-making: individual, relational, and material). The literature revealed the following:

[1] The central problem of the research is that affective polarization inhibits coordination and decision-making, two necessary components of a functioning society.

[2] A gap in the current literature indicates that there currently exists no set of comprehensive principles aligned with this project's objectives to support coordination and decision-making strategies in a polarized society.

Horizon scan. Emerging potential forces of change were identified by conducting a horizon scan. Individual data points are known as weak signals which, when clustered, form emerging trends. Approximately 500 weak signals were gathered.

PROCESS

Systems mapping. Systems thinking is an approach to understanding, synthesizing, and analyzing systems as wholes (Gharajedaghi, 2011). Often, systems are complex, made up of many interconnected parts, and are themselves parts of different or larger systems. The saying the 'whole is greater than the sum of its

parts' is often used to conceptualize systems, referring to the concept of 'emergent properties', meaning that only from the system as a whole, does a particular property arise. This property is not found individually in its parts. The literature gathered was input into several systems design tools to form a deeper understanding of the system:

Stakeholder analysis-a matrix used to map the decision-making power and the hierarchical needs of each key stakeholder. It revealed the power dynamics involved in the system, as well as stakeholder motivations and incentives.

Systemigram-a diagram that maps parts of a system and the interrelationships between them (Boardman & Sauser, 2013). This tool was used to map the high-level interactions of system catalysts (stakeholders and instruments) on the relational dimension.

Iterative process of inquiry—a process that seeks to define a system of varying operative dimensions. It maps the system function (what it does), structure (its components), process (how it works), and purpose (its context) (Gharajedaghi, 2011). This tool was used to understand and visualize how this system escalates on the individual (human) dimension as it pertains to social identity.

System archetypes-patterns of common system behaviours (Senge, 2006). These archetypes formed the foundation for diagramming system outcomes on the material dimension as it pertains to how our social identities affect knowledge creation.

Causal layered analysis-a top-down process of uncovering the multi-layered dimensions of a system by assessing the most visible manifestations (day-to-day recurring outcomes) to

the deep-rooted myths and metaphors upon which the system operates (Inavatullah, 2008). This tool revealed the overview and essence of the current state, including its underlying driving forces.

on the basis of:

STEEPV-a framework intended to promote an all-encompassing inquiry (MaRS, n.d.) of the following factors: social, technological, economic, ecological, political, and values.

OUTPUT

Current system properties. The research analysis revealed key stakeholders, their fundamental needs, and the interactions between them. It also revealed prominent drivers of affective polarization from a human experience perspective and the significant societal consequences that we face as a result.

Evaluation criteria for societal coordinative capacity.

Six criteria are uncovered through the identification of leverage points in the system during research analysis. These criteria were defined according to a lowmoderate-high rating scale that established an ideal score for each criterion. These ideal scores formed the overarching model system score.

quide.

- 8
- 9 emerges stronger as a result.

Affinity diagramming. The weak signals compiled during the horizon scan were clustered and categorized using an affinity diagram. Categories were determined

Potential emerging trends. Clustered weak signals formed a set of potential emerging trends. Relevant trends were selected in alignment with the project

PHASE 2: future states

INPUT

Phase 1 outputs. The current system properties were used to provide structure to the alternative system states; the evaluation criteria were used to evaluate the alternative system states; and the potential emerging trends were used to inform the narratives of the alternative system states.

PROCESS

Futures mapping. Futures thinking, or foresight, is a systematic, research-based approach which recognizes the reality of alternative futures⁸ (Voros, 2001). The goal of futures thinking is not to predict what is to come, but rather to envision alternative futures that exist on a spectrum of likelihood and is often used to inform today's decisions to reinforce resilient and antifragile⁹ systems and structures. Alternative future system states (scenarios) were developed and analysed using the following:

Causal layered analysis-the same systems tool from Phase 1, only this time implemented in the context of foresight. The futures application of the tool is a bottom-up process of uncovering the multilayered dimensions of a system by beginning with a deep-rooted myth and/or metaphor, and working upwards to the most visible manifestations (day-today recurring outcomes) of the system (Inayatullah, 2008). This tool provided a structure within which to form the alternative states, however, the deeprooted myths and metaphors were determined using one of four ways to deal with problematic

Futures is used in its plural form in recognition of many potential outcomes.

Antifragility is a concept and term coined by Nassim Nicholas Taleb referring to a property or quality of a system that allows it to thrive in the face of "volatility, randomness, disorder, and stressors" (2012). Taleb rejects commonly used opposites for 'fragility' such as resilience or sturdiness, because they imply resistance without change. Antifragility takes on stressors and

situations: exit, adapt, force, or collaborate (Kahane, 2017). The alternative states that emerged were those in which society had opted for one of these decision-making approaches.

OUTPUT

Future system properties. Four alternative states and their respective properties emerged.

PHASE 3: transition state

INPUT

Phase 1 and 2 outputs. The system properties of the current and alternative states were used to conduct the comparative analysis. The evaluation criteria assessed all five states independently and comparatively.

PROCESS

Comparative analysis. An assessment was required to validate research findings and outputs thus far, and was conducted using:

Comparative matrix—a matrix that assesses all five (current and future) system states against one another using the evaluation criteria for coordinative capacity. The deviation of each criterion in each state from the model score is noted to highlight overall outcomes across all system states. Key insights from the comparative analysis were used in conjunction with the current system leverage points to produce the output of this phase.

OUTPUT

Theoretical framework for building coordinative capacity. Four core values are proposed to underpin strategic anti-polarization (preventative) and depolarization (mitigative) initiatives from the perspective of the human experience. The core values for building coordinative capacity were expanded on to clarify their connection to this research and the project objectives. This output prompts the need for an impact assessment to determine the efficacy of the values in influencing desired change; in other words, to validate whether the core values could theoretically bring the five system states closer to the model score. An impact matrix is used to theoretically apply the core values for building coordinative capacity to the evaluation criteria for coordinative capacity. This assessment confirmed the theoretical validity of the core values, which warranted further expansion of the values into a theoretical action-oriented framework consisting of guiding principles that could be integrated into strategic anti-polarization and depolarization initiatives from the perspective of the human experience.

Potential opportunities to expand this research could include one or a combination of the following: [1] evaluating the validity of the theoretical framework proposed by this research in a practical research setting; [2] conducting a thorough systems analysis on the governance structure in Canada and a comprehensive inquiry into national and global political and economic factors contributing to affective polarization; [3] exploring this topic through the lens of organizational competency to determine how the concepts investigated and proposed by this research may be transferred to an organizational context.

02-2022

Exploring the current system

[1] Forward-bound: the relational dimension

Power relations

System relations

Leveraging systemic change

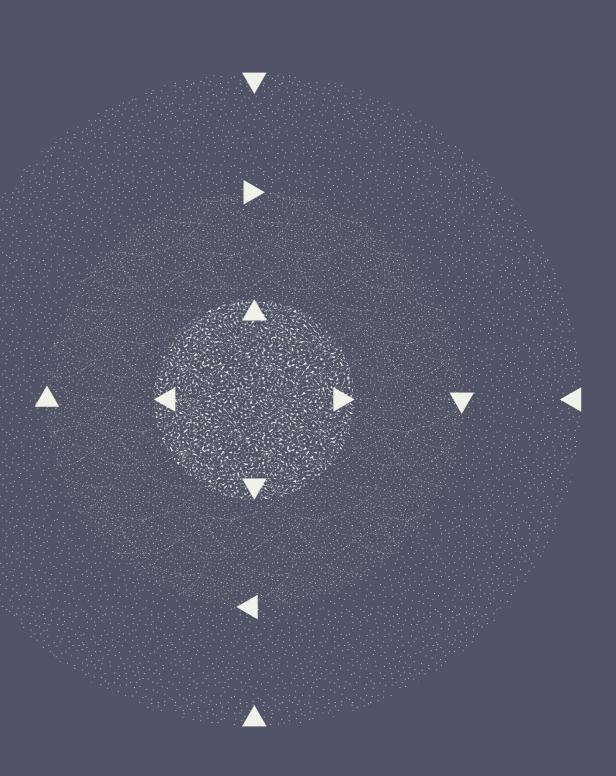
[2] Inside-out: the individual dimension

Forming our social identities Group belonging Leveraging intra- and inter-personal change

[3] Outside-in: the material dimension

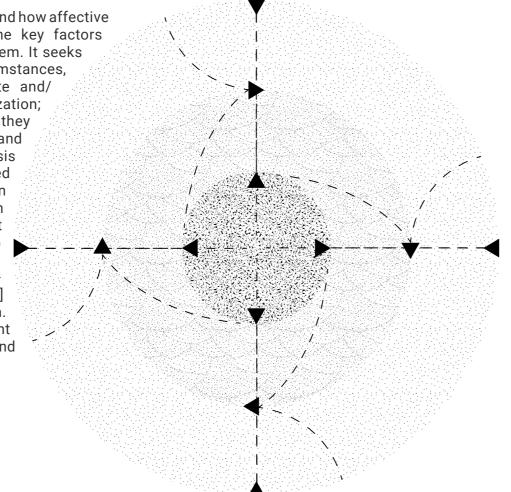
Generating knowledge amidst conflicting identitesThreats to collective knowledgeLeveraging cognitive change

2022: In the Name of Justice



02-2022

This chapter is an exploration of why and how affective polarization operates to identify the key factors shaping the state of the current system. It seeks to uncover the conditions, circumstances, behaviours, and traits which create and/ or contribute to affective polarization; how perspectives are formed, how they escalate, and why they are retained and defended. The contents are a synthesis of the research that has been compiled and analyzed using systems design tools. The narrative is aligned with the three dimensions of the project structure and is thus segmented into three subsections: [1] Forward-bound: the relational dimension, [2] Insideout: the individual dimension, and [3] Outside-in: the material dimension. At the end of the chapter, the current state of the system is presented and explained.



[1] Forward-bound: the relational dimension

Understanding relational interactions: This section focuses on the relational systems of affective polarization—the system in focus. Each tool builds on the previous, and it is through these layers that the system is constructed and understood. In this part of the chapter, key stakeholders pertinent to decision-making and the emergence and escalation of affective polarization are investigated, as well as their positions of power, their needs and motivations, the manner in which they interact with one another, and the mediums through which affective polarization transpires and escalates.

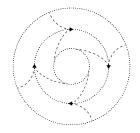
Power relations

Decision-making in our current state is conducted via a network of hierarchically-oriented groups interacting to work with or against one another in service of one larger systemic structure of governance. Polarization is one outcome of these interactions, and more specifically, is the accumulation of certain behaviours enacted by the system's stakeholders that allow it to emerge and escalate. Several of these key stakeholders are identified in the analysis that follows, and each are found to exert and be influenced by varying scales of power. While the research focuses on the Canadian context, our global connectivity means that global stakeholders also play a critical role in the system—especially as it pertains to polarization that occurs online.

For the purpose of this project, power is manifested and exerted in two forms: authority and influence. Authority refers to decision-making power (the level of jurisdiction a stakeholder has over other stakeholders to implement legislation), while influence refers to the range and impact a stakeholder has on other stakeholders in terms of polarizing them.

Influence x authority

The first tool used for the stakeholder analysis is a matrix plotting positions of influence and authority, adapted from Mendelow's Stakeholder Matrix (1991),



in order to reveal the system's power dynamics. Figure 8 depicts four quadrants, where the x-axis represents influence, increasing from left to right, and the y-axis, authority, increasing from bottom to top.

*Note that this matrix presents a highly simplified version of a complex system where many stakeholders are not accounted for, particularly on the basis of authority. The conceptualization, drafting, proposal, passing, and enforcement of legislation in Canada could be researched and analysed as a system in itself, however, a high-level assessment was selected to align with the scope of this project. It was deemed necessary nonetheless to provide a brief summarization of Canada's governance to form a basic foundation of understanding how decision-making and change are implemented in Canada. This will provide valuable context in Chapter 3 as we explore potential futures outcomes.

Low Influence, Low Authority



made by the Canadian government.

Nonpartisans¹ are Canadian citizens who are not aligned with any one political party, and may tend to vote on any other basis not related to the party itself. They are considered to have low influence, not for lack of political interest. Rather they may be less likely to exhibit behaviours more common amongst partisans which escalate polarization, and are less likely to be influenced themselves on only the basis of group belonging. Although they have the power to vote for an elected government which grants some level of authority, they are not considered to have a necessarily high level of authority over other stakeholders.

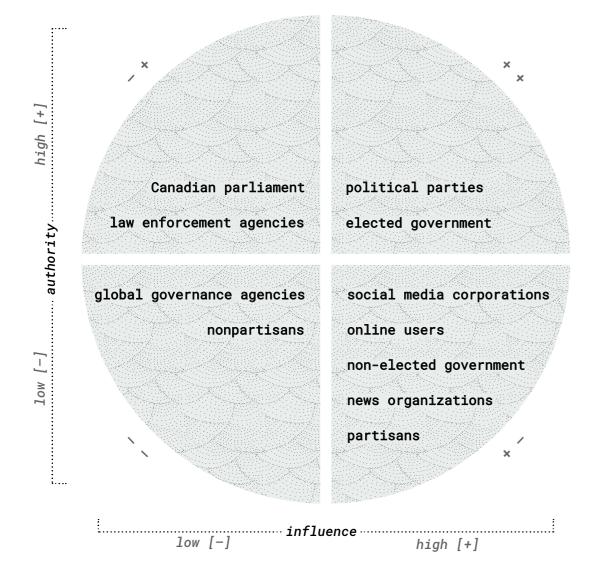
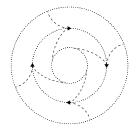


Figure 8 | Stakeholder matrix representing influence and authority

to partisans.



Global governance agencies include any organization whose mandate is to achieve and maintain global cooperation and advocate for human rights. This group of stakeholders has some influence on general global direction and some level of authority for participating members, but in this context both are ranked as low. They do not currently have the influence to significantly sway the opinions of a mass amount of people in Canada, and they cannot directly impose legislation within Canada, although they may in some cases influence agreements or decisions

High Influence, Low Authority

Social media corporations have jurisdiction over their communications platforms. Censorship has historically been reserved for government or religious entities, but for the first time, we are experiencing online speech regulation enforced by "profit-driven private companies" (Berkowitz,

2021). This form of power makes it challenging to assign the stakeholder to a high or low authority status, but it is determined that they have low general legislative authority at the least in relation to governing authorities. Social media corporations also exert high levels of influence based on platform and algorithmic design (influencing how users engage and the degree to which they engage), as well as how they collect data, the kind of data collected, and what they do with that data once collected.

Online users are active users of the internet and social media platforms. A 2018 Statistics Canada report found that about 78% of Canadians are regular social media users (Fonberg et al., 2021). This number is even higher (over 90%) for Canadians under 34 years of age. In July 2022, it was reported that 4.7 billion people use social media worldwide (Kemp, 2022). With access to a significant portion of the world's population and a wealth of content, online users have the potential for a high degree of influence. This is especially so with those who create, share, and engage with politicized content. All online users contribute to the online sphere,

Nonpartisans in this context refer to Canadian citizens, solely for their voting eligibility (authority), though all people permanently or temporarily residing in Canada may have influential power, despite having less authority. The same applies but this specific subgroup may exert more influence in a polarized context. Despite having low authority in legal terms, online users may exert another form of authority: social censorship.

Non-elected governments make up the public service, and are policy-developing branches of the federal, provincial, and municipal governments. They develop policies at the level of government they coincide with and according to the direction of the political party in power at the time. They have low direct authority since they act on behalf of the political party in power, and have no authority to enforce policy, but can easily access the public via government websites and media channels, and exert higher levels of influence through public communication via press releases and public statements—particularly if the topics of communication are politicized.

News organizations include any Canadian or international news media organization. They have no authority over other stakeholders, but do have a high degree of influence in terms of the content they choose to include or omit in their reporting, the means they use to reach the public, and the language or perspective employed in the report. This group of stakeholders could be segmented further into organizations that remain ideologically neutral and adhere to the principles of journalism, and those who tend towards bias. Biased sources may draw in viewers who become or are already aligned with the perspective presented, leading to more influential power.

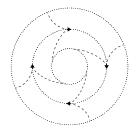
Partisans are Canadian citizens aligned exclusively with one party which informs their voting decisions. They may have higher influence than nonpartisans as they may be more likely to exhibit behaviours that escalate polarization, and may be more likely to be influenced themselves. Although some level of authority is granted in their power to vote, they are not considered to have a necessarily high level of authority over other stakeholders.

Low Influence, High Authority

The Canadian Parliament is composed of: [1] the monarchy and its representatives, which, according to the Canadian Constitution, has "executive power" over Canada (Justice Laws Website, 2022). however, in practice those roles are delegated to Canada's elected politicians (McCullough, 2022b); [2] the Senate, a group of appointed senators who also tend towards minimal to no intervention in terms of their legislative involvement; [3] the House of Commons, the group of elected members of parliament (MPs) who hold the most leverage when it comes to federal decisionmaking. The monarchy and Senate will be considered to have both low influence and authority in this context, so in this case, Parliament refers specifically to the House of Commons. It may be argued that Parliament has a high level of influence over other stakeholders, which may be true on a long-term, cultural level, however on a shorter-term basis. MPs do not have the public-facing influence equal to that of the Prime Minister or provincial Premiers. Authority on the other hand may very much be exerted by Parliament in the passing of legislation. A critical note to add is that Canada has a "strong party discipline", meaning, "all MPs of a particular political party are expected to vote the same way all the time-the way the party leader wants" (McCullough, 2022b). Those who vote against the party are likely to be penalized, and for this reason, they vote as they are expected to in almost every circumstance.

Law enforcement includes all government-operated divisions at any level of jurisdiction which enforce and settle public and civil law disputes, such as municipal, provincial, and federal officers, and judges

that constitute both the Provincial and Federal courts (McCullough, 2022a). All are considered to have high authority in enforcing legislation, however, the entity with the most authority is the Supreme Court of Canada. The Supreme Court is able to overrule all other courts as well as Parliament-meaning, the Supreme Court has the authority to "overturn a law passed by Canada's elected government" (McCullough, 2022a). The judiciary is not considered to have a high degree of influence for the purpose of this research, although considering the media and the public tend to follow along with Supreme Court rulings, and they can initiate controversy, there are circumstances in which this stakeholder would belong in the high influence, high authority quadrant for its potential to provoke public polarization.



High Influence, High Authority

Political parties, and their respective ideologies, are the focal point of polarization in the current system context. Despite being the same as elected government, the two labels have different connotations. Political parties in today's ideologically divergent and polarized context fulfill the role

of group belonging for partisans and have become a means of division (us vs them). As topics become politicized, the parties' response, stance, and/or commitment to a particular ideological position exerts a high level of influence over the public, particularly in their choice of content communicated and use of language. Additionally, while parties cannot pass legislation without the appropriate process of approvals, they do have authority over the direction of policies made, the degree of which is determined by the sum of representation elected as a whole.

Elected government constitutes political party representatives that have been voted into office by the public. The connotation with this label is that of fulfilling a constitutional duty, rather than engaging in what has become a tool for division and competition for political gain. On a federal level, an elected government involves the Prime Minister as the leader of their party, and the MPs that form the House of Commons, each as a representative of their respective parties and electoral ridings. Provincial elected governments operate similarly to the federal government, simply on a smaller scale (McCullough, 2022c). Municipal elected governments are led by a mayor and a city council "act as the legislature" (McCullough, 2022c). Each level of government is responsible for different aspects of public service and distinct types of legislation. The federal government is the only level with authority over criminal law. On a provincial level, law is focused on things such as labour, health, and education, while municipalities are responsible for zoning and bylaws, for example. Justifications for influential and authoritative power are considered the same for elected governments as for political parties.

Authority x needs

The next tool supporting the stakeholder analysis is one that seeks to understand stakeholder behaviours in the context of their respective levels of authority. Behaviours are understood by uncovering needs, as needs fuel motivation, and motivation prompts action.

To simplify the analysis, stakeholders will be synthesized from those identified in the previous section into three general categories: media, citizens, and government. A high-level depiction of stakeholder needs is plotted on Figure 9. The x-axis represents stakeholder authority, increasing from left to right, while the y-axis represents the priority of stakeholder needs, and increases from bottom to top. Needs are placed in hierarchical order pertaining to each stakeholder, but also comparatively across stakeholders. The black arrows signify connections between stakeholder needs, where one need supports thefulfillment of another. Insights gained from the research and analysis are synthesised in the following paragraphs.

Media in this context refers to the organizations that distribute or enable the distribution of media content. In this analysis, this stakeholder is divided into news

organizations and their various forms of broadcasting, as well as social media corporations and their platforms.

Both forms of media share a profit-seeking priority, meaning they have the motive to escalate polarization among citizens (exploiting the virality of visceral language)² as well as the capability (due to their influential power) to do so. This is compounded with virtually no personal incentive or enforced regulation to discourage its escalation.

As mentioned in the previous section, social media corporations are responding to the complexities of online discourse management, simply because the discourse occurs on their private, publicly available service. Content regulation primarily occurs when users have violated the organization's terms in some way, and is in place to prevent the spread of harmful, violent, or inappropriate content, ostensibly for the benefit of mass users' safety. Despite current intentions, not only is online speech regulation an immense and everevolving endeavour, it also transfers a concerning amount of responsibility and authoritative power into the hands of already powerful profit-driven entities.

Citizens refer to both nonpartisan and partisan Canadians who essentially share identical needs. What differs, is that partisans' identity formation may support increased media engagement, where viewers' attention is exploited by media organizations. This relationship can escalate polarization, while having increasingly negative implications on the quality of content broadcasted to the public.

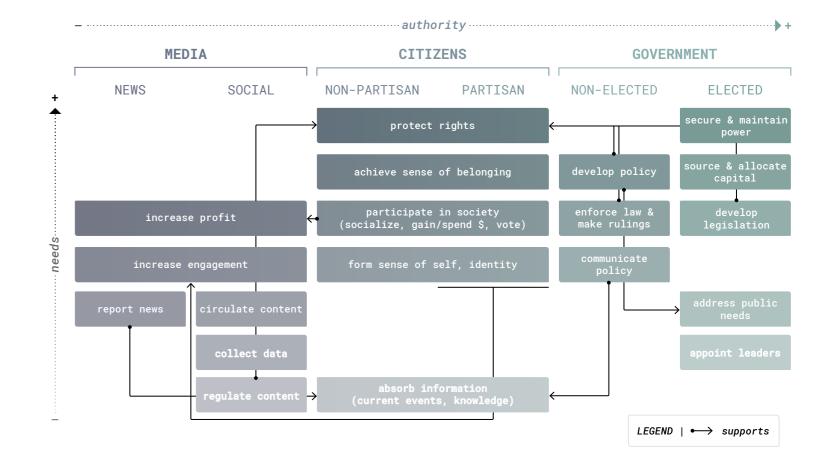


Figure 9 | Stakeholder hierarchy of needs matrix

² This refers to the exploitation of our human tendency to pay more attention to "visceral" language. Studies have found that people are more likely to share or engage with content that uses words that have a combination of both moral and emotional connotations (words such as 'greed', 'abuse', 'honour', etc.) (Brady et al., 2020). The use of such language is a tool implemented by stakeholders to capture more attention and increase engagement with their platform and/or content.

Government includes elected (political party representatives), non-elected (public service, i.e., policy-makers and law-enforcement) representatives of the government. This group holds the most authority, with the capacity to propose, develop, and enforce policy and law.

They also generally operate as a whole to fulfill the priority needs of citizens. This analysis revealed a conflict within the role of elected government: while the presence of competing and diversified ideas are a critical element in a democracy, it is the nature of competition that the priority be to win. This allows candidates and elected representatives to prioritize securing and maintaining power over fulfilling their public duty: managing the nation at various levels via legislation and resource sourcing and allocation.

System relations

Expanding on this understanding of stakeholder power relations and core motivations, media, citizens, and government can be analyzed in context with the instruments that facilitate their interactions and the environments they operate within. Instruments for this research purpose are defined as inherently neutral and inert entities mobilized by stakeholders to achieve an objective. With certain stakeholder motives and their respective levels of influence and authority, these inert entities have the potential to become instruments of power.

Catalysts and agency

The system interactions are synthesized into a systemigram: a simplified diagram of an otherwise intricate, interconnected system of interest (Boardman & Sauser, 2013). It is presented in a stylized format

of parts within wholes to represent the multilayered and complex nature of the system. The same three stakeholder categories identified in the previous section-media, citizens, and government-are set in an environmental context (in person and online) along with subgroups of stakeholders and influential instruments, all of which will be generally categorized as *catalysts*. These catalysts are interconnected as a system via their respective expressions of agency (directional force), represented as black arrows on the diagram.

Insights derived from catalyst interactions

Society's control centre. Media as a categorization is as multi-layered and complex as the system in focus itself. Figure 10 only captures a handful of its dimensions, yet, this analysis is sufficient enough in recognizing that media is the route through which much of today's societal discourse takes place. News organizations and social media corporations play a central role in the system-facilitating the dissemination of information throughout-which signifies substantial leverage over all other stakeholders, particularly as it pertains to polarization. With the right motivations and conditions in place, any topic has the potential to become politicized (McRaney, 2020). Biased sources or content aimed to attract rather than inform for the sake of profit poses a threat to our collective knowledge and our perceptions of the world. As the world continues to evolve in complexity, regulations on and engagement with the companies that own, house, or broadcast content must evolve in parallel, adapting and anticipating change. A stronger cultural commitment to good journalistic practices, based in evidence and curiosity might be a start (Rauch, 2021). For those consuming media on the other hand, media literacy is becoming more crucial. Technology is making it increasingly more difficult to

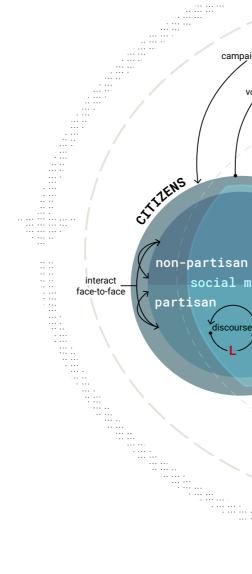


Figure 10 | Systemigram of system catalyst interactions

GOVERNMENT . arty platform campaign to communicate via elected vote for report about enforce non-elected legislation nfórm set by policy direction MEDI develop _____ policies oversee, adjudicate escalate polarization on social media users social media corporati<u>ons</u> innovate to engage more regulate speech of_ Platforms collect data on design personalized content algorithms post, share, like, comment o ONLINE reate & consur ←→ catalyst agency LEGEND | IN PERSON stakeholder (solid shape) instrument LANGUAGE (patterned shape) environment

2022

discern misinformation and disinformation³, which requires that consumers of content do so with a critical lens-which will be defined as a mixture of moderate skepticism and an abundance of curiosity.

Language is power. A critical catalyst pervades the system which can unite us or divide us-it is employed by all stakeholders and forms the foundation for how instruments are leveraged: language. In this context, language is not limited to words. Rather it encompasses all manners of transmitting information verbally or visually (e.g., words, symbols, images, expression). Being able to assess incoming information and express information outwards gives us agency, thus the use of language itself is an assertion of power (Berkowitz, 2021). The significance of language in our lives implies a need for understanding the various forms in which it manifests, how it can be employed, and the impacts of those manifestations. Language can also expand our worldview; we can only perceive the world to the extent that we can understand and describe it. In this way, language and understanding are mutually dependent. Language is "our portal to meaning-making, connection, healing, learning, and self-awareness" (Brown, 2021). and because it is so intertwined with our experience, it accordingly requires an understanding of ourselves within the context of our surroundings. It is for this reason that we must know how to name our experiences and how to communicate them, which involves a level of reflexive and interpersonal vulnerability.

An antisocial social system. Today's context, particularly following the onset of the COVID-19

pandemic, grants fewer opportunities for face-toface communication and interaction, particularly with people who have dissimilar beliefs, opinions, and worldviews. Humans depend on social belonging, and if a significant portion of our social interactions take place in an online environment where anonymity and "antisocial system design" (Rauch, 2021) are central features, it can elicit antisocial behaviour from us in return. Deindividuation (the perception that we are anonymous) is associated with antisocial behaviour and is one of the primary phenomena that allows us to commit horrible acts towards others (Shaw, 2019). It has been found to be a precursor to destructive online behaviours such as cyberbullying (Bartlett et al., 2016). With so many Canadians regularly using social media (and an even greater percentage of young Canadians), it becomes the opportune vessel for hostility and escalating polarization⁴ in a number of ways. This insight presents the opportunity for curators of the internet to insert principles of positive social behaviour into the design of our online environments.

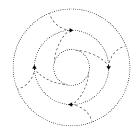
Leveraging systemic change

initiatives to do so.

Balancing political regulation

The first stakeholder group is one with greater authority than both the media and the public: the government and all its levels. Government has the authoritative power to implement and enforce policy and law, however, legislative initiatives only extend so far before they begin to create other threatening outcomes. In our democratic society, we rely on our leaders and the electoral structure to protect our civil liberties and facilitate our coordination. This necessitates that our governing authorities balance varying regulatory interventions across the many domains of society.

One of those domains pertains to speech. Human civilization has a historical record of suppressing individual expression, imposed primarily by institutions in power due to the threat that free speech poses to their authoritative position (Berkowitz, 2021). Because speech itself is an assertion of power, it is a natural response to censor that which threatens us. Censorship in any form is as a result, a sign of weakness in disguise. Protecting the entitlement we each have regarding personal freedom of expression is critical, but it is also incredibly challenging. To live amongst free expression is to grant it to every person. In other words, it must be an equitable liberty, granted to even those who we may not wish to hear from, or anyone who may express what we consider to be harmful or "dangerous ideas" (Berkowitz, 2021).



This chapter's stakeholder analysis has revealed the high degree of influential power that the media currently holds over all other stakeholders. It highlights a need to decentralize this power, which may be enacted by leveraging the two other key stakeholder groups. Ideally, these stakeholder groups engage in congruous

Beyond our personal expressions, we rely on free expression to obtain information about our world. This requires that the media be reasonably unregulated and operate without strict content restrictions so that we may remain accurately informed about current events. emerging ideas, and new discoveries. Governments in this domain may take the role of a sweeping facilitator, in which policy, law, and general decisionmaking are targeted towards shaping a society that incentivizes or creates the conditions for evidenceseeking practices to prevail in reality-based disciplines such as journalism, science, and philosophy (Rauch, 2021). Our culture should be one which prioritizes and rewards truth and transparency rather than increased media engagement and the profits associated with that engagement. Incentivizing good journalistic, scientific, and philosophical practices can cultivate trust in our institutions and in the information generated and distributed by them.

That said, we find ourselves in the midst of a historical anomaly caused by the rise of the internet and social media. Never before has authoritative power been granted to corporations and the people who work at those corporations to define public censorship policies and enforce them (Berkowitz, 2021), (Rauch, 2021). Censorship imposed by any entity is problematic, but the enforcement of censorship policies by profitseeking entities is particularly concerning.

Ultimately, it must be made clear that censorship as a whole, does not work (Berkowitz, 2021). We can remove manifestations of ideas, but never the ideas themselves. Speech is a symptom of an underlying condition; treating the symptom as opposed to the cause is as oppressive as it is unproductive.

Employing personal agency

The other stakeholder group is the one for whom media is designed: its consumers, represented by the public

³ Misinformation is false information which may be unintentionally disseminated, while disinformation is false information employed with the intention of deceiving.

⁴ For more information on how polarization presents online, Build Up has produced a theoretical framework detailing archetypes of [affective] polarization on social media (2022). It uses a synthesis of various related concepts from social psychology to create five archetypes: attitudes, affiliation, interaction, interests, and norms, onto which they have mapped signals of affective polarization (user behaviour) as they present on social media, based on their research and analysis.

as a whole. One way to reclaim our individual power is through media literacy, curiosity, and cultivating critical thinking (Rauch, 2021), (Pinker, 2021). Together, these work to support our ability to detect false information when it is presented to us, and to prevent us from spreading false information ourselves. As media consumers, we have the choice to self-manage when we engage with content; to employ curiosity when interpreting information, its source, and the intentions behind it prior to reacting or responding.

Even so, any personal agency that leverages information is contingent on the forces that govern us. For citizens and the public to employ personal agency requires commitments from our leaders and institutions to establish and preserve equity, and to operate with reasonable levels of transparency. The public needs access to a certain amount of information about policies, processes, rules, and actions of our governing entities to keep them accountable, and to inform our voting decisions (Transparency International, 2022). Transparency supports democracy; hidden corruption undermines it and at the same time reduces public trust in institutions.

One form of agency that is solely dependent on individuals is actively seeking to understand ourselves to reveal insights not only about ourselves, but the nature of humanity. This process begins with the recognition of the mutually responsive relationship between our human experience and our environment. Our humanity shapes our material and non material ⁵environment, and this environment shapes us in

return. The systems we operate within exist because we are human, and with our humanity comes certain biological and psychological functions. This brings us to the heart of this research: why polarization emerges on a human, individual level.

[2] Inside-out: the individual dimension

Understanding the individual experience: This section is focused on understanding the human factors that provoke affective polarization, in particular, how our social identities can fulfill our biological need for belonging on one hand. and can lead to a contest of moral superiority and hostility between social groups on the other. Ultimately, the negative outcomes may be mitigated by managing our discomfort associated with uncertainty, increasing our tolerance for dissent, and pursuing connection, rather than conformity.

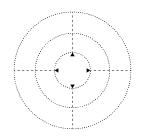
Forming our social identities

Minimal group paradigm

The most fundamental explanation for affective polarization may well begin with our human instinct and readiness to form social and group identities over just about anything, and to tend almost immediately towards ingroup bias for these groups (Mason, 2018).

The origins of minimal group studies are largely attributed to social psychologists Henri Tajfel and colleagues following their experiments in the 1970s. These studies set out to observe intergroup relations⁶ in a social vacuum to identify the "minimal conditions in which an individual will, in his behaviour, distinguish between an ingroup and an outgroup" (Taifel, 1974).

This social vacuum was created by eliminating all variables typically involved in conflict amongst groups, leaving only one defining element, such as a single and arbitrary identifying categorization for two distinct groups. In just one study of many, participants were, at random, assigned to a group that was said to either prefer the art of Paul Klee or the art of Wassily



Kandinsky. The groups had no interaction with ingroup or outgroup members, and no other information was provided to them about the members of either group. and yet, participants consistently demonstrated preference towards their ingroup members whether or not it benefited them personally to do so (Tajfel, 1970). The key finding is that we naturally desire success for our groups-in other words, we want them to win (Mason, 2018).

Minimal groups studies have contributed significantly to our understanding of social psychology, however, they are only able to explain the emergence of ingroup preference (or ingroup love) and, at most, outgroup neutrality. They do not account for the factors which create the conditions for expressions of ingroup love to become expressions of outgroup hate (affective polarization). This type of escalation originates in certain contexts as a result of an allegiance to our social identities-which is inevitable from time to time- and is a consequence of our human biology.

Social identities & our sense of self

From the research of Tajfel emerged the concept of social identity⁷, which asserts that our groups can have a strong hold on us because they inform our sense of self. Additionally, the more we identify with a particular group, the stronger and more passionate our behaviours, beliefs, and emotional reactivity become, thus increasing the potential for polarization (Mason, 2018). This is true for three reasons that relate to our sense of self.

Muzafer Sherif preceded Taifel with his research on intergroup relations and intergroup conflict in the 1950s and 60s, and defines the former as "the relations between two or more groups and their respective members" (Sherif, 1958). Intergroup conflict may refer to any form of disagreement, tension, or violence between two groups.

Social identity: a part of a person's sense of self that emerges from an active membership in one or more social groups, as well as the meaning behind those memberships (Tajfel, 1974).

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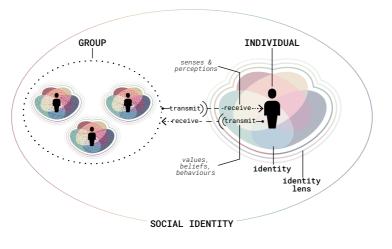
⁵ Our material environment relates to the physical and tangible products of our operations, such as infrastructure and our physical creative outputs, while our non material environment includes intangible traits, such as culture, values, and ideas.

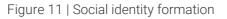
Jay Van Bavel and Dominic Packer⁸ express that our sense of self is inherently linked to others because our identities and any labels we use to define them evolve from how we relate to those around us (2021). This is true even for traits we identify as individual or personal to us-which are only made meaningful because of an implied comparison (i.e., to be kind is a notable trait because of the potential for one to be unkind). We may also consider our identity directly in relation to others (e.g., partner, friend, sister) or as part of a collective (e.g., Canadian, student, woman). All of these layers of our identity which are considered part of me, are actually rooted in notions of we.

Social identities also impact our interpretation of the world through our senses and perceptions, filtering the inputs we receive from our surroundings: "when you adopt an identity, it is as if you put on a pair of glasses that filter your view of the world" (Van Bavel & Packer, 2021). This is a valuable human feature, considering the constant stream of stimuli we are exposed to at any given moment, and the vast uncertainty about the world around us. Our social identities help filter these inputs into interpretations that can make sense to us, even prompting our sense of smell, taste, sight, hearing, and preferences to activate in alignment with those identities. What's more, the strength of our ties with our social groups can affect the degree to which our perceptions are affected by a group.

For the same reasons, our social identities help filter or inform how we should conduct ourselves. In other words, they guide what we transmit out into the world, including how we should behave, what we should believe, the values we should hold, and the language we should use, in the form of social norms and constructs.

Figure 11 maps the reciprocal process of transmission and reception between us and our groups to form our social identities. What we transmit to others and what we receive from others is filtered through our social identity lenses. In essence, we are our social identities. We tend to be invested in our groups because they are intertwined with our sense of self, and anything personal to our groups becomes personal to us.





Escalation: us vs them

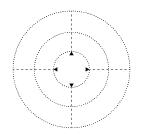
Recalling the definition of affective polarization, 'the degree to which expressions of outgroup hate surpass expressions of ingroup love', it would be valuable to highlight a couple of expressions of significance that emerged in the research.

Expressions of ingroup love can be supported by factors such as identity signaling or a concept known as optimal distinctiveness. Identity signaling is an

important element of group membership (Van Bavel & Packer, 2021). It is a form of active participation among group members, but more fundamentally. it allows individuals to identify other ingroup members. A signal of identity can be anything at all, politicized or not, such as a sports team logo, a cross around one's neck, or, since the onset of COVID-19, a mask on one's face (McRaney, 2020). It is often associated with the term 'virtue signaling' which has negative connotations, implying the behaviours are perceived to be inauthentic and done only as a means of endorsing one's reputation. Social media allows for high visibility identity signaling, where users can engage on their social communities to indicate where their political partisanship lies.

Optimal distinctiveness is a concept which proposes that people hold two contradictory, core needs: the need to belong and the need to be different (Brewer et al., 2010). Groups which are able to fulfill both needs are the most compelling for ingroup members. One Canadian-specific example of this phenomenon is the Toronto Raptors' 'We the North' campaign, which capitalized on its position as the only Canadian team within the NBA (Dunne, 2019). The campaign was successful in uniting a predominantly hockey-oriented nation over a basketball team. It brought about a sense of national pride because it differentiated the Raptors from any other team in the league, and from it evolved a reinforced identity for Torontonians in particular.

With other expressions, we digress from a harmless and natural tendency to prefer our ingroup members, towards actively distancing ourselves from outgroup



members, at times to the point of justified violence. When our groups dictate what we should value and believe, and how we should behave, an underlying message is conveyed: how we 'should' conduct ourselves implies it is the correct manner to conduct oneself. If there is a correct manner, there must also be an incorrect one. This initiates the process of othering: where we perceive others as "inherently different to ourselves" (Shaw, 2019). It becomes us, the good and virtuous, versus them, those who are wrong and fundamentally bad people. When faced with a group whose moral principles and prescribed worldview seem to exist in opposition to our own, we experience the instinct to protect our group at all costs, sometimes to the point of emotional or physical harm; "...and when we do commit harm against others, it is often because we think it is pursuant to a larger, virtuous goal" (Van Bavel & Packer, 2021). Othering can present itself in what we believe about the outgroup, the way that we speak about them, and the way we behave towards them. This may present as moral righteousness, and in extreme cases can go so far as moral disengagement⁹ and dehumanisation¹⁰ (Kalmoe & Mason, 2022), (Shaw, 2019).

Enemyfying, a similar experience and term coined by Adam Kahane¹¹, is the perception and behaviour that "the people we are dealing with are our enemies" (2017). In this state, we perceive people as a source of harm, and as the reason that the problem we are facing exists. Enemyfying occurs on any level, from political discourse, to our individual daily lives. But to engage in effective problem-solving and collaboration, Kahane

Moral disengagement occurs when perspectives justify hostility and violence against perceived opponents. 10 Dehumanisation is a phenomenon where we stop being able to perceive others as people, instead perceiving them to be

11 Adam Kahane is the Director of Reos Partners where he is a global facilitator of complex, seemingly impossible collaborative initiatives faced by business and government organizations (Reos Partners, 2022).

⁹

subhuman.

Jay Van Bavel and Dominic Packer both have PhDs in Psychology, and are research professors and co-authors of their book, 8 The Power of Us (Jay Van Bavel & Dominic Packer, 2022).

challenges a myth we may be familiar with: 'If you're not part of the solution, you're part of the problem'. asserting that in fact we cannot be a part of the solution if we do not see ourselves within the problem. Unless we intend to implement a solution which requires force, using a unilateral coercive approach, we cannot reasonably and accurately assess the issues we face without a complete understanding of the systemincluding our role within it.

William Braun's escalation system archetype (2002) may be used as a foundation to represent the hostile nature of partisanship and how it erodes the coordinative capacity of two parties. The escalation archetype represents escalating retaliatory behaviours between two parties, whose individual actions are perceived as threats by the other party. Figure 12 represents two balancing loops¹² the causal relationship between two hostile partisan groups. A plus sign (+) indicates an increase of the factors presented, while a minus sign (-) indicates a decrease. The 'o' refers to growth that occurs in an opposite direction, which could result from a '+ and -', or a '- and +' relationship between two factors. The 's' refers to growth in the same direction, resulting from relationships between factors formed by either '+ and +' or '- and -'.

Group belonging

Health implications of belonging

So far in this section of the chapter, it may appear that the argument being formulated is that social and group identities are an inherently problematic human instinct. This is not the intention, in fact, achieving a sense of belonging in our social groups satisfies a basic human need. Not belonging on the other hand, has been found

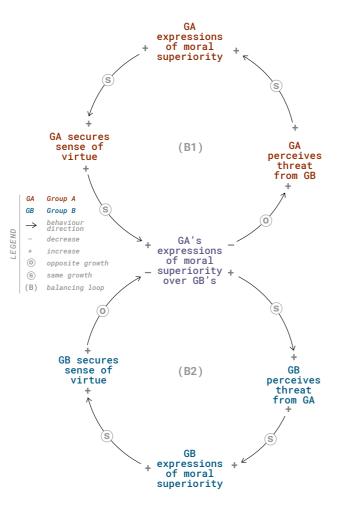


Figure 12 | Escalation system archetype: a moral superiority contest

to have mental and physical health implications (Van Bavel & Packer, 2021).

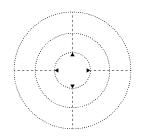
The primary and biological explanation for our tendency to form groups is known as tribalism or tribal

sentence to death.

In our current context, this biological need has remained despite the absence of predatory threats, and presents itself as a need for belonging. An absence of belonging is considered a form of social pain, which psychologists Naomi Eisenberger and Matthew Lieberman define as:

"...the distressing experience arising from actual or potential psychological distance from close others or from the social group. Psychological distance could include perceptions of rejection, exclusion, noninclusion, or any socially-relevant cue that makes an individual feel unimportant to, distant from, or not valued by important relationship partners" (2005).

Researchers across multiple disciplines have explored this concept, and the common finding appears to be the real health implications associated with not belonging, and similarly with isolation and/or loneliness. From a neurological perspective, studies have identified a relationship between social pain and physical pain, where it appears that experiencing social pain can affect our perception or sensitivity to physical pain and vice versa (Zhang, Zhang, & Kong, 2019). Research also shows that social and physical pain rely on "shared neural circuitry", meaning, "negative experiences based on social pain can activate the brain areas related to the emotional components of physical pain" (Zhang, Zhang, & Kong, 2019). From a sociological and psychological perspective, sociologist Robert Putnam equates the harm of smoking cigarettes daily and belonging to no groups, implying that both quitting smoking or joining a group would have approximately equal impacts on one's health (2000).



psychology. It is essentially a survival mechanism attributed to our deep-seated need to be protected by our group from external risks such as predators or other threatening groups (Vadantam, 2021). In a tribal context, social ostracization is almost certainly a

Conformity & allegiance

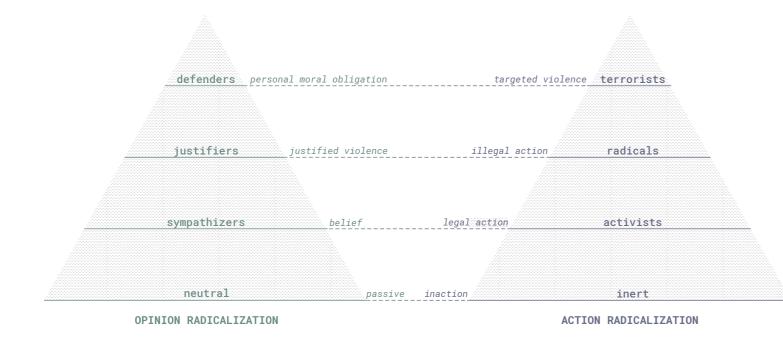
Being aware of the relationship between belonging and our well-being, it is perhaps not surprising that we seek to hold onto our position within our groups, and we do so by means of conformity. Conformity allows us to coordinate to achieve objectives which can be anywhere from favourable and positive, to unfavourable and negative, depending on the perspective that the conformity is supporting, and the perspective of the recipient or observer of the conformity.

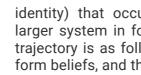
As mentioned previously, there is a point in our social identity formation at which we naturally develop ideological and behavioural social norms to define what the group is and what it is not. In this way, our groups define the boundaries within which we should think, speak, and behave. As a result, in order to belong to a particular group, we may consciously or subconsciously conform. In other words, we may think, speak, and behave in the ways that we perceive others in the group are thinking, speaking, and behaving (Van Bavel & Packer, 2021).

That is not to say we cannot explore outside of those boundaries, but often the risk of social ostracization from the groups that hold the greatest significance to us prevents us from straying too far. If or when we do stray from those boundaries, it is an active rejection of groups we once belonged to. In this case we may choose to seek belonging among different groups that better suit our ideological incompatibilities.

Further, belonging is not a binary phenomenon; the strength of our allegiance can vary. Just as our devotion can stray, we can also become more deeply devoted, surpassing the boundaries and expectations of conformity into radicalization-this is one example where conformity can pose a danger to individuals, groups, or societies. The Two-Pyramids Model (McCauley & Moskalenko, 2017) was developed in the

¹² Balancing loops represent relationships in which a gap exists between a goal and reality (Wardman, n.d.). In a balancing relationship, factors exert behaviours that attempt to close the gap between these two states.





In this tool, function is defined as the activity needed to achieve an outcome (what does the system do?);

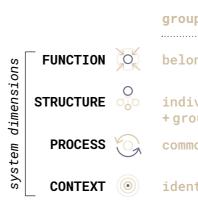


Figure 13 | Two-Pyramids Model (McCauley & Moskalenko, 2017)

context of understanding political radicalization as it pertained to terrorist violence, but can also be valuable in understanding how an individual or group's stronger allegiance may contribute to or align with extreme levels of affective polarization in radical cases.

Figure 13 differentiates the levels of radicalization between action and opinion, as each have respective psychological explanations, however there is a clear relationship between the progression of the two. The first level is a neutral stance and inert energy for a cause; the next level is a belief in a cause, which may be associated with legal forms of activism; the third level is justification of a cause, which rationalizes activism by means of illegal action; finally the fourth and most extreme level represents a deep personal and moral obligation to a cause, to the point of violence against others.

Conformity can certainly have adverse and destructive effects, and while these instincts are within us, most of us do not resort to extremism. Its core function is coordination, and any byproducts of this process are circumstantial.

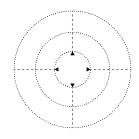
Social identity: from group formation to belief protection

To further understand the process of group belonging and how it escalates towards moral righteousness, an iterative process of inquiry was conducted (Figure 14). Iterative inquiry is a method and tool designed by Jamshid Gharajedaghi (2011), which seeks to simplify and understand a system in multiple levels and across four dimensions (function, structure, process, context). For this analysis, the tool is applied to a subsystem (the escalating trajectory of an active and salient social

Figure 14 | Iterative inquiry: the trajectory of an active and salient social identity

structure is the cumulative components or catalysts that make up the system (who and what is involved?); process has to do with the activities that occur among catalysts (how does it work?) and; context is related to the system's overarching purpose (what is the operating environment created by the system?). These four dimensions of the system are intersected with four levels of the system: group formation, norm formation, belief formation, and belief protection.

Group formation is the first dimension; its function is to belong. Belonging is executed with one individual and at least one other individual (for this sake, we will call that



identity) that occurs within and contributes to the larger system in focus (polarization). In essence, the trajectory is as follows: we form groups, form norms, form beliefs, and then protect those beliefs.

extra one or more people a group). Belonging between two or more individuals is achieved via a commonality, and the context or output is a shared social identity.

Norm formation is the second dimension: its function is to conform. Conforming is conducted with the two or more individuals from the group formation, as well as a

system levels						
up formation	>	norm formation	\rangle	belief formation	>	belief protection
ong	>	conform	>	justify	>	reinforce
ividual oup	\rangle	+shared norms	\rangle	+shared beliefs	>	+shared sources +shared spaces
nonality	>	agreement	>	communication	\rangle	congregation & dissemination
ntity	>	principles	\rangle	worldview	>	virtue

set of shared norms. These shared norms emerge as a result of agreement, and the cumulative output results in established guiding principles for how one should conduct oneself.

Belief formation is the third dimension; its function is to justify the formulated guiding principles and an emerging belief system. As such, the relevant attributes are the addition of shared beliefs, which are established via verbal and non-verbal communication amongst the group. The context or purpose of this level is the framing of a worldview.

Belief protection is the fourth and final dimension of this system: its function is to reinforce all that has been formed up until this point: the individual and group's identity, their guiding principles of conduct, and their worldview. The structure required now also includes shared sources and shared spaces, where congregation and dissemination of information occurs. The context of belief protection is the creation and validation of virtue.

Perhaps as this table and its set of outcomes are revealed, you envision a certain type of group. The reality is that this process is in and of itself neutralit is the nature of social identities. They simplify our existence in a complex and ambiguous world by guiding us towards how we should behave, what we should believe, and the values we should hold. Whether those guidelines produce preferable or undesirable outcomes is ultimately subjective.

Navigating internal complexity

At any given time, we experience a range of complex, interconnected internal processes, some of which are self-governing, while others are a reaction to our external environment. Addressing the core function at the group formation level, our need to belong, poses an underlying question: what does it mean to belong? Not in the sense of what does it take for one to belong to a group (e.g., conformity), but rather, what are the inner experiences associated with it, and how do we achieve a level of belonging that genuinely fulfills our need for it?

Brené Brown¹³ asserts that there is a distinction to be made between belonging and 'fitting in'. She defines the nature of true belonging as an intrapersonal and

social acceptance of our authentic selves (2021). Fitting in. on the other hand, involves active and persistent conformity-it requires us to change who we are in order to create the illusion of belonging. In her research, participants report perceptions of disconnection resulting from the us versus them cultures that confine us, and a shared concern that we are united today predominantly by "shared fear and disdain, not common humanity, shared trust, respect, or love" (2021).

Fulfilling our belonging needs requires an adherence to "a practice that requires us to be vulnerable, get uncomfortable, and learn how to be present with people without sacrificing who we are" (2021).

Leveraging intra- and inter-personal change

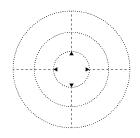
This section uncovers the internal processes and experiences that prompt behaviours associated with affective polarization. Much of these behaviours are attributed to our social identities regarding what they provide for us (alleviation of uncertainty) and what they demand from us (conformity). Understanding the internal and external interactions of our human functions provides valuable insight about ourselves, which connects us to our own experiences and enables connection with others (Brown, 2021).

Managing uncertainty

In the face of ambiguity or difficulties, we tend to seek guidance from others to help us interpret the situation (Van Bavel & Packer, 2021). Consequently, our identities play a leading role in facilitating our interpretations of life's ambiguities. Generally, uncertainty can also cause deep discomfort when we are intolerant of it, contributing significantly to anxiety in all its forms. We may cope with this experience by either worrying about the situation or avoiding the situation, neither of which are productive (2021). Intolerance to ambiguity is also associated with the human tendency to seek firm (essentially authoritarian) leadership when experiencing high degrees of uncertainty (Van Bavel & Packer, 2021). Managing and increasing our tolerance to ambiguity is beneficial to our personal well-being and has implications on our ability to contribute to our groups effectively, and on the collective functioning of our groups.

Fostering and inspiring dissent

Strong groups and effective decision-making can be cultivated by leveraging the positive elements of conformity such as coordination and collaboration, and mitigating the negative, which may include encouraging nonconformity as well as the willingness to both



receive and vocalize dissent. Research finds that where conformity and majority perspectives induce narrow thinking, dissenting perspectives expand our thinking (Nemeth, 2018). Exposure to alternative perspectives does not necessarily change our minds to align with those perspectives, but it inspires creativity and innovation by disrupting our thinking and assumptions. Van Bavel and Packer assert that, "embracing a diversity of opinions and listening to criticism is necessary for groups to flourish in the face of new challenges and adversity" (2021). Dissent benefits the groups that cultivate it, and those that aim to discourage it are vulnerable to failure or collapse. Seemingly contrary to the information provided in the report about social identities, it is in fact those who are most loyal to their groups who are also most likely to express dissent within them, generally to caution and protect the group from threats or in pursuit of preserving group objectives and values. In groups that cultivate a culture welcoming of dissent, this is a healthy behaviour. In groups that condemn dissent, those who speak up in opposition can be perceived as treacherous and face ostracization, even if their dissent is deemed to be a heroic or moral act outside of the group or at a later time. The benefits of dissent can be realized only if groups have active dissenters within them, and if group members are willing to engage with curiosityas opposed to defensiveness-towards the dissenters.

Pursuing connection

Conformity can also have negative impacts on us when it is pursued at the cost of genuine sources of connection (Brown, 2021). Through her research, Brown has uncovered that, "connection is why we're here. We are hardwired to connect with others, it's what gives us purpose and meaning to our lives, and without it there is suffering" (2012). When our social identities are activated, our desire to fit in can at times overpower our need to belong, but through understanding

¹³ Brené Brown has a PhD in social work and over 20 years experience as a research professor and author studying courage, vulnerability, shame, and empathy (Brené Brown, 2022).

ourselves, we can avoid what Brown defines as "hotwired connection" and mitigate the negative traits associated with conformity. Understanding ourselves may seem straightforward, but many of us struggle to face vulnerability within ourselves. let alone with others. Vulnerability, while uncomfortable, is not a weakness; it is an indication of one's personal and emotional strength.

In sum, dissent expands our thinking, uncertainty is inevitable, and vulnerability is worth the discomfort. Our tolerance to all three provides value to ourselves and our groups, and is within our own capacity and interests to cultivate.

[3] Outside-in: the material dimension

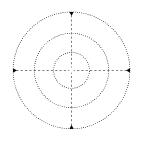
Understanding our material observation: This section identifies one of our defining human gualities: the ability to coordinate and generate knowledge. It focuses on how we observe and interpret the world through layers of cognitive filters and fallacious reasoning-our human lens-and how it inhibits our ability to perceive the world's objective nature. Societal coordination and well-informed decision-making is supported by access to collective, accurate, and shared knowledge in critical situations. Being human, we cannot eliminate our cognitive filters entirely, but we can subscribe to a shared set of evidence-based principles to facilitate a more impartial system.

Generating knowledge amidst conflict

A double-edged nature

The more we understand about social identities, the more is revealed about its double-edged nature. The very biology that has provided humans the extraordinary capacity to coordinate is the same that makes it nearimpossible for us to agree.

Conformity enables coordination, which is required for a functioning society. Conformity is based and reliant on commonalities such as shared goals and interests, understandings, agreements, communication, and the places we go to learn about and share these commonalities with one another. It exists in the fabric of virtually all that we do-fashion, politics, music, morality, sports, food, culture, language, and knowledge; ultimately, it serves a critical role for groups and society (Van Bavel & Packer, 2021).



Perhaps one of the most remarkable products of conformity is that it enables us to coordinate our ideas and behaviours towards achievements far beyond the capacity of a single individual. Similar to how we depend on our aroups to guide us in how we perceive the world, we also turn to our groups and society to ease uncertainty and provide information that might fill in as much of our vast unknowns about the world as possible. We may also make small contributions ourselves, addressing these unknowns by using existing information in the world to expand, revise. review, or uncover new information. In sum, it facilitates the generation of knowledge.

Defining knowledge

Johnathan Rauch¹⁴ conceptualizes knowledge as more than the cumulative contributions of one or more people-it is an emergent property of our social coordination (2021). Defining knowledge is not only a challenge, but it forms the subject of an entire philosophical realm, the details of which are beyond the scope of this research. However, for the purpose of this MRP and clarity going forward, I conceptualize knowledge by leaning towards a social constructionist¹⁵ perspective: as a *subjective* social agreement of understanding and explaining the functions of our universe and all that it contains. This definition of knowledge seems most appropriate in the context of affective polarization considering the power that our social and group identities have over us, and the consequences of its influence. Identity lenses, social norms, echo chambers, bias, and other greater

14 Jonathan Rauch is a senior fellow at the Brookings Institute, as well as a writer and author of several books on public policy. culture, and government (Brookings, 2022).

15 Social constructionism is a theory of social psychology which asserts that any knowledge we claim to know individually or collectively is derived exclusively as a result of social interaction (Burr, 2015). The theory challenges the notion that the world can be understood through observation and validated by replications of that observation. The latter definition is possibly more applicable to the term 'evidence'.

systemic factors, can divide our perceptions of reality, and in some cases, this division greatly impacts our ability to coordinate in novel and critical circumstances, as we experienced during the COVID-19 pandemic.

Subjective objectivity

Being human, we hold ingrained human cognitive tendencies and processes that inhibit our ability to perceive the world in an objective way-despite what we may like to believe. Combined, these human factors can interfere with our ability to agree on knowledge, information, facts, or evidence.

It is challenging to face others' perceptions of reality because we tend to believe that our perception of reality is the true one; that we are objective and rational (Van Bavel & Packer, 2021). This belief is known as naïve realism, and it leads us to determine that because we are objective, people who have alternative beliefs to us are stupid, ignorant, uninformed, irrational, biased, evil, or some combination of these (Pereira & Van Bavel, 2018)—a phenomenon that "has become a defining feature of partisan polarization" (Rauch, 2021). Maintaining our beliefs is one way that we protect or reinforce our groups, and our sense of self by association.

Similarly, we have a predisposition to hundreds of cognitive biases¹⁶, a tendency to use logical fallacies when presenting arguments or attempting to persuade, and can experience other cognitive phenomena such as cognitive dissonance. Biases lead us to be genuinely convinced by our beliefs; they are deeply embedded such that we even have a bias for concealing our biases, known as our "bias blind spot" (Pronin et al., 2002). This bias blind spot accounts for the fact that

we are able to identify biases in others much more than in ourselves. In this way, ingroup members are proficient at disputing the logic of outgroup members. and are shielded from the same level of accountability and scrutiny of their own logic. We may also shield ourselves from information that might undermine our beliefs, even if that information represents the truth. This process is known as confirmation bias, defined as the human tendency to seek and accept information that supports one's beliefs and being apathetic or actively dismissive towards information that might undermine those beliefs (Pinker, 2021). We have also evolved such that "we like to win arguments" (Pinker, 2021). The challenge we face in our communication with others is being both compelling and correct, and so at times, our reasoning may fall short of correctness in favour of persuasion. Logical fallacies are flaws in reasoning that may be employed subconsciously, or as a deliberate debate tactic (The School of Thought, n.d.).

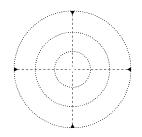
Lastly, cognitive dissonance is an often subconscious phenomenonthatoccurs when an individual experiences inconsistencies (dissonance) among "any knowledge, opinion, or belief about the environment, about oneself, or about one's behaviour" (Festinger, 1962). Since we generally prefer to maintain consistency (consonance) among our beliefs and behaviours, when faced with such inconsistencies, we seek to reduce the discomfort of dissonance by altering one of the variables causing the mental conflict, and/or by actively avoiding circumstances that would generate dissonance. To reduce the dissonance, we can either change our belief, or change our behaviour (Shaw, 2019). Altering our behaviours is often more challenging than altering our beliefs, so we tend to find justifications of our beliefs which account for the inconsistencies.

Threats to collective knowledge

Living in a bubble

When our individual biases and group conformity intersect, we experience "epistemic tribalism" (Rauch, 2021). Echo chambers, also known as epistemic bubbles, confirmation loops, or group think, represent enclosed containers of like-minded individuals discussing and agreeing with ideas that are compatible with existing perspectives of the group. Ideas within the group are reinforced with no intervention from alternative inputs. Figure 15 represents a causal relationship depicting the reinforcement of echo chambers, where the cognitive filter that supports one's social identity leads each group to, over time, reinforce their identities as well as the barriers surrounding their group's echo chamber.

Echo chambers can occur in person or online, however, the solution to either is not as simple as increasing exposure to alternative perspectives (Van Bavel & Packer, 2021). Not only do echo chambers limit opportunities of encountering opposing or alternative information, but the individuals engaging in them actively choose to more easily accept information that comes from sources within (ingroup members). Conversely, they are more likely to distrust, discredit, and/or be entirely incurious about information from outside of the group (outgroup members). Studies have found that we have a more of a tendency to believe positive stories about people we perceive to be one of us, and negative stories about people we perceive to be one of them (Pereira et al., 2021). This is true even when presented with information that should seem suspect. It has been observed however, that when less visceral language is used (language not associated with moral and emotional connotations), people may be willing to engage with outgroup members to discuss



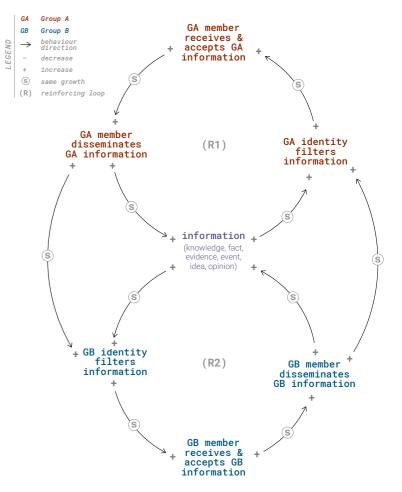


Figure 15 | Two reinforcing partisan echo chambers

contentious issues if the morality of either group is not insinuated in the communication (Van Bavel & Packer, 2021).

Information warfare & censorship

It can be challenging to navigate a society divided into two groups that are exhibiting similar—if not identical behaviours. In our attempts to manage a mass of conflicting information being presented as knowledge from either side, there is a growing sense in recent

¹⁶ Hundreds of cognitive biases exist, the details of which go beyond project scope. For a detailed reference, please visit writer Buster Benson's <u>Wikipedia Cognitive Bias Codex</u>, where he compiled and categorized 188 biases in an interactive format (2016).

years that we are living in a "post-truth era", or in the midst of an "epistemological crisis" (Pinker, 2021). In this state, uncovering actual truth is not as important as asserting our truth.

This situation reveals another system archetype: the tragedy of the commons (Braun, 2002), or as Rauch has named it, "an epistemic tragedy of the commons" (2021). Figure 16 represents this phenomenon, which occurs when a public resource is depleted due to self-interested parties' actions (Spiliakos, 2019). In this context, a lack of coordination (polarization) surrounding the creation and use of knowledge, leads to the depletion of factual information available for all of society.

Rauch's impassioned argument is that our social institution, what he's named The Constitution of Knowledge, is currently under attack by two major threats: [1] troll culture or troll epistemology, defined as "the spread of disinformation & alternative realities", and [2] cancel culture, "the spread of enforced conformity & ideological blacklisting" (2021).

Troll culture today is predominantly associated with right-wing partisanship. It is a force which applies "chaos and confusion" (Rauch, 2021) in the intentional (disinformation) or unintentional (misinformation) dissemination of false information, to a point where people are incapable of discerning truths and untruths. Cancel culture, on the other hand, is predominantly associated with left-wing partisanship. It is a force which enforces "conformity and social coercion" (Rauch, 2021) by means of censorship and weaponizing shame. While they have emerged from opposing ends of the political ideological spectrum, their motives and outcomes are in fact aligned. To be clear, members of either party are capable of, and do employ both of these tactics, known as 'information warfare'. This is an often propagandistic, strategic use of information to

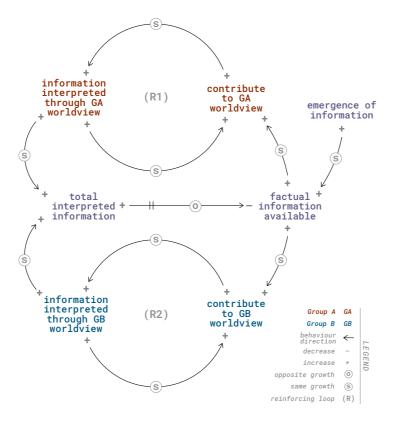


Figure 16 | System archetype: "an epistemic tragedy of the commons"

control one's opposition for political gain (RAND, n.d.). It is a manipulation tactic that exploits the very human tendencies explored in this report thus far. It opposes the principles of rationality as a means of justified persuasion. Under these circumstances, we become vulnerable to threats.

While it is important to protect and encourage free and diverse thought in every domain, there is a necessity that emerges from living amongst others: in order to make decisions, we require a certain level of coordination that can only be achieved using the knowledge we collectively agree upon.

Leveraging cognitive change

Analysing the material dimension uncovered the importance of shared knowledge in our coordination and decision-making processes. Our human instincts and cognitive filters tend to undermine knowledge generation, but we may offset these negative outcomes by establishing social structures and institutions that facilitate successful outcomes.

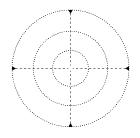
Shaping a strong container

When working towards a collective initiative that has conflicting interests, objectives, and desired outcomes, Adam Kahane proposes the idea of a strong container (2012). A strong container is the space within which a group of collaborators can operate. It includes the purpose for the collaboration and objectives, those who are supporting and facilitating the initiative, its location(s) or contexts, channels and methods of communication, and any ground rules. The group must feel "both enough protection and safety and enough pressure and friction to be able to do their challenging work" (2012). The quality of this container will affect the outcome, and so this container must be continuously managed.

In the context of affective polarization, the strong container may represent our society as a whole, to be shaped by varying levels of government working together to effectively fulfill the role of group facilitation, rather than authoritative group management. A sense of safety can help build trust in the process and our institutions, while friction may support higher levels of curiosity and innovation.

Committing to the reality-based community

The notion of the strong container may share some parallels with Rauch's Constitution of Knowledge



(2021). He claims that the closest we are able to get to 'truth' is by continually expanding our collective resource of reality-based knowledge. The constitution is a social network considered by Rauch to be "the most successful social design in human history" (2021). What he is referring to, is liberal science¹⁷. Despite its success, its principles contradict the human nature defined in this chapter thus far. Adhering to realitybased practices essentially asks that we "mistrust our senses and our tribes, guestion our sacred beliefs, and relinguish the comforts of certitude. It insists that we embrace our fallibility, subject ourselves to criticism, tolerate the reprehensible, and outsource reality to a global network of strangers" (2021). In other words, we must both communicate and receive dissent, nurture curiosity, accept uncertainty, embrace failure and vulnerability, tolerate the expressions of even the most 'non-virtuous' members of society, and trust others so long as they adhere to the principles of the realitybased community. This community operates under two core rules: the fallibilist rule and the empirical rule.

The fallibilist rule asserts that "no one gets the final say". It is a pluralistic system which depends on ideas diversity, but also on the commitment of contributors to assume one's proneness to failure, mistakes, inaccuracies, as well as the proneness of others to fail. make mistakes, and be inaccurate. The empirical rule asserts that "no one has personal authority". It acts as a filtration system that eliminates ideas that are not reproducible by others. An idea or information is not valid as knowledge if it can only be confirmed by a single person or by a single ingroup.

Trusting in the absence of trust

What both the strong container and the reality-based community seek to cultivate is trust where it might not

naturally exist. The challenge we persistently face is the rise of circumstances that necessitate collaboration with people we dislike or distrust. Kahane claims that we often misinterpret what effective collaboration entails. We can, and often must work together with people that we dislike or distrust. His conceptualization of collaboration, which he names stretch collaboration, challenges conventional notions of collaboration and asserts that we do not have to have the same interests or be on the same team in order to engage in collaboration. Trust is not necessarily a requirement in the way we may expect it to be. For example, Kahane's strong container may act as a substitute to trust between potential collaborators (2012). We do not necessarily have to trust one another in order to agree to work together, but it may be valuable to have mutual trust in a process that requires active engagement from all relevant stakeholders. We can trust that whatever problems we need to solve must be done in agreement toward a mutual movement forward, in whatever direction the collaboration takes us. The engagement can be prompted by conflicting reasons and our definition of the objectives may not coincide, but we must at least agree on the need for change and with the understanding that this change can only occur by means of collaboration.

2022: In the Name of Justice

Defining the current state

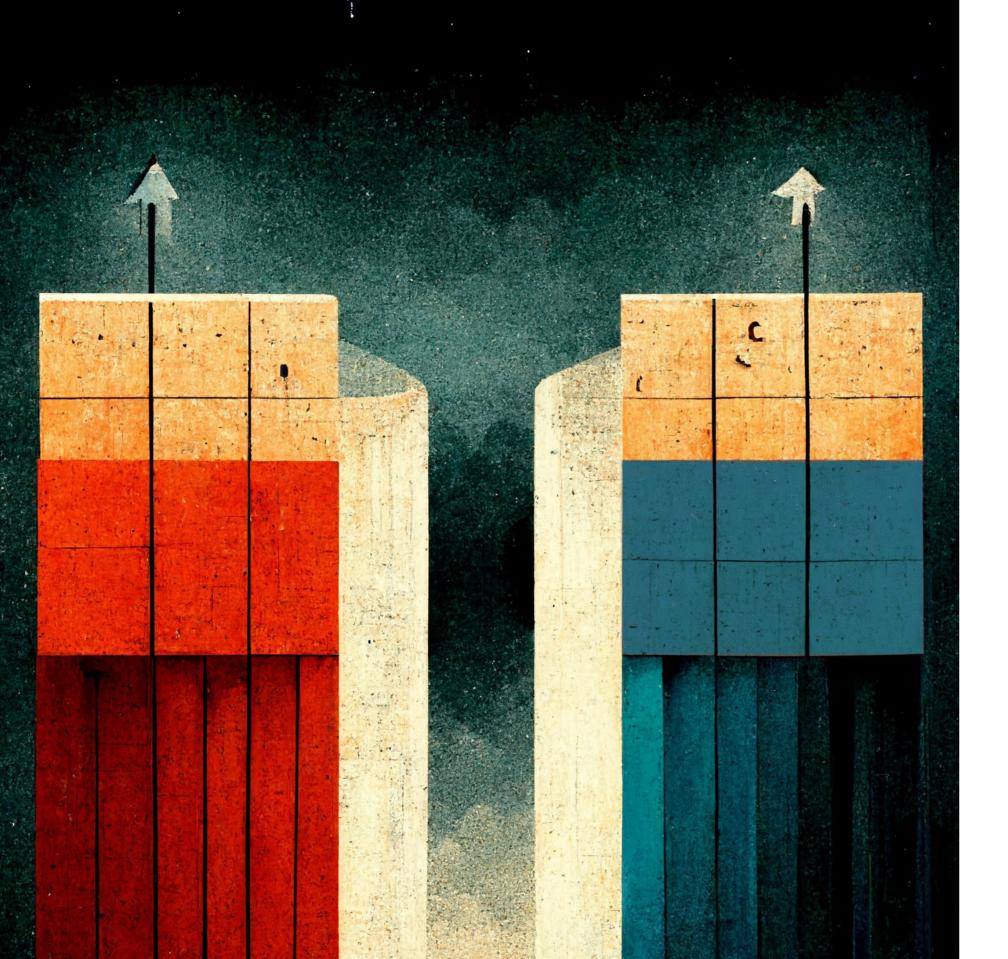
This chapter has investigated the system in focus (affective polarization) on three dimensions: [1] the relational dimension, which includes stakeholder and instrument interactions, [2] the individual dimension, which includes the human factors that form the basis of behaviours that cause and aggravate the problem, and [3] the material dimension, which includes cognitive human factors that affect our ability to observe the world in its inherent objectivity.

In the section that follows, the current state of the system is defined with a descriptive overview and a system summary presented in Table 1. The table includes a set of categorizations derived from the STEEPV framework and its corresponding factors (social, technological, ecological, economic, political, and values). Together, the categorizations selected aim to ensure a comprehensive yet concise depiction of the system.

This chapter concludes with a causal layered analysis (Table 2) to further deepen and uncover layers of the system (Inayatullah, 2008). It analyzes the system in focus according to four dimensions. The first dimension, what we will name recurring outcomes, represents visible, day-to-day manifestations of the system. These manifestations may include frequently reported events, topics, and discussed issues. The next dimension addresses the systemic causes for the recurring outcomes, which include social, economic, or political factors. Next, is the dimension representing long-term constructs in the form of our worldview and perspectives. The final dimension succinctly uncovers deeply embedded societal myths and metaphors that underlie the entire system.

Through this analysis it is revealed that our beliefs are fused to our sense of virtue, and this provides a rationale for the hostility that arises when those beliefs are questioned in the face of conflicting, equally tenacious perspectives.

Where society proceeds from this point can not be predicted, but potential indicators of change can help us envision possible trajectories for the alternative future states we may find ourselves in. Those alternative futures are explored in Chapter 3–2042.



2022 System title | In the Name of Justice System approach | Deadlock

Our inflection point begins in 2022, following two years of navigating an emotionally turbulent global pandemic. What has unfolded is public distress over the existence, threat, or perception of injustice- the definition of which is determined by one's political alignment. On one end, the risk and loss of human lives due to the virus is both distressing and indisputable. On the other end, the threat of one's loss of freedom and livelihood is just as undeniable and unacceptable. Provoked by polarizing media headlines and divisive language expressed by party leaders, an inherently politically neutral event quickly became a matter of us versus them. The global pandemic did not (and could not) cause a polarized society; rather, a cumulative product of human behaviour and the interactions of those behaviours prompted political ideological division and continued to aggravate the situation to where we find ourselves today: a deadlock situation leaving many filled with frustration, anger, fear and despair.

With both partisan groups fixated on the defeat of the other, all are left dissatisfied. The inability to agree on essential information, paired with willful attacks on our shared resource of collective knowledge has created an uncoordinated, hostile, and unstable environment. When we implement force based on a desire to destroy, we never win; we simply aggravate those in the losing position. Ignoring the requests, needs, concerns of any person or group, despite however wrong, immoral, irrational, or unreasonable they may seem, only compounds their experience, and is likely to amplify their beliefs and actions. Ultimately, the deadlock approach is a non-solution.

The visual depiction of the current state, deadlock, was created using the AI image generator Midjourney, by entering the following text prompt: "deadlock situation between two equal forces".

Emerging trends:

Al-generated images Government-mandated internet shutdowns Two-Eyed Seeing Ministries of futures Democratic backsliding

		VISIBILITY	SYSTEM DIMENSIONS	SYSTEM MANIFESTATIONS	
SYSTEM QUALITIES	CURRENT STATE-2022	Visible	Recurring outcomes (day-to-day manifestations)	 + Weaponized shame + Hate speech, ridicule, offensive intents + Public outrage 	Short-te
		•	,	+ Cancelling + Trolling	•
Decision-making approach System Title	In the Name of Justice			 + Spread of misinformation and disinformation + Divisive language from influential sources (media, government 	•
Myths & metaphors	I think, therefore I am right (and good)	0 0 0	Systemic causes (long-term manifestations)	representatives, influential group members)	•
Governance structure	Decentralized liberal minority	0 0		 + Competitive party system prompts us vs them thinking + Social media design triggers anti-social behaviour + Social identities prompt conformity and group protective behaviours + Echo chambers online (e.g., algorithms; blocking, unfollowing outgroup accounts; following, engaging ingroup accounts) and in person (e.g., avoiding people or contentious topics, cutting people out of one's life) 	- •
Governance strategy	Situation-apathetic: no strategy in place as of yet				
Governance	Democratic	0 6 0			0 0 0 0 0 0 0
Social constructs	You're either one (liberal) or the other (conservative)	0 			
Social interaction	Mixed, tendency towards prioritizing ingroup association	0 0			
Social services	Free essential services, i.e., public education until post-secondary, some health care	0 0 0			•
Knowledge creation	"Liberal science" (Rauch, 2021)	0	Worldviews	 + Absolutism; there is only one truth + Splitting; all-or-nothing thinking + Zero-sum thinking; one side's loss is anothers' gain + Moral superiority; my beliefs and behaviours are the most righteous + Social identity egocentrism; perception bound by social identity 	•
Technological integration	Increasingly all-encompassing	0 0 0	(long-term constructs)		•
Environmental state	Declining	•			•
Economic priority	Continual growth				•
Culture & values	You're either with us or against us	Hidden	Myths/Metaphors (deeply-embedded principles)	+ "I think, therefore I am right (and good)"	Long-t

Table 1 | System summary of the current state, 'deadlock'

Table 2 | Causal layered analysis of the current state, 'deadlock'

03-2042

Exploring alternative systems

Foresight practice

Potential indicators of change

Alternative system outcomes

Defining system criteria Decision-making approaches and positions

Alternative futures of 2042

Exit

Adapt

Force

Collaborate

Alternative futures observations

Outcome analysis

03-2042

Foresight practice

Exploring alternative outcomes: This chapter envisions potential alternative future outcomes, constructed from the context of our current state as well as the emerging potential indicators of change. Four scenarios set in the year 2042 are presented, each accompanied by a description, system summary, causal layered analysis, and an evaluation against several factors that aim to determine the coordinative capacity of each alternative state. The chapter concludes with an analysis of their respective evaluation scores.

The decisions we make today will impact the trajectory of our futures. Foresight enables us to envision potential futures, and when we do so, we can determine elements we desire and elements we wish to avoid. In this chapter, futures thinking approaches and foresight practices and tools are implemented with the objective of assessing four alternative outcomes based on four approaches or decisions we may make towards managing (or not managing) polarization going forward. This process can support better informed decisions, with processes and institutions that are more resilient, or antifragile¹ even.

The alternative outcomes are set in a 20-year timeline-2042-to allow at minimum a generation's length of time for a cultural shift, but not too far into the future that the state of the scenarios might be radically unrecognizable from today's context.

The development of reasoned futures outcomes in this situation was supported by a horizon scan, a research process that explores emerging indicators of potential change.

1 Antifragility is a concept and term coined by Nassim Nicholas Taleb referring to a property or quality of a system that allows it to thrive in the face of "volatility, randomness, disorder, and stressors" (2012). Taleb rejects commonly used opposites for 'fragility' such as resilience or sturdiness, because they imply resistance without change. Antifragility takes on stressors and emerges stronger as a result.

Gathering weak signals² formed larger trends, of which the most pertinent could be identified. Referring back to the project guide, the trends selected were those with the potential to significantly impact what we do (knowledge) and how we do it (coordination) as they relate to collective decision-making. Specifically, these trends are considered to impact our perception of reality and the ways we come to understand the world, as well as a shift in power dynamics or governance structure. A total of five potential indicators of change are described in the pages that follow, each of which includes a description, set of implications, extrapolations, related trends, and counter-trends. Implications are meant to present shorter-term consequences that might be prompted by a particular trend, while extrapolations are longer-term predictions or estimations of potential outcomes of a trend under the assumption that it will progress further.

Potential indicators of change: emerging trends











1. Al-generated images

Artificial intelligence that translates user prompts into increasingly realistic and precise visual depictions of those prompts.

2. Government-mandated internet shutdowns

Enforced regulation of the internet by restricting access to some or all of it by various means.

3. Two-Eyed Seeing

The integration of Indigenous knowledge and ways of knowing with western liberal science approaches.

4. Ministries of Futures

Government agencies focused on future-oriented policy development and initiatives.

5. Democratic backsliding

The loss of democratic characteristics in a oncedemocratic society.

² Weak signals are individual pieces of data that could have greater implications for change should they be found in multiple sources to form a cluster of signals (a trend).



Trend 1. Al-generated images

Artificial intelligence that translates user prompts into increasingly realistic and precise visual depictions of those prompts.

Al-generated images are becoming a publicly accessible resource. These images are created via a number of formats and methods, such as user-controlled digital brushstrokes which produce realistic renderings of landscapes or creatures, or text-to-painting, where text inputs produce images in an artistic, stylized format, or more generally text-to-image, which implies the output of any format, style, or degree of photorealism that is indicated by the user.

The technology is growing increasingly precise with interpreting and processing text description inputs into imagery that aligns with the content in the text prompt. This level of processing requires a complex and vast understanding of language and sentence structure, and it is continually improving. The tool can be found from an expanding selection of sources, including Imagen,

DALL-E. NVIDIA Canvas. Chimera Painter. Wombo. Midjourney, and Craiyon.

Implications

There are boundless possibilities for how the trend will evolve, and the functions it will develop (VR x AI painting, the level of customization and specificity, text-to-video generation, etc.).

Data which is pulled from the web to generate the images can be problematic and harmfulrepresentative of bias, stereotypes, oppressive and discriminatory perspectives. This prompts everevolving ethical practices to be implemented in the code of these technologies to manage inputs and outputs of information.

On the other hand, a curated data set comes with its own risks, as the curation is subject to human bias and manipulation.

Unrestricted access to the technologies can allow the potential for propaganda, public safety, exposure of harmful content.

Increased need for determining boundaries of censorship content by corporations or government.

Extrapolations

The human capacity for creativity could undergo a revolutionary shift. Learning to speak articulately and expressively to AI leads to a new, highly accessible era of art and content generation. It prompts an evolution in human cognitive processes as they relate to innovation, imaginative capabilities, and envisioning cause and effect. Society experiences a rise in innate futures thinking which initiates positive change.

Devaluation of information. Accessible AI-generated image creation escalates to an uncontrollable

spread of misinformation and disinformation. distributed by all outlets of information including media and among the public themselves. This ends up entirely devaluing information, evidence, and fact, and pollutes our knowledge resources. Additionally, the public experiences a desensitization to a variety of content and media.

Related trends

Web 3: decentralization of the internet whereby power is shifted from corporations to individuals.

Counter-trends

Online censorship: currently primarily done by social media corporations to manage the spread of content deemed offensive or hateful.

Government-mandated internet shutdowns: enforced regulation of the internet by restricting access to some or all of it by various means.

Deepfakes: images or videos manipulated to appear as though a fabricated event actually occurred.



2. Government-mandated internet shutdowns

Enforced regulation of the internet by restricting access to some or all of it by various means.

A steady global rise in government-mandated internet shutdowns have been observed over the last few years. In 2021, 31 countries deployed shutdowns to some degree, totaling at least 182 shutdowns (Díaz Hernandez & Anthonio, 2022). They may be employed to varying degrees and targeting different methods of constraints (i.e., throttling, IP blocking, mobile data shutoffs, DNS interference, server name identification blocking, and deep packet inspection) (Jigsaw, 2021), and can target specific locations and/or populations.

Generally, the shutdowns are presented by governments as "precautionary measures", public safety measures, or limiting misinformation dissemination, but are in fact largely prompted by a number of recurring circumstances, including political instability, protests, military operations and coups, elections, communal violence, and school exam cheating (Feldstein, 2022), (Duggal, 2021). These shutdowns may also be undetectable by the public. Certain tactics are implemented such as slowing down the overall connection or targeting specific sites which can appear to be technical issues. While this primarily occurs on social media and messaging platforms, it could also target specific sites or services, and could include imposing regulations on companies regarding content censorship.

Implications

Access to internet is associated with free speech and freedom of expression, as well as access to public information. There is agreement among global democracies that these are all considered human rights, thus, shutdowns are human rights violations.

Shutdowns have detrimental impacts on society and the economy. They prompt public distrust towards the government and other citizens, and erode trust in democracy. Additionally, a network of essential systems can be affected such as journalism, education, and health care.

Evidence suggests that shutdowns actually aggravate violence rather than prevent or mitigate it.

Weaponization of the internet in the interests of authorities. This could include silencing speech and messaging that conflicts with government interests or attempting to keep people in fear.

Definitions of terrorism and extremism are easily manipulatable, and can be used as mere justifications for shutdowns.

Extrapolations

Global spread of democratic backsliding. Shutdowns become an "all-in-one tool to assert control over populations" (Woollacott, 2022). As mandated shutdowns continue to be justified by governments, they gain momentum to the point of becoming normalized. Governments exploit the power of public knowledge and access to public information, and societies find themselves increasingly under autocratic rule, slowly stripped of their liberties.

Aggravated affective polarization and hostile society. Increased distrust towards government and others leads to protest, violence, riots, and attempts of overthrowing the government in revolt.

Non-virtual or undetectable forms of organization and communication. In response to a highly surveyed and volatile internet environment, people find alternate modes of communication.

Related trends

Information warfare: intentional dissemination of false information in the interest of political gain.

Counter-trends

Global condemnation of internet shutdowns on the basis of them violating human rights.

The emergence strategies.

The emergence of internet shutdown resistance



3. Two-Eyed Seeing

The integration of Indigenous knowledge and ways of knowing with western liberal science approaches.

Reconciliation efforts are increasing, following a greater public awareness and accountability of Canada's past and continued oppression of Indigenous peoples. As it pertains to knowledge, supporting reconciliation is the recognition of the infinite ways one may perceive the world.

Two-Eved Seeing (Etuaptmumk) is a form of Integrative Science designed to bring together different worldviews: western science and Indigenous knowledge and ways of knowing (Bartlett, 2012). It is described as a difficult but necessary guiding principle for how we may coexist. It is deemed beneficial for our society to find the strengths in both of these perspectives, mindfully bring those strengths together, and take the best of both western and Indigenous tools and their deep understandings to move forward together-the idea being that we cannot thrive in isolation.

Western science is grounded in a compilation of written records of observation, while "Aboriginal epistemology is grounded in the self, the spirit, the unknown" (Bartlett et al., 2012). It represents "ethical space" which is the engagement of two worldviews towards dialogue and united decision-making (Ermine, 2007).

Implications

This could prompt a new level of innovative thinking, reform to our societal systems, significant cultural or paradigm shifts, alter our association to and management of the environment.

Barriers may include the coordination of the diversity within Indigenous languages and cultures in Canada and globally.

Increased risk for Indigenous appropriation and exploitation.

Increased initiatives towards protecting Indigenous intellectual property (material and non-material property such as oral stories and history, songs, styles, etc.).

Establishment of a shared agreement of our objectives for knowledge generation, and establish definitions, standards, and practices of knowledge in this integrative context.

This process could evolve slowly or potentially be accelerated by a drastic event that necessitates immediate and widespread efforts.

Significant initiatives towards change management may be required with those indoctrinated in Western science and its practice.

Extrapolations

world.

Society undergoes incremental systemic restructuring across social, political, economic, and cultural realms, as well as in education. People uncover new meanings in life; the objectives and processes of governance evolve; the 'economy' begins to represent something different; alternative standards and practices in education including reform in curriculum and teaching and learning content and method; new worldviews begin to form.

Related trends

Decolonization: eliminating colonial influence.

Counter-trends

Troll Culture: the spread of disinformation & alternative realities.

Humans enter a new era of enlightenment. Through integrative science, we develop a greater capacity for knowledge and understanding, new cognitive capabilities, and a deeper understanding about the

Indigenization: instilling Indigenous influence.

Truth and Reconciliation in Canada.

The Rise of the Alt-Right: the radical right movement which tends to seek 'revival of national identity'.



4. Ministries of Futures

Government agencies focused on future-oriented policy development and initiatives.

Ministries of Futures, or similar futures-focused governance initiatives, are designed so that long-term impacts of decision-making are thoroughly considered. It has to do with creating "future-oriented policy and programs that are more robust and resilient" (Policy Horizons Canada, n.d.). UN member states agree that today's challenges are globally interconnected (United Nations Secretary General, 2021), and thus, such initiatives would also focus more strategically on global long-term issues such as climate-related issues or poverty. This addition to the governance structure provides a voice to future generations, who are granted the status of relevant stakeholders with tangible influence on policies and decision-making.

Several current examples of such agencies include: Wales' Well-being of Future Generations Act 2015, Sweden's Ministry of the Future 2014, Scotland's Future Generations Commissioner 2021, United Arab Emirates' Minister of Cabinet Affairs and the Future (Samuel, 2022), and Canada's Policy Horizons.

Implications

It may prompt a need for change management initiatives across government to integrate new processes as well as welcoming new potential limitations on policy and decision-making.

These initiatives may not be well-received for today's public, who will likely not experience their value soon enough or within their lifetime, especially if it leads to increased taxes to account for the additional resources associated with providing this public service.

Welcoming these initiatives requires a cultural shift to value foresight as a need rather than a luxury, and policy must shape this cultural evolution onto the public and on businesses.

The current four-year electoral structure may not be conducive to such long-term planning. Future-focused segments of government rely on coordination and collaboration of all ministries and functions of the government, or, part of their function can be to support this needed coordination.

A need for increased and targeted trends analysis and scenario generation to identify key issues.

Extrapolations

Decelerated economic growth. Increased regulations and drawn out processes related to long-term thinking and planning could impact economic development. The government may, as a result, impose more taxes and increase rates of current taxes.

Improved emergency management. Long-term

thinking and planning leads to antifragile systems, meaning, future crises have less severe impacts on people and systems, and even have positive effects in that it leads to incrementally stronger and more favourable systems and institutions.

Public foresight and futures literacy. Ministries of futures may inspire a cultural evolution in which futures thinking becomes integrated in all realms of society, including public services, all levels of government, infrastructure, education, career planning, and is generally widespread in the personal lives of citizens.

Related trends

on the natural environment.

Counter-trends

Climate Crisis: the consequences of human activity

Democratic backsliding: The loss of democratic characteristics in a once-democratic society.



5. Democratic backsliding

The loss of democratic characteristics in a oncedemocratic society.

Democratic backsliding is the trend towards autocracizing a government structure. Reports indicate a global democratic recession, which has been exacerbated by the pandemic. There are numerous ways that a democracy can be threatened, and several of them are identified in our current state.

The rise of "Trumpism", "Brexit", and populism in general may indicate this trend. Surveys imply a "greater willingness to elect strong executive leaders, and the rise of parties that represent 'the people' at the expense of liberal values and minority rights" (Ruparelia, 2021). Extreme polarization is also correlated with democratic decline-since 1950, of the 52 cases of extreme polarization, 26 experienced a decline in their democratic rating (McCoy & Press, 2022). When parties and partisans feel the ideologies of the opposition are immoral or dangerous, it may lead to a strong incentive

and desire to maintain their party's interest by any means necessary, such as voter suppression. Additionally, our increasingly complex and rapidly evolving world may lead us to forfeit democratic practices. This, compounded with large-scale, global issues such as climate change and inequality generate instability and uncertainty. In times of extreme uncertainty, authoritarian leaders have historically rose to power "as a result of an overwhelming desire from the public for firm leadership" (Van Bavel & Packer, 2021). This same desire tends to emerge within people who feel wronged by capitalism and the free maket. Propaganda and attacks on our collective knowledge, such as troll culture and cancel culture, also degrade democracy. The spread of misinformation and disinformation obstructs truth and our sense of reality, while social coercion and censorship impede on freedom of thought. Lastly, the intent of democracy is to enable the public to select true representatives of their needs, but this process is undermined by the "corrupting influence of campaign donors; the racial, gender, and other biases of voters; voter ignorance about which politicians and policies will best pursue their values", etc. (Matthews, 2022)

Implications

Increased autocratic processes and authoritarian leadership; including a rise in enforced regulations, loss of civil liberties such as voting and freedom of expression.

Canada's political, economic, and cultural proximity to the United States may influence its own political trajectory.

Challenging invalid assumptions that because Canada has been a democracy, it will always be so. Every system requires attention, discretion, and active innovation.

Extrapolations

Related trends

& ideological blacklisting.

alternative realities.

Counter-trends

Rejection of a False Democracy: an interpretation of the political climate in which democracy is not backsliding, rather people are rejecting a system that presents as democracy but isn't actually, which is in itself democracy in action.

Society finds itself governed by an increasingly authoritarian regime, brought about by either political partisan group. This could obstruct further expansion of social justice and human rights, and lead to the loss of those already gained.

Government-Mandated Internet Shutdowns.

Cancel Culture: the spread of enforced conformity

Troll Culture: the spread of disinformation &

The Rise of the Alt-Right: the radical right movement which tends to seek 'revival of national identity'.

Open Democracy: a form of democracy in which candidature is truly accessible to ordinary citizens.

Alternative outcomes

Defining system criteria

As mentioned in the project scope, polarization in itself is not a bad thing. In fact, diversity of opinions is a desirable quality, and conflicting opinions on how to move forward may even signify a strong democracy and an engaged group of people willing to coordinate towards problem-solving and decision-making. The objective of creating, defining, and evaluating alternative future outcomes for the purpose of this research is to assess specifically the conditions and decisions that provoke negative outcomes of polarization, allowing it to thrive.

Evaluating affective polarization

The factors defined in Table 3 have been extracted and synthesized from the concluding insights within Chapter 2. The research findings were determined to be solution-oriented and were used to establish the six criteria in the system evaluation. These criteria collectively assess coordinative capacity, an evaluation that directly addresses this project's overarching research question: 'how might we coordinate a polarized society despite an increasingly complex environment?'. Drawing from the definition of coordination used in the context of the research question, coordinative capacity refers to our ability to effectively orient ourselves towards collaborative initiatives in order to make collective decisions about how to move forward. Coordination is critical to a society that aims to thrive in the face of inevitable challenges, as it enables wellinformed decision-making.

Rating categorizations range from low, moderate, and high, but the numerical score assigned to each is on a scale of 1 to 5 to highlight more granular variances.

Based on this evaluation matrix, a desired result is a system that engages in both conformity and nonconformity. More specifically, one in which all stakeholders adhere to shared agreements and a level of coordination that enables decision-making, while at the same time allowing pluralistic qualities to flourish. Pluralism in this context seeks to cultivate an equitable society where self-determination and an abundance of perspectives can support innovative and comprehensive decision-making. High levels of tolerance to dissent and ambiguity, equity, trust, and innovation are indicators of a society which has strong coordinative capacity. Consequently, it is favourable that these criteria have higher evaluation scores.

On the other hand, high levels of political regulation would suggest a loss of civil liberties and an oppressive structure which seeks to impose unilateral decisionmaking. Low levels of political regulation may represent a neglected or anarchic society in which no coordination exists to facilitate collaborative decision-making. A moderate score is preferred for these reasons.

A model score would look as similar as possible to Figure 17 (see page 73). Note that the model score is theoretical and primarily meant to be used as a baseline score against which to compare scores of all other systems.

Decision-making approaches and positions

With an adaptation of Kahane's Four Ways to Deal with Problematic Situations (2017) and the causal layered analysis tool, alternative futures outcomes were produced to explore what might happen if we elect to deal with affective polarization in four distinct ways.

Kahane's framework proposes that the first way we can deal with a problematic situation is to *exit*. This instinct arises from a sense that we cannot change the situation, nor can we live with it. Usually we quit or withdraw from the situation because the other force is more powerful than us. While Kahane describes exiting as a unilateral decision, in the scenario presented, both

EVALUATION C

The degree to wh

DISSENT TOLER ...deviances from conflicting, and c

opinions) are tol

AMBIGUITY TOL

...society tolerate gray areas pertin and matters of m

EQUITY

...financial equal is experienced a society.

TRUST

...society has con competency of it public perception regard for the we

INNOVATION

...society values thinking across s economic, and p

POLITICAL REGU

...governing auth oversee the daily

Table 3 | System evaluation criteria for coordinative capacity

	RATING (SCORE)	
LOW (1-2)	MODERATE (3)	HIGH (4-5)
Society is highly averse to dissent in any form.	Society is accepting of some forms and degrees of dissent.	Society is relatively open to, and at times, encouraging of dissent.
Society is made highly uncomfortable with ambiguity in any form.	Society perceives some forms and degrees of ambiguity to be tolerable.	Society is relatively comfortable with ambiguity; at times it even enables prosperity.
Inequities in all respects of the term are extreme and highly visible.	Inequity is moderately experienced; to varying degrees for some of society.	Equity is experienced in all respects of the term for all of society.
Society has little to no confidence in its institutions, and perceives a lack of all concern for individuals' well- being.	Society has some confidence in its institutions, and perceives moderate concern for individuals' well-being.	Society has a high level of confidence in its institutions, and perceives high concern for individuals' well- being.
Innovation is undervalued and neglected by society.	Innovation is selectively valued and to varying degrees depending on the circumstance.	Innovation is highly valued across all realms.
Society is politically unregulated in all aspects.	A moderate level of political regulation is in effect for some realms, and to varying degrees.	A high level of regulation is in effect across most or all realms.
	(1-2) Society is highly averse to dissent in any form. Society is made highly uncomfortable with ambiguity in any form. Inequities in all respects of the term are extreme and highly visible. Society has little to no confidence in its institutions, and perceives a lack of all concern for individuals' well- being. Innovation is undervalued and neglected by society. Society is politically unregulated in all	(1-2)(3)Society is highly averse to dissent in any form.Society is accepting of some forms and degrees of dissent.Society is made highly uncomfortable with ambiguity in any form.Society perceives some forms and degrees of ambiguity to be tolerable.Inequities in all respects of the term are extreme and highly visible.Inequity is moderately experienced; to varying degrees for some of society.Society has little to no confidence in its institutions, and perceives a lack of all concern for individuals' well- being.Society has some confidence in its institutions, and perceives moderate concern for individuals' well-being.Innovation is undervalued and neglected by society.Innovation is selectively valued and to varying degrees<

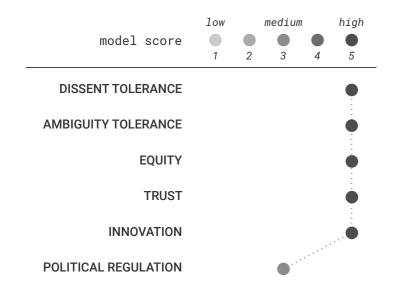


Figure 17 | Model evaluation score for coordinative capacity

political partisan groups decide that exiting is the best option due to an equal level of power on either side.

The second way is to *adapt*. As with exiting, when we adapt we feel that we cannot change the situation, but unlike exiting, we find a way to deal with it. Adapting can feel at times like a compromise, sacrifice, or as though we are settling. Adapting is also a unilateral decision in which one force determines the outcome of a situation, thus, it is also a situation in which our decision is based on another force being more powerful than us. In the corresponding scenario, radical liberal ideologies seek to push society forward at all costs, and all others are coerced into adapting to the progressive trajectory.

The third way is to *force*. A forceful approach is taken when we feel we know what is best for ourselves and determine it is the best for others as well. This is again, a unilateral process by which we feel compelled to change the situation, and have the power to do so.. We are for that reason only capable of employing force when we are the more powerful actor in the situation. The scenario that emerges is one where radical conservative ideology prevails in protecting, preserving, and reinstating the way things used to be.

The fourth and final way is to *collaborate*. Collaboration occurs when we are not satisfied with the current situation, and feel as though the only way to resolve it is alongside others, even if we have little or no desire to do so. We may choose to collaborate when both forces are equally powerful, and exiting is not an option. Collaborating is a multilateral approach, and in the scenario generated from it is one in which both ideologies acknowledge their dissatisfaction with the current state of the world, and despite their distrust of one another, decide the only option is to seek solutions collaboratively or face even greater undesirable consequences.

While Kahane's framework is a valuable point of origin, there are a few inconsistencies and a lack of nuance that this research called for. First, it does not account for the outcomes of multiple parties dealing with problematic situations in their own ways, and the result of those two approaches interacting. Each nuanced approach may produce outcomes specific to its context, and those outcomes should be assessed according to the context. For example, a low innovation score in one outcome may have different implications than in another outcome.

The realization of a need for more specificity in this framework came up in a couple of scenarios. First, in our current context, *In the Name of Justice*, we are experiencing two parties attempting to apply force. This results in a deadlock situation, where in fact, no true decision can be made. Another instance emerged with the realization that the exit approach may be applied unilaterally or multilaterally, as is the case in *Truman*. A mutual withdrawal from a situation may produce distinct outcomes from a one-sided exit, and it was presumed in this research context that a unilateral exit would produce outcomes too similar to force or adapt, where one ideology may prevail as a result of another's' surrender or defeat. As a result, the submissive exit scenario as shown in Table 4 was not explored. Due to this, the mutual exit scenario will continue to be referred to as simply exit going forward for consistency and conciseness.

DECISION- MAKING	AVOIDA
POSITION	COMBAT
	COOPERAT

Table 4 | Decision-making approaches and position

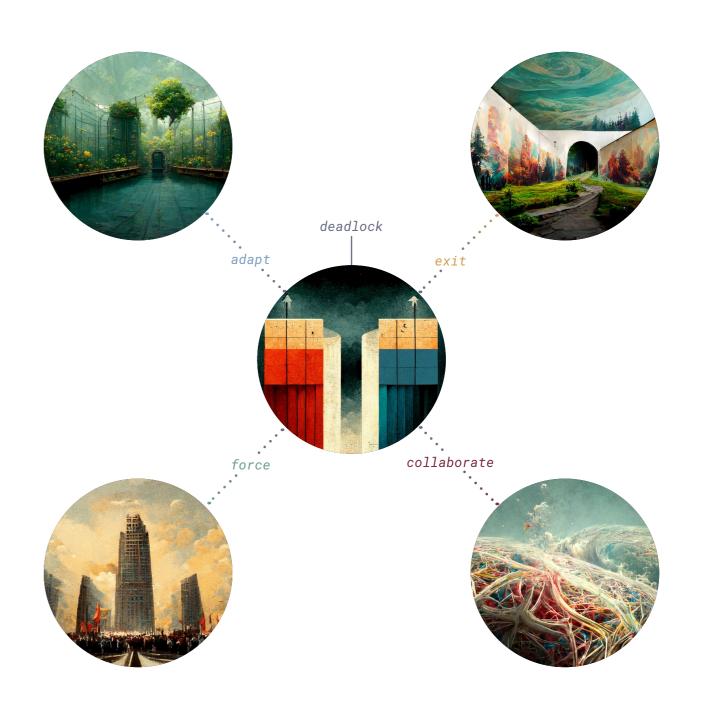
These specific situations highlighted the need for another dimension in the framework, which was defined as decision-making position. This dimension exists in contrast to Kahane's existing conceptualization of unilateral or multilateral decision-making approaches. Decision-making position refers to the attitude in which one engages or disengages in conflict, and has been distinguished by three variables: avoidant, combative, or cooperative. An avoidant approach involves the resistance of interaction with another, a combative approach involves an eagerness or readiness to apply force onto another, and a cooperative approach involves a willingness to engage with another.

	DECISION-MAKING APPROACH		
	UNILATERAL	MULTILATERAL	
ANT	Submissive Exit	Mutual Exit (Truman)	
IVE	Force (Success to the Successful)	Deadlock (In the Name of Justice)	
IVE	Adapt (Nightingale)	Collaborate (Symphony)	

This modification has created six potential outcomes, as opposed to four. Those captured by the alternative outcomes in this research are bolded in their respective colour schemes, presented in Table 4.

Alternative futures of 2042

Figure 18 presents five systems and their respective titles and visualizations, including the current system (deadlock) and the four alternate systems based on Kahane's framework (exit, adapt, force, collaborate). The remainder of the chapter includes visual representations, descriptions, identifies the mature trends³, system summaries, and a causal layered analysis of each alternative outcome.



³ Mature trends are those that are pervasive in the system. These are trends that were once known as emerging potential indicators of change that continued to progress and heavily impact the state of the system they are found in.



2042: Truman Approach | Exit, multilateral Position | Avoidant

When neither partisan group desired to accept the situation, both simply opted out and withdrew. An entire nation, from the people to the institutions, have been coaxed over two decades into a collective polarized trance. Succumbing to human instincts, no force has yet emerged to counteract or mitigate this trajectory, only those which have facilitated deeper division, distrust, and hostility. Elected government is static due to the inability for parties to reach consensus on any topic, and any motions take an extensive amount of time to be reviewed, and even longer to be passed. Regions are colloquially and culturally distinguished by their political affiliation after a period of mass intranational migration. The two groups exist in their own echo chambers, physically and virtually disconnected from each other, and experience distinct versions of reality where each side only has access to information about the world filtered according to their respective values (and group leader interests). They never encounter alternative ideas to their political ideologies, and rarely encounter members from the other group. It has proved to be safer that way for all.

For both groups, it is equally clear as to who and what they are, and who and what they are not; what they represent, and what they do not represent; what they will tolerate, and what they will not tolerate; what their objectives and vision are, and what the unthinkable would be. Explicit definitions of acceptable thought, speech, and conduct on either side leaves little flexibility and autonomy for people. For most, the fear of saying

Mature trends:

Al-generated images Government-mandated internet shutdowns Democratic backsliding

or doing the wrong thing among their respective members is suppressed and has become normalized.

This society has reached another inflection point. As strong as the trust within groups was in the early days of the divide, recently there has been an undertone of growing distrust, where groups within each region are beginning to emerge and slightly deviate in their values, opinions, and beliefs about how to move forward as a collective. There will always have to be a them in order for us to exist.

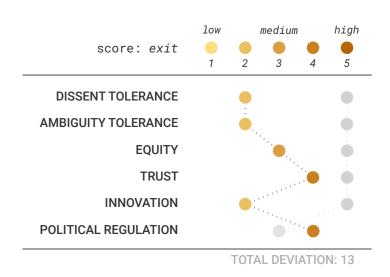


Figure 19 | 'Exit' evaluation score and deviation

The visual depiction of the alternative state, exit, was created using the Al image generator Midjourney, by entering the following text prompt: "360 degree painted walls of outdoor scenery".

SYSTEM QUALITIES	ALTERNATIVE STATE-2042
Decision-making approach	Exit
System Title	Truman
Myths & metaphors	Out of sight, out of mind
Governance strategy	Situation-avoidant: busy managing symptoms, not addressing cause
Governance	Weak Democratic
Social constructs	What you don't know can't hurt you
Social interaction	Ingroup association only
Social services	Inconsistent allotment; services are struggling
Knowledge creation	Uncoordinated, politically-motivated
Technological integration	Extensive for the public; elevated for regulatory purposes
Environmental state	Critical
Economic priority	Survive
Culture & values	Conflict is perceived to be a major threat; "Ignorance is bliss"

ISIBILITY	SYSTEM DIMENSIONS	SYSTEM MANIFESTATIONS	TIMEFRAME
Visible	Recurring outcomes (day-to-day manifestations)	 + Poor handling of events and circumstances resulting in high levels of damage and loss + Decisions are made slowly or not at all + Groupthink, conformity + Frequent internet disruptions + Censorship of content, information, speech + Misinformation and disinformation is pervasive + Downplaying the severity of events and circumstances + Fabricated evidence 	Short-term
	Systemic causes (long-term manifestations)	 Reactionary policy: "we'll cross that bridge if or when we come to it" Ideological segregation Siloed processes & departments Uncoordinated policy – extreme misalignment between federal, provincial, and municipal pursuits Echo chambers online (i.e., algorithms; censored content & blocked access to information) and in person (i.e., physical segregation of two populations) Bureaucracy 	
•	Worldviews (long-term constructs)	 + Absolutism; there is only one truth + Dualism; good vs evil + Hierarchical society 	
Hidden	Myths/Metaphors (deeply-embedded principles)	+ "Out of sight, out of mind"	Long-term

Table 5 | System summary of the alternative state 'exit'

Table 6 | Causal layered analysis of the 'exit' alternative outcome



2042: Nightingale Approach | Adapt, unilateral Position | Cooperative

Society, having had to adapt to governance that adheres to progressivism by any means, has brought about positive change for the betterment of all. Citizens are universally provided for, ever since the implementation of a guaranteed basic income. Most people can own a home on a leased lot, if they so choose, essential services are publicly funded, and goods and services are reasonably affordable in comparison with the average wage. People are almost always physically safe, and rarely face psychological danger from other individuals. Automation has covered some of the laborious jobs that once existed, allowing people more freedom to explore, discover, and pursue their genuine life interests.

And yet, a societal undertone of general unsettlement persists. Mental health is suffering, but the underlying causes are not explored by the majority, let alone addressed. It would undermine the social progress that has been achieved, to guestion external reasons, and consequently, many people blame themselves for these feelings. Although there are some that have begun to question a life that most of society deems people should simply feel grateful for.

Knowing who one may trust is key to social survival. Getting reported online or in real life for saying the wrong thing is the worst thing to happen to a person-a likely path to social ostracism, unemployment, and lack of access to public and private services. For everyone's best interest, ensuring no harm is intentionally or

unintentionally inflicted, all publications, media, research initiatives, social media posts, must be approved prior to their initiation and release. The released content must align with the pre-approved proposal or face a penalty of public defamation up to criminal charges. Opinions, beliefs, and ideas can never be completely eliminated, but expressions of socially unacceptable content can only be done in private, with those you trust most. The laws function because it's nearly impossible to find out whose opinions deviate from the 'norm'. Many are not willing to risk being exposed, and so communication remains surface level, in the 'safe zone'.

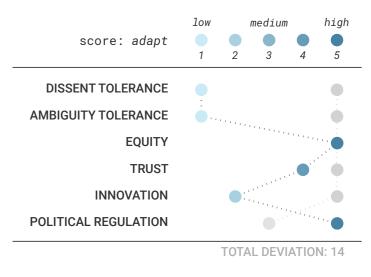


Figure 20 | 'Adapt' evaluation score and deviation

Mature trends:

Government-mandated internet shutdowns Democratic backsliding

The visual depiction of the alternative state, adapt, was created using the AI image generator Midjourney, by entering the following text prompt: "beautiful garden inside of a locked cage".

SYSTEM QUALITIES	ALTERNATIVE STATE-2042
Decision-making approach	Adapt
System Title	Nightingale
Myths & metaphors	When in Rome
Governance strategy	Unilateral: onwards with liberal ideology only
Governance	Autocratic
Social constructs	Zero tolerance for hate
Social interaction	Conformity via weaponized shame
Social services	Free essential services, i.e., all levels of education, holistic health care, & basic income
Knowledge creation	Coordinated, Politically-motivated
Technological integration	Limited for the public; elevated for regulatory purposes
Environmental state	Recovering
Economic priority	Local growth prioritized
Culture & values	Hive mind policing; "if you see something, say something"



Table 7 | System summary of the alternative state 'adapt'

Table 8 | Causal layered analysis of the 'adapt' alternative outcome

ng outcomes day stations)+ Ideological conformity + Suppression of speech + Minimal research initiatives + Public services for all + Basic income + High demand for mental health services + Overburdened, understaffed health institutions/services + Low supply and inflation of goods and servicesShort servicesic causes rrm stations)+ Pervasive surveillance + Social policing + Nationalization + Defunding of research & science + Expectation of holding oneself and others accountable + Stringent and bureaucratic research ethics regulation + Low government transparency+ Collectivism; prioritization of social reform + Moral Universalism; one set of ethics for all + Absolutism; there is only one truth + Splitting; all-or-nothing thinking+ "When in Rome"			
day stations)+ Suppression of speech + Minimal research initiatives + Public services for all + Basic income + High demand for mental health services + Overburdened, understaffed health institutions/services + Low supply and inflation of goods and servicesic causes rrm stations)+ Pervasive surveillance + Social policing + Nationalization + Defunding of research & science + Expectation of holding oneself and others accountable + Stringent and bureaucratic research ethics regulation + Low government transparencyiews rrm constructs)+ Collectivism; prioritization of local growth + Progressivism; prioritization of social reform + Moral Universalism; one set of ethics for all + Absolutism; there is only one truth + Splitting; all-or-nothing thinkingMetaphors -embedded+ "When in Rome"	M DIMENSIONS	SYSTEM MANIFESTATIONS	TIMEFRAME
 + Social policing + Nationalization + Defunding of research & science + Expectation of holding oneself and others accountable + Stringent and bureaucratic research ethics regulation + Low government transparency + Collectivism; prioritization of community + Localism; prioritization of local growth + Progressivism; prioritization of social reform + Moral Universalism; one set of ethics for all + Absolutism; there is only one truth + Splitting; all-or-nothing thinking + "When in Rome" 	day	 Suppression of speech Minimal research initiatives Public services for all Basic income High demand for mental health services Overburdened, understaffed health institutions/services 	Short-term
mm constructs) + Localism; prioritization of local growth + Progressivism; prioritization of social reform + Moral Universalism; one set of ethics for all + Absolutism; there is only one truth + Splitting; all-or-nothing thinking + "When in Rome"	rm	 Social policing Nationalization Defunding of research & science Expectation of holding oneself and others accountable Stringent and bureaucratic research ethics regulation 	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
-embedded		 + Localism; prioritization of local growth + Progressivism; prioritization of social reform + Moral Universalism; one set of ethics for all + Absolutism; there is only one truth 	
	embedded	+ "When in Rome"	Long-term



2042: Success to the Successful Approach | Force, unilateral Position | Combative

Outraged with the direction that society was heading in, some took it upon themselves to prevent any further damage, and revert things back to how they should be-the way they've always been done. Leaders forced a retrogressive vision on society to rebuild one based on the premise of freedom and respect for tradition. One's personal rights are protected-so long as social norms and expectations are adhered to.

These expectations are distributed across all types of media, which is highly regulated, and with the help of technology, no one can tell the difference whether the information in front of them is real or fabricated-online or in person. Many are too exhausted and disoriented by the inconsistent messaging to decipher a concrete grasp on what's happening in the world, and have either surrendered into accepting the information presented, or have become entirely disengaged.

With a driving principle of freedom comes a full embrace of the free market. Corporations are minimally regulated, and their power far supersedes the government, particularly in the context of the internet and social media. They have the authority but no incentive to enforce any censorship policies, as their regulatory decisions pursue profits, not public duty. And profits are made by adhering to free expression. In any case, censorship roles are fulfilled by the user base where either trolling or extreme, unregulated hostility restrain people from posting socially unacceptable content.

Mature trends: Al-generated images Government-mandated internet shutdowns Democratic backsliding

Technological innovation is progressing at a rate faster than ever before, nearly in parallel with the rate of the rising wealth gap. Inequality is at a peak, since the only possible way to accumulate wealth is to have been born into it.

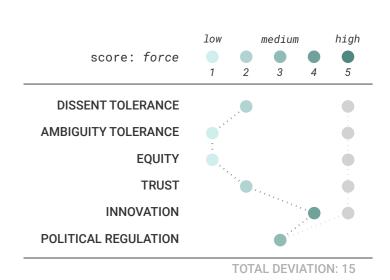


Figure 21 | 'Force' evaluation score and deviation

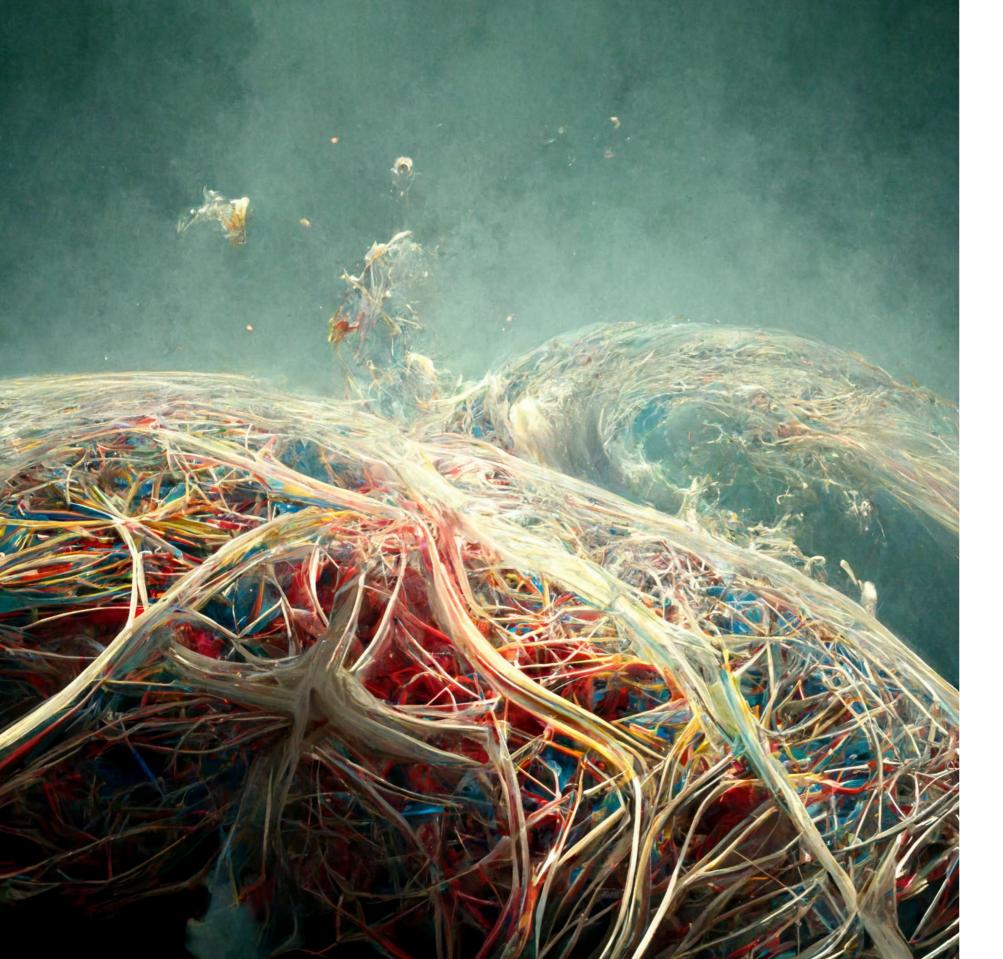
The visual depiction of the alternative state, force, was created using the AI image generator Midjourney, by entering the following text prompt: "success to the successful, late capitalism".

VISIBILITY	SYSTEM DIMENSIONS	SYSTEM MANIFESTATIONS	TIMEFRAME
Visible	Recurring outcomes (day-to-day manifestations)	 + Discrimination, hate, violence + High rates of theft + Large wealth disparity & social inequity + Suppression of self-expression + Minimal research initiatives + High availability of goods and services + High debt + High barriers to entry; few are self-employed + Frequent internet disruptions 	Short-term
	Systemic causes (long-term manifestations)	 + Stagnant social progress + Oppressive policies + Adherence to criminalization + Wealth is rewarded—the rich get richer + Subsidized traditional family structures + Incremental privatization + Government-employed disinformation + Monopolistic industries 	
	Worldviews (long-term constructs)	 + Constitutionalism + Individualism + Conservatism + Nationalism + Hierarchical society + Patriarchism + Capitalism + Splitting; all or nothing thinking + Absolutism; there is only one truth + Live to Work 	
Hidden	Myths/Metaphors (deeply-embedded principles)	+ "Every man for himself"	Long-term

ALTERNATIVE STATE-2042
Force
Success to the Successful
Every man for himself
Unilateral: onwards with conservative ideology only
Autocratic
Respect for tradition
Elite vs non-elite association only
Privatized services; prices align with quality
Coordinated, Politically-motivated
Extensive for consumption and profit; elevated for regulatory purposes
Critical
Continual growth prioritized
Protection of freedom; pride in "family values"

Table 9 | System summary of the alternative state 'force'

Table 10 | Causal layered analysis of the 'force' alternative outcome



2042: Symphony Approach | Collaborate, multilateral Position | Cooperative

Upon the realization that a divided society is unproductive at best, and subject to failure at worst, political leaders and political ideological representatives decided that it took two sides to create this problem, and it would take two sides to resolve it.

After two decades, society has reached a point where people are comfortable and welcoming of uncertainty. There is in fact an excitement and sense of agency and empowerment that accompanies it. Personal agency extends as well to general life choices, in which all may express and live by their values. Having rid society of shame tactics has been liberating for everyone.

In the face of conflicts, challenges, or potential dangers, many are willing to take action, in whatever form it comes, and with whomever it takes to engage in problem-solving. With more people involved in decision-making, comes more opportunity for dissent, but also stronger, more resilient, and even antifragile solutions.

Things are by no means perfect. For one, collaborative decision-making generally consumes a lot of time and resources. This has resulted in political reform, higher taxes and more forms of taxation. But for now, the benefits seem to outweigh the costs. The mainstream culture of plurality and curiosity that has evolved appears to be leading this society into a positive direction, one that is more prepared than ever to face the uncertainties and inevitable challenges that the futures hold.

Mature trends: Two-Eyed Seeing

Ministries of futures

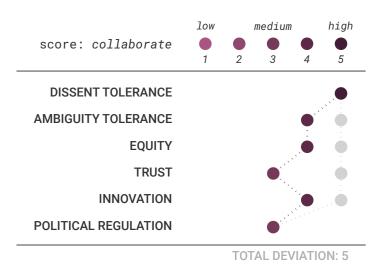


Figure 22 | 'Collaborate' evaluation score and deviation

The visual depiction of the alternative state, force, was created using the AI image generator Midjourney, by entering the following text prompt: "a complex system, massive, beautiful, flexible, collaboration".

		VISIBILITY	SYSTEM DIMENSIONS	SYSTEM MANIFESTATIONS	TIN
SYSTEM QUALITIES	ALTERNATIVE STATE-2042	Visible	Recurring outcomes (day-to-day manifestations)	 + Extended processes for decision-making + Tendency towards steady, incremental progress + High use of resources and human engagement + Expansion of taxable goods and services + Innovative systemic ideas and solutions 	Sh
Decision-making approach Collaborate System Title Symphony		•		 + Stabilized tech innovation growth curve + Public literacy of decisions, policies 	
Myths & metaphors There's always room f	or improvement			+ Frequent dissent & barriers of opinion	
Governance strategy Multilateral: onwards		•	Systemic causes	+ Futures-focused institutions	
Governance Open democratic		. • • •	(long-term manifestations)	+ High government transparency+ Participatory decision-making; pace is set by the public	
Social constructs The more, the merrier		• • •		 + Policy protects free speech and expression for all + Mitigation of beliefs, opinions, behaviours that threaten 	
Social interaction Mixed, connection ex	ists by means of diverse shared experiences			physical safety + Tech-equity policy development	
Social services Free essential service	es (definition of 'essential' is co-decided and regularly assessed)	0		+ Cross-disciplinary departments	
Knowledge creation Integrative science		•	Worldviews	+ Pluralism; multiple things can be true and exist at the same	_
Technological integration Life-centered, tech-en	abled	•	(long-term constructs)	time, varied ways of observing and interpreting the world	
Environmental state Recovering		•		 + Democratism + Social constructionism; much of what we know are social 	
Economic priority Local supports; "inclu	sive and respectful global integration"	•		agreements	
Culture & values "Find comfort in the d	iscomfort"	Hidden	Myths/Metaphors (deeply-embedded principles)	+ "There's always room for improvement"	Lo

Table 11 | System summary of the alternative state 'collaborate'

Table 12 | Causal layered analysis of the 'collaborate' alternative outcome

Alternative system observations

Outcome analysis

The current system (deadlock) and the four alternate system outcomes (exit, adapt, force, collaborate) are presented in Table 17 in a synthesized format of their system structures. Their evaluation is provided at the bottom of the table with a comparison to the model score; the total deviation is provided next to the scores in grey. The farther a sum is from zero, the further it deviates from desired conditions that would indicate higher levels of coordinative capacity.

Upon review of the alternative outcomes as a collective, several insights emerged. Overall, unilateral decision-making of any kind resulted in the least desirable outcomes. The forceful approach (unilateral combative) taken in Success to the Successful deviated the furthest from the model system score. It produced the lowest levels of equity and trust. The adapt approach (unilateral cooperative) taken in Nightingale did not produce better results. It seems that adapt is the flipside scenario to force, only from the other, less powerful perspective's position: if one is having to adapt, then another stronger force is coercing one to do so. The exit approach (multilateral avoidant) in Truman was almost equally deficient in that it produced low or moderate levels of most criteria other than high trust and political regulation. Additionally, avoiding the problem prompted history to repeat itself in this scenario, with polarization beginning to resurface. The collaborative approach (multilateral cooperative) in Symphony yielded an outcome closest to the model system.

It should be noted that any one of these criteria in isolation are insufficient in determining the state of a system without the context of the others. For example, at first glance, high levels of equity and trust as we see in Nightingale may appear to indicate a positive outcome, but in the context of other criteria, proves

to be an oppressive system in other ways. Inversely, in Success to the Successful an ideal level of political regulation exists, yet most of the other aspects in the svstem suffer.

Additionally, none of these outcomes or systems are perfect. Perhaps the model score itself is not the ideal, especially having been determined by one authored perspective and not by means of collective discussion and agreement. It did, however, provide a valuable baseline against which to compare all systems.

Key insights from comparative analysis

A synchronous relationship between dissent tolerance and ambiguity tolerance. All scores of dissent and ambiguity tolerance tended to be associated with one another and correlated with levels of flexibility and willingness to be curious, as well as attitudes towards variety-which will be defined as diversity of ideas and general potentiality. Lower scores seem to stem from monistic system manifestations and constructs that include absolutism and/or splitting (all-or-nothing thinking), while higher scores tend to be associated with pluralistic constructs that value variety in group coordination and decision-making.

No scenario resulted in low political regulation. This may suggest that as the world continues to become more complex and uncertain due to technology, increasing global connectivity, and access to boundless information, there appears to be an inclination towards overcompensating for the complexity with governing micromanagement across corporations and government, rather than easing restrictions. In this way, if we generally tend towards more regulation in conflict or complex circumstances, the threat of losing one's personal rights and freedoms either incrementally or more suddenly at the onset of a disruptive event may be a rational concern for future events. The current state and alternative outcomes highlight the precarious

SYSTEM QUALITIES	CURRENT STATE		ALTERNA	ATIVE STATES	1
Approach	Deadlock	Exit	Adapt	Force	Collaborate
System Title	In the Name of Justice	Truman	Nightingale	Success to the Successful	Symphony
Myths & metaphors	I think, therefore I am right (and good)	Out of sight, out of mind	When in Rome	Every man for himself	There's always room for improvement
Governance strategy	Situation-apathetic: no strategy in place as of yet	Situation-avoidant: busy managing symptoms, not addressing cause	Unilateral: onwards with liberal ideology only	Unilateral: onwards with conservative ideology only	Multilateral: onwards with collaboration and pluralism
Governance	Democratic	Weak Democratic	Autocratic	Autocratic	Open democratic
Social constructs	You're either one (liberal) or the other (conservative)	What you don't know can't hurt you	Zero tolerance for hate	Respect for tradition	The more, the merrier
Social interaction	Mixed, tendency towards prioritizing ingroup association	Ingroup association only	Conformity via weaponized shame	Elite vs non-elite association only	Mixed, connection exists by means of diverse shared experiences
Social services	Free essential services, i.e., public education until post- secondary, some health care	Inconsistent allotment; services are struggling	Free essential services, i.e., all levels of education, holistic health care, & basic income	Privatized services; prices align with quality	Free essential services (definition of 'essential' is co-decided and regularly assessed)
Knowledge creation	"Liberal science" (Rauch, 2021)	Uncoordinated, politically-motivated	Coordinated, Politically-motivated	Coordinated, Politically-motivated	Integrative science
Technological integration	Increasingly all- encompassing	Extensive for the public; elevated for regulatory purposes	Limited for the public; elevated for regulatory purposes	Extensive for consumption and profit; elevated for regulatory purposes	Life-centered, tech- enabled
Environmental state	Declining	Critical	Recovering	Critical	Recovering
Economic priority	Continual growth	Survive	Local growth prioritized	Continual growth prioritized	Local supports; "inclusive and respectful global integration"
Culture & values	You're either with us or against us	Conflict is perceived to be a major threat; "Ignorance is bliss"	Hive mind policing; "if you see something, say something"	Protection of freedom; pride in "family values"	"Find comfort in the discomfort"
		EVALUAT	TION CRITERIA		·
Dissent tolerance	3	2	1	2	5
Ambiguity tolerance	3	2	1	1	4
Equity	2	3	5	1	4
Trust	3	4	4	2	3
Innovation	4	2	2	4	4
Political regulation	3	4	5	3	3
TOTAL DEVIATION	10	13	14	15	5

Table 13 | Comparative system summary of current and alternative states

nature of governance and how future events may further disrupt our societal functioning.

A synchronous relationship between trust and political regulation. This relationship contradicted initial assumptions: high political regulation tended to be associated with high trust, while moderate political regulation tended to be associated with moderate levels of trust. Upon deeper reflection, it is possible this phenomenon may be explained by two justifications. The first is that higher levels of regulation may instill higher confidence in our institutions or at least an easing of uncertainty, to some degree. As mentioned earlier in the report, during highly uncertain times, people tend to seek firm leadership (usually associated with authoritarian approaches) (Van Bavel & Packer, 2021). The second potential cause relates to studies that suggest higher levels of distrust in government emerge when access to the internet is increased, and when the internet is uncensored (Guriev et al., 2019). In the context of the scenarios generated, it may be inferred that access to more, unregulated information (lower political regulation), leads to lower trust.

Pluralism is a rare but powerful force. Extracted from the first insight, lower levels of dissent and ambiguity tolerance will be defined as inflexibility, an unwillingness to be curious, and/or an aversion to variety. With the exception of Symphony, lower dissent and ambiguity tolerance are observed in every system; the tendency to harden and become desensitized, dissociated, or entirely segregated from alternative perspectives was a common outcome across scenarios. Because of this, it is inferred that pluralistic beliefs or practices tend to be a less common or potentially non-instinctual human tendency-an inference that may be further validated by our human desire and need to form social identities, as well as the behaviours associated with their formation and reinforcement as outlined in Chapter 2. That said, the impact of pluralistic beliefs and practices tended

to generate a more desirable system outcome as a whole, as is presented in Symphony. It is deduced that higher levels of dissent and ambiguity tolerance enable stronger, antifragile systems as a whole due to the system's frequent and widespread exposure to variety.

Note that these insights could be further tested for their validity in the context of a practical research application in a specific situation.

04−2022→2042

Exploring potential ways to move forward

The four c's for enabling cordinative capacity

Core values

Courage

Connection

Collaboration

Impact assessment

Guiding principles

Principles for building coordinative capacity

$04 - 2022 \rightarrow 2042$

The four C's for enabling coordinative capacity

This chapter presents the overall research outcome: a set of core values from which guiding principles oriented towards mitigating and/or preventing affective polarization were determined. These principles are derived from the human experience and are intended to underpin any strategic initiatives that individuals may desire to engage in.

Following the synthesis of current and alternative system assessments, four core values are uncovered and proposed as a potential foundation for antipolarization or depolarization initiatives. These initiatives aim to improve societal coordination and our societal resource of knowledge so that we may make well-informed collective decisions on how to move forward together during times of conflict and uncertainty.

The research thus far has been predominantly informed by the human factors that contribute to polarization. Our systems, processes, and institutions are established and shaped by humans and our interactions; these core values intend to support our navigation of this shared human experience toward more meaningful connection and coordination that strengthens the environments we operate within.

The values proposed are cumulative in that each one put forward depends on adherence to and the active practice of the value prior to it. They include curiosity, courage, connection, and collaboration. Each value is connected to and corresponds with a realm of the project guide (see Figure 19). Nurturing curiosity is associated with knowledge, our individual and collective pursuit. Pursuing deeper levels of understanding may enable more opportunities for connection, and those connections may dictate our attitudes towards engaging and coordinating with others. A mutual dependency exists between courage and connection; whereby one cannot effectively exist without the other. Finally, the cumulative value is collaboration: more specifically, stretch collaboration, a more effective

approach to working with others that challenges the conventional forms often employed.

Curiosity

Any effective truth-seeking endeavor is initiated by and conducted with curiosity (Rauch, 2021). Curiosity is an active desire and persistent application of that desire to deepen understanding. It goes beyond openmindedness, which is perhaps more of a passive state of being willing to receive new information. Curiosity enables us to actively challenge our own biases, beliefs, opinions, worldviews, and those of others towards truthseeking and collaborative solution-seeking outcomes. It does not necessarily undermine the perspectives it questions, but it may reasonably question their origins. In this way, being curious brings us that much closer to truth, evidence, and reality. Curiosity also has the potential to alleviate negative experiences associated with dissent and ambiguity intolerance, increase our tolerance of them, promote innovative thinking, and increase our willingness to work together. It is considered a strong foundation that enables a positive and cumulative effect on coordinative capacity.

Courage



The root origin of the word courage, before ly it became associated with heroism, was originally about the ability to "speak one's mind by telling all one's heart" (Brown,

2020). Brown reinstates the true meaning of courage, defining it as "speaking honestly and openly about who we are, what we're feeling, and about our experiences (good and bad) (2020). In that respect, courage is measured by our ability to be vulnerable.

Vulnerability is defined as "the emotion that we experience during times of uncertainty, risk, and emotional exposure" (Brown, 2021). Many of us are

Į.		\mathbf{t}
GUIDE	STRUCTURE	CORE VALUES
essence & purpose	inquiry & analysis	for coordinative capacity
	MATERIAL	CURIOSITY
KNOWLEDGE	observation	in our observations
what we do	RELATIONAL	↓ COURAGE
COORDINATION	interaction	in our interactions
how we do it	INDIVIDUAL	CONNECTION
now we do it	THETTEVAL	in our experience
	experience	
IDENTITY who we are	experience	

Figure 23 | Four C's in alignment with the project guide and structure

raised to believe that vulnerability is a weakness. Brown has found no evidence of this in her research, in fact, the contrary appears to be true. While it often elicits discomfort, it is a sign of inner strength that enables courage, meaningful connection, and transformational leadership.

Connection



In her research, Brown has uncovered that \rightarrow the purpose and meaning we find in life are rooted in connection and adds that, "...without it, there is suffering" (2012).

Connection comes from true belonging, and true belonging is only achieved "when we present our authentic, imperfect selves to the world" (Brown, 2017). Without authenticity, our desire to be accepted and fit in with our social groups can actually degrade connection, leaving us to be associated in proximity to our groups, yet disillusioned by the persistent sense of unfulfillment. Where curiosity enables, connection, can reinforce and strengthen the interactions between us, and support our coordinative capacity.

Collaboration



Stretch is a value derived from Kahane's concept of stretch collaboration. It differs from conventional collaboration primarily in that it "requires us to pluralize" and to "step fully into the situation" (Kahane,

2017). Pluralizing means embracing multiple realities, truths, and potential ways forward. Stepping into the situation means that we recognize our role in problematic circumstances as not only part of the solution but also as contributors to the problem. It asks that we let go of our preoccupation with changing others, and seek how we may instead change ourselves.

Table 14 is one adapted from Kahane's book, Collaborating with the Enemy, where stretch collaboration is first introduced and explained (2017). It concisely distinguishes between the two forms of collaboration and explores both according to three dimensions: how we relate with our collaborators, how we advance our work, and how we participate in our situation. These three dimensions of collaborating align with the three dimensions of decision-making associated with the project guide of this research, presumably due to the similarities associated with collaboration and decision-making. The dimensions of decision-making are added to the right of the existing table and aligned to the corresponding dimensions of collaborating.

Assessing the impact of the four c's on coordinative capacity

Table 15 visually summarizes the impact of the Four C's on coordinative capacity by indicating whether the application of each core value would increase, decrease, or have no impact on each evaluation criterion.

Impact assessment insights and considerations

This assessment revealed that an increased application of the core values tends to lead to an increase in most of the evaluation criteria. Some of the values have a direct impact, while others are identified by means of inductive reasoning (i.e., if X is true, then Y must be true). For example, curiosity may not at first glance seem to have a positive impact on equity, but it is inferred that by means of curiosity, we expand our thinking towards challenging the paradigms we live within and thus shaping our institutions that allow for inequity to persist.

Another discovery of this process is the challenge associated with applying these core values to political regulation and anticipating an outcome. This criterion is more of an inert measure that gains meaning through context. Unlike the other criteria, which are considered

Dimensions of Collaborating

How we relate with our collaborators

How we advance our work

How we participate in our solution

Table 14 | Conventional and stretch collaboration comparison (Kahane, 2017)

desirable traits with an inherent meaning behind them.

A significant insight gained from this assessment relates to findings found at the end of Chapter 3: A synchronous relationship between trust and political regulation, which suggests that high political regulation tended to be associated with high trust, while moderate political regulation tended to be associated with moderate levels of trust. Through inductive reasoning, it was found that an application of connection may offset the negative outcomes associated with public access to more, unregulated information, and the distrust that it otherwise provokes.

There are a few considerations to bear in mind with this impact assessment. The first is that without validation granted by its application in a practical research setting, this assessment is only theoretical in nature. Similarly, in this theoretical setting, an increase in each

CONVENTIONAL	STRETCH	Dimensions of	
COLLABORATION	COLLABORATION	Decision-Making	
Focus on the good and	Embrace conflict and	COORDINATION	
harmony of the team	connection (multiple	relational	
(one superior whole)	diverse holons)	interaction	
Agree on the problem	Experiment our way	KNOWLEDGE	
and the solution (one	forward (multiple	material	
optimum plan)	emergent possibilities)	observation	
Change what other people are doing (one paramount leader)	Step into the game (multiple co-creators)		

core value is assumed, since this would reflect the desired outcome. In a practical research setting in a specific situation, an increased, neutral, or decreased application of each core value may be observed. It is recommended for this reason that criteria also be established for each of the core values to determine their directional application in each practical setting (i.e., whether an increase, decrease, or neutral application was observed).

The four core values from the previous section were translated into a set of action-oriented guiding human principles. These principles may be used to underpin anti-polarization and depolarization strategic initiatives toward more effective societal coordination and decision-making.

Guiding principles

Principles for building coordinative capacity

Figure 24 visualizes a framework for building coordinative capacity. Four guiding principles are presented as action-oriented representations of the Four C's to which individuals may commit themselves. As with the core values, the principles have cumulative outcomes and are meant to be implemented as such; curiosity feeds into courage, courage and connection have a mutually dependent relationship, and connection feeds into collaboration.

Principle 1. Practice and apply a curiosity mindset

This principle asks that we become mindful of our curiosities, and commit to applying curiosity in our daily lives and interactions with others. We can promote curiosity by seeking experiences of wonder and awe. Together, these emotions inspire us to become aware of the vastness of our world as well as our interconnectivity within it (Brown, 2021). Specifically, wonder inspires a desire for inquiry, observation, and learning, while awe inspires humility and a sense of unity by prompting us to acknowledge and appreciate the world around us, and the people in it.

In the context of our interactions, curiosity may mean letting go of our tendencies to be defensive when faced with alternate perspectives, and instead be inquisitive (Van Bavel & Packer, 2021). Inversely, it encourages us to at times accept the risks of nonconformity in favor of strengthening our initiatives by promoting innovation and creativity. In the context of ourselves, curiosity may involve engaging in metacognitive practices that allow us to question the origins of our own perspectives and processes (McRaney, 2021). In the context of our quest for knowledge, we may adhere to the first rule of the reality-based community which is a commitment to pluralism and the acknowledgment of our susceptibility to failure, mistakes, and inaccuracies, as well as the susceptibility of others (Rauch, 2021).

	CORE VALUES			
EVALUATION CRITERIA	Curiosity	Courage	Connection	Collaboration
Dissent tolerance	+	+	+	+
Ambiguity tolerance	+	+	+	+
Equity	+	+	+	+
Trust	+	+	+	+
Innovation	+	+	+	+
Political regulation	/	/	1	/

LEGEND | + increase

- decrease
- / neutral, no impact

Table 15 | Theoretical impact assessment of the Four C's on coordinative capacity

Principle 2. Cultivate courage and vulnerability

Courage is our ability to express our authentic selves and is measured by our ability to be vulnerable (Brown, 2020). Vulnerability is defined as "uncertainty, risk, and emotional exposure" (Brown, 2021), and it is "the core, the heart, the center, of meaningful human experiences" (Brown, 2012). Engaging wholly in vulnerability asks that we do so reflexively (internally) and interpersonally (externally). Understanding the internal and external interactions of our human functions provides valuable insight about ourselves, which connects us to our own experiences and enables connection with others (Brown, 2021). It should be clarified that vulnerability does not entail sharing our experiences with anyone. It is reserved for those with whom trust has been established.

Reflexive vulnerability is critical because, in order to facilitate outward communications and expressions, we must establish an understanding of our internal processes. We must know how to name and communicate our individual experiences—in other words, emotional literacy. Emotional literacy refers to our ability to identify and regulate our emotions and to identify and empathize with the emotions of others in a way that contributes to our own well-being, the well-being of others, and the quality of our interactions (Steiner, 2003). Marc Brackett, a research psychologist has developed with his team a framework called RULER (2019) which comprehensively describes the five skills required for emotional literacy:

Recognizing-Recognize our emotions and those of others;

Understanding–Understand the experience and where it might be coming from;

Labeling-Label the emotions with higher precision;

Expressing-Express the emotions appropriately according to the context;

Regulating–Regulate the emotions with strategies to help manage our own and those of others.

In the context of government organizations, vulnerability may be equated to transparency. While the intricacies of government transparency are outside the bounds of the research scope, the research did suggest several connections between the two. Transparency refers to the optimal amount of public information that is both accurate (truthful) and accessible (obtainable and comprehensible). Levels of transparency are one indicative factor of democracy because access to accurate information enables the public to make informed decisions and to keep our government accountable (Transparency International, 2022). Adapting Brown's definition of vulnerability, we may consider transparency to be defined as 'uncertainty, risk, and operational exposure' (2021). Neither vulnerability nor transparency can predict the reaction of others, and where vulnerability exposes one to potential judgment, criticism, or manipulation, transparency elicits public feedback and retaliation. Both are indicators of strength-in one's courage and self-awareness, or in the validity of established functions and operations. Most pertinently, both contribute to a foundation of trust and connection among collaborators and thus support our ability to coordinate toward effective decision-making. Both transparency and vulnerability may cultivate connection because they make available the necessary details and provide context to our collaborative spaces and the people within them. Where individual vulnerability illuminates our sense of shared humanity, institutional transparency may allow us to partake in shared purposes or objectives.

Principle 3. Recognize and pursue connection

True belonging enables connection, and means living in our authenticity (Brown, 2017). 'Fitting in' with a group requires conformity and altering ourselves to participate. We only fulfill our belonging needs when we are accepted as our authentic selves. It is the connection that we innately crave; it is what gives us meaning and purpose (2012). Brown has uncovered four elements of true belonging (2017), the descriptions of which have been paraphrased below:

It's easier to hate from afar than it is up close. This means that when we distance ourselves from others, we lose sight of their humanity, the nuances of their experiences, the complexities that have shaped their lives. We must zoom in to find true belonging.

Confront nonsense, but maintain civility. Nonsense is the outcome of our pervasive dismissal of truth which emerges primarily from a place of incuriosity. Maintaining civility as we confront dismissals of truth means that we interpret expressions of nonsense with generosity, and without degrading our counterparts (e.g., weaponizing shame).

Maintain our belief in human connection. We have an unbreakable connection to ourselves and others, and so long as we believe this, it remains true. Distancing ourselves leaves us prone to hatred, dehumanization, and isolation.

Live amidst the plurality of our experience. True belonging relies on a paradox: to have both courage and vulnerability; to feel and express contradictory emotions.

Consequently, belonging cannot be achieved without trust in ourselves, in others, and in the institutions and information that allow us to operate in the world (2017). Trust is defined as the cognitive process of "choosing to risk making something you value vulnerable to another person's actions" (Feltman, 2021). It begins with a commonality and encourages us to coordinate and collaborate with others. Inversely, distrust is the perception that the things we value are not safe with

GUIDING PRINCIPLES action-oriented initiatives

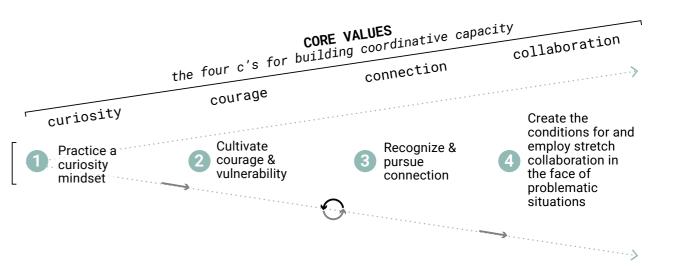


Figure 24 | Guiding principles for building societal coordinative capacity

others in a specific situation or any situation at all. It impedes our willingness or capability to coordinate and collaborate with others.

Trust can be built by committing ourselves to the traits defined by Brown's BRAVING framework (2017), paraphrased below:

- Boundaries: explicitly expressed personal limitations of interaction we will accept and not accept.
- **Reliability:** consistently adhering to commitments.

Accountability: a sense of responsibility for our own actions enacted by confronting mistakes, expressing regret, and altering behaviour accordingly to demonstrate awareness of our impact towards cultivating personal growth.

Vault: safeguarding information shared in confidentiality.

Integrity: electing to do the right, honourable thing aligned with one's values when called to do so.

Nonjudgment: expressions of personal experiences do not prompt criticism or ridicule.

Generosity: interpreting the presence of others with kindness and a genuine attempt to understand.

Often, we associate trust with 'trust-building'. It implies that trust is a process rather than an isolated experience. It takes time to cultivate and requires several key commitments. We may enable trust in our systems and institutions by applying BRAVING in these contexts as well. These trait definitions have been slightly adapted from Brown to apply to an organizational context, particularly for government leaders and representatives.

Boundaries: explicitly expressed limitations of acceptable and non-acceptable interaction.

Reliability: a consistent adherence to commitments made.

Accountability: a sense of responsibility for our actions enacted by confronting mistakes, expressing regret, and altering behaviour accordingly to demonstrate awareness of our impact and a desire to learn and grow.

Vault: safeguarding private information.

Integrity: electing to do the right, honourable thing aligned with one's values when called to do so.

Nonjudgment: expressions of others do not prompt criticism or ridicule.

Generosity: interpreting and engaging with others with kindness and a genuine attempt to understand.

Principle 4. Create the conditions for and employ stretch collaboration in the face of problematic situations

Employing stretch collaboration requires adherence to the three dimensions of stretch. The first stretch corresponds with "how we relate to the people with whom we are collaborating-our team", and it asks that we embrace both conflict and connection, and the existence of multiple holons¹ (Kahane, 2017). This is related to pluralism and involves exercising both power (asserting) and love (engaging), and knowing when to employ either. The second stretch corresponds with "how we advance the work of the team", and involves dedicated experimentation to uncover what works best in that specific situation to move forward (Kahane. 2017). The third stretch corresponds with "how we

participate—what role we play—in the situation we are trying to address", and involves inserting ourselves into the situation wholeheartedly, as contributors to both the problem and the solution (Kahane, 2017). This third stretch challenges a phrase we so often hear associated with social justice initiatives: 'if you're not a part of the solution, you're a part of the problem'. Kahane argues that this expression lacks a critical understanding that we cannot be part of a solution to a problem we believe we are not a part of.

A final consideration of collaboration is that often, our willingness to collaborate does not align with the other parties' willingness to do so. Thus, we must create the conditions for collaboration to occur. Kahane (2017) proposes four possibilities in this scenario:

the viability of collaborating".

- "Waiting for frustration, doubt, or desperation of the viability of the unilateral options";
- "Increasing their frustration, doubt, or desperation of the viability of the unilateral options";
- "Decreasing frustration, doubt, or desperation of the viability of the unilateral options";
- "*Increasing* their excitement, curiosity, hope about

A holon is a term in the domain of philosophy coined by Arthur Koestler, and is defined as "something that is simultaneously a whole and a part" (Kahane, 2017). Systems are holons in that within them exist numerous wholes, but they are themselves also a whole nested within other larger wholes.

05-CONCLUSIONS

Summarizing the research objectives and outcomes

Research overview

Beyond research scope

Limitations

Next steps

05-CONCLUSIONS

Research overview

This chapter is a brief reflection of the project in its entirety including research objectives and outcomes, and concludes by addressing project limitations and next steps.

The purpose of this research was to explore how we might make more meaningful connections in our lives and become curiosity-led collaborators. We have explored the shared elements of our human experience that highlight our need for belonging and connection, and how we interact with one another to form (or harm) our collective resource of knowledge. The culmination of this research produced a set of core values and guiding principles by which to conduct ourselves, and it is clear that in order to pursue both an ideologically diverse, yet civil society, we must learn to be curious towards ourselves and in our interactions with others. to be courageous when we are called to be, to pursue true sources of connection, and to stretch into plurality.

The research question sought to address how we might coordinate a polarized society despite an increasingly complex environment. This question was explored in the context of three dimensions – the relational (our interactions), the individual (our experience), and the material (our observations). These dimensions formed the structure of the project and were an underlying thread and guide throughout the project. The Input-Process-Output (IPO) methodology was applied as a roadmap for connecting a series of methods and tools towards a cohesive and logical outcome:

Chapter 2 constitutes the literature review and the bulk of the research where the current state was explored. The inquiry and analysis identified the key stakeholders involved in the system in focus, the conditions, circumstances, behaviours, and traits which create and/or contribute to affective polarization, as well as how perspectives are formed, how they escalate, and why they are retained and defended. An analysis revealed that our group identities are embedded into our sense of self, and their corresponding beliefs in our

morality. When those beliefs are guestioned, it elicits high levels of inner conflict which emanates outwards into our interactions with dissenters.

Chapter 3 is an exploration of alternative futures that might await us based on our current state today and the emerging potential indicators of change that might shape the trajectory. Four alternative futures outcomes are envisioned according to four distinct ways we may elect to deal with the problem we face: affective polarization. The current state and alternative states are individually and comparatively assessed with the evaluation criteria for coordinative capacity. Favourable outcomes are only observed when we elect to collaborate.

Chapter 4 reveals a theoretical framework that includes core values and guiding principles that may be used as a foundation for anti-polarization or depolarization initiatives. Being rooted in the human experience, the framework seeks to provide an action-oriented guide for managing and tending to our needs to promote a pluralized yet coordinated society.

Beyond research scope

Limitations and next steps

Acknowledging and mitigating bias. The singular perspective that compiled the research and authored this report inherently contradicts the overarching message of the research. As is true for us all, any research endeavor is subject to personal bias. Mitigating the bias found within this work, and for it to adhere to the rules of the reality-based community, would require that it sustains a process of review, feedback, and revisions from a variety of perspectives. Acknowleding bias also includes recognizing one's worldview and the implicit processes that inform one's thoughts, beliefs, and actions. The project emerged exclusively from a Western perspective with an application of western science; any attempt to mitigate bias also requires that this work be considered in intersection with alternative worldviews and knowledge-generating approaches. A primary advisor overseeing the work helped uncover blind spots and question potential expressions of bias in the work, however, under ideal circumstances, the research would be conducted alongside a diverse group that is representative of the content and topics covered throughout the project.

Project timing. The project emerged from an interest in uncovering the cause of polarization as experienced throughout the COVID-19 pandemic. The timing of the project was favourable in that many gaps in the topic space were open for exploration. This same situation was unfavourable in the limited availability of prior research relevant to the interconnected disciplines that ultimately informed this project. This entailed connecting many dots between the various fields.

Validating research synthesis. The research would have been better supported by expert interviews and/ or a secondary advisor in one of the related disciplines explored to corroborate the information presented and synthesized. The range of topics covered and the nature

of how the research process unfolded prevented the process of identifying and securing an adequate and relevant panel of experts.

There are a couple of potential directions to expand and/or further this research:

Evaluating the theoretical framework. Given the theoretical nature of this project's contribution, the research could be further developed by testing the framework within a number of practical applications. Selecting a specific research setting, subject, and any associated variables would form the practical research space. From here, an impact assessment based on the evaluation criteria for societal coordinatie capacity would be conducted to determine the practical efficacy of the guiding principles.

Investigating other leverage points in the system. This inquiry focused on system leverage points from the perspective of individual, human factors. A thorough systems analysis could be conducted on the governance structure in Canada as well as a comprehensive inquiry into national and global political and economic factors contributing to affective polarization.

Examining organizational competency. Similarly, future inquiry could expand this research on human behaviour by exploring and analyzing literature pertinent to organizational behaviour to investigate whether any parallels could be made between the guiding principles and organizational competency.

I hope this research has offered an alternative way of thinking about our problem in focus and about other people, especially those we previously could not or did not want to understand. With any success, it would have prompted a desire to understand and a desire for more meaningful interactions in our pursuit to move forward, together.

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