

# **Beyond Technology: The Role of Information Interference in Climate and Election Obstruction**

Heidi Tworek and Sonja Solomun

## **Influence and Interference**

Attempts to drive polarization through deliberate propaganda and/or misleading claims are nothing new. Yet, in the last few years, “disinformation” has emerged as a seemingly novel and exclusively technological threat to fair elections and democracy more broadly. Most recently, the term “climate disinformation” has been used to characterize decades-long climate denial and delay strategies that are finding new ground and amplification on social media. Twitter for instance, saw a 300% increase in climate denialist content in 2022 alone,<sup>1</sup> while known climate conspiracies circulated to hundreds of millions Facebook users, especially during key events such as COP26.<sup>2</sup> Google meanwhile, continues to profit from climate denial ads despite disallowing content that contradicts scientific consensus on climate change.<sup>3</sup> Policymakers are waking up to these enforcement gaps and their risks. Last year, the Intergovernmental Panel on Climate Change (IPCC) drew attention to the impacts of climate change rhetoric and polarization for the first time, noting that the politicization of climate change science has impeded climate policy and action.<sup>4</sup>

While contemporary narratives have moved from “overt denial” of climate change’s anthropogenic causes to more subtle tactics of “delaying” mitigation measures, they deploy well-worn denial strategies such as cherry picking, mobilizing “half-truths,” and calling for inactivism. “New” forms of “climate disinformation” echo old climate opposition myths from the last century.

The long history of election interference in democracies around the world relies on similarly nuanced tactics. Yet, the present public and policy debates about these types of interference are often de-politicized as mostly technological problems. Scholars and practitioners working on these issues have called for a deeper engagement with these histories, especially as they illustrate the centrality of power, interest and politics to the study of polarization today.<sup>5</sup> These historical dimensions of polarization are especially disregarded when they concern the replication of long-standing, systemic harms and struggles for equality.<sup>6</sup> More broadly, historically informed perspectives are crucial at a time when forms of historical inequality are being justified anew.

This essay will draw parallels between the two historical examples of election interference and climate obstruction.<sup>7</sup> We highlight long-standing tactics including: the use of deliberate and misleading narratives; the creation and weaponization of doubt and uncertainty; the coordination of networks and actors; and attempts to drive polarization and influence policy outcomes. In doing so, we hope to underscore how pre-existing myths about inequality drive the success of such interference more than specific technologies or “bad actors.” Polarization is deeply interrelated with diverse social, political, and economic causes and is a multifaceted policy problem that goes far beyond new communications technologies.

## **The History and Politics of Election Interference**

While both election interference and climate obstruction campaigns involve the deliberate dissemination of false information and overt forms of state-sponsored propaganda, susceptibility to propaganda has much broader societal, political, and economic causes than reading or viewing

a few pieces of flawed information. The role of institutions and trust in institutions matter for whether low-quality information resonates or not.<sup>8</sup> Moreover, these are long-standing problems that have waxed and waned throughout democracies' existence.

Election interference has existed for as long as elections themselves. The United States, for example, worried about French interference in the election of 1796. Alexander Hamilton argued in Federalist paper 68 in 1788 that the Electoral College protected against the “most deadly adversaries of republican government,” which mainly included “the desire in foreign powers to gain an improper ascendant in our councils” and could best be achieved “by raising a creature of their own to the chief magistracy of the Union.” To guard against foreign interference in presidential elections, Hamilton believed that “a small number of persons [white men], selected by their fellow-citizens from the general mass, will be most likely to possess the information and discernment requisite” to select the President.<sup>9</sup> Restricting the franchise was Hamilton's solution to feared foreign intervention.

Ultimately, restrictions on the franchise in the United States for women and non-white citizens until the 20th century meant that, according to some scholars, the US only really became a democracy with the passing of the Voting Rights Act of 1965, which forbade racial discrimination in voting.<sup>10</sup> Electoral restrictions for fear of foreign interference can thus contribute to undermining democracy and increasing polarization.

During the Cold War, foreign interference became “a common feature of great-power politics.”<sup>11</sup> The United States and Soviet Union (or its successor state of Russia) intervened in 11.3 percent of all national elections between 1946 and 2000, according to a dataset collected by political scientist Dov Levin.<sup>12</sup> Over 35 percent of these interventions were overt. Concerningly, interventions generally increased the chances that the candidate favoured by the foreign intervenor would win. Such interventions commonly included spreading false or salacious information as well as campaign funding or assistance.

Seen in this historical light, Russian attempts to intervene in the 2016 election are part of a long-standing pattern.<sup>13</sup> As Levin notes, even the one new feature of cyberwarfare was “largely the digitization of an age-old method of electoral intervention (i.e., ‘dirty tricks’).”<sup>14</sup> Foreign interference has even been common in established democracies, whether post-war Italy or probably Canada in the 1960s. Electoral interference is a feature, not a bug, of open democratic elections. The question then becomes when and why this interference succeeds. It succeeds not due to citizens seeing one item, but due to repeated exposure and resonance with deep-seated understanding of people's places in society. Distrust in electoral processes can enable foreign interference to succeed or can depress voter turnout. That underlying distrust may have emerged from domestic political or media actors stoking such skepticism, which can further polarize societies between those who do and don't trust basic democratic processes like voting.

Polarization and disinformation intertwine through distrust in institutions. Polls show that this distrust has increased over the past few decades. In 1960, 73 percent of Americans polled stated that “they trust the government in Washington to do what is right just about always/most of the time.” By the early 1990s, that number declined to 19 percent; with the exception of a bump after 9/11, trust has hovered between 15 and 20 percent since 2010.<sup>15</sup> Yet that distrust was at times justified, for example in the case of Watergate.

That distrust exists more broadly in established democracies around media institutions too.

Trust in media has declined rapidly in the United Kingdom, sliding from 51 percent in 2015 to just 34 percent in 2022.<sup>16</sup> In Canada, trust has slipped from 55 percent in 2016 to 42 percent in 2022.<sup>17</sup> Though higher than many other countries, this was the lowest ever trust score in Canada.

In this regard, electoral interference and distrust in government institutions follow similar patterns to other historical forms of disinformation and skepticism, including about climate and environment, that seeks to polarize by building on existing societal cleavages. In the American context, Alice Marwick, Rachel Kuo, Shanice Cameron and Moira Weigel created a critical disinformation studies syllabus using historical case studies on subjects such as Japanese incarceration or AIDS/HIV to “argue that disinformation is a key way in which whiteness in the United States has been reinforced and reproduced, in addition to heteronormativity and class privilege.”<sup>18</sup> A similar syllabus could undoubtedly be created for Canada.

### **Canadian Elections, Politics and Climate Obstruction**

The history of climate obstruction has equally seen efforts to sow distrust through propaganda and well-coordinated and financed “denial campaigns.” Public distrust in global warming – predicted for at least a century – has existed for just as long.<sup>19</sup> Seeding distrust and uncertainty is the primary goal of climate obstruction, particularly because this can destabilize democratic institutions, mitigation efforts, and democratic processes like voting.

Voters identified climate change as the top issue driving their ballot choice in Canada’s 2021 federal election.<sup>20</sup> Although this partly indicates growing concern over environmental issues (especially amongst younger voters), it also emerged from an alarming rise in the mainstreaming of climate conspiracy theories in Canadian and U.S. political debates and elections.<sup>21</sup>

In the months leading up to the 2021 Canadian federal election, Cheryl Gallant, a Conservative Party of Canada Member of Parliament (MP), circulated an established “climate lockdown” conspiracy claiming that the COVID-19 pandemic is a precursor to impending “authoritarian” climate emergency lockdowns.<sup>22</sup> On both her YouTube channel and through distributed leaflets, Gallant claimed the incumbent Liberal government would “legislate rolling lockdowns in response to an ill-defined climate emergency” and urged voters to “make the coming election a referendum on more lockdowns.”<sup>23</sup>

The climate lockdown conspiracy entered mainstream Canadian electoral politics in summer 2021; mainstream media outlets amplified the conspiracy to expose its danger, causing the highest ever volume of mentions for “climate lockdown” on Twitter.<sup>24</sup> Although the Canadian Election Misinformation Project found that most Canadians did not come across this story, over half of those who did believed it was true.<sup>25</sup>

The “climate lockdown” narrative was momentarily successful because of it was quickly integrated into a pre-existing ‘culture war’ framework, echoing strategies that cut across both election interference and climate opposition. These strategies weaponize existing messages to fuel distrust in institutions, drive polarization, and reinvigorate historical discrimination.<sup>26</sup> This framework seems to have resonated with certain Canadians: the amplification of climate lockdown on far-right Canadian news outlet Rebel News garnered the retweets out of any other mention of the term that week.<sup>27</sup>

Such issues, however, existed before the 2021 election. Coordinated propaganda and disinforma-

tion in politics often work to maintain existing power structures. Current efforts to “debunk” or otherwise deal with climate disinformation through exclusively technological solutions and platform policies such as verification and fact-checking cannot address the underlying historical, social, and political conditions for spreading it. As Wendy H.K Chun argues instead, the framework of authenticity may be more useful in addressing social problems commonly categorized as exclusive problems of mis and disinformation.<sup>28</sup>

## Climate Obstruction in Canada: “New” Forms, “Old” Myths

Climate obstruction in Canada follows both “traditional” and “new” forms of denialism that aim to delay regulatory and collective action.<sup>29</sup> Intersections of class, race, gender, and settler colonialism have long informed the history of climate opposition. One of the earliest examples comes from a popular 19th century claim that “rain follows the plow” in the American West. Used to encourage colonial settlement, the widely promoted and since discredited claim argued that deforestation would bring more rainfall. When other experts of the time disagreed – proffering that deforestation could even result in reduced rainfall – European academics alleged that temperature zones inhabited by the “Caucasian race” were naturally superior for the proliferation of “civilization.”<sup>30</sup>

Connections between climate denial, identity, and politics continue up to today. These intersections of power and identity politics animate contemporary tactics of climate denial and opposition. For instance, a recent study of American political conspiracy theory and political movement, QAnon finds that members integrate and oscillate their tactics between climate denial and hate speech, including spreading anti-Black Lives Matter content.<sup>31</sup>

Contemporary climate delay discourses repurpose established forms of conservative populism into “extractive populism” – an umbrella term to capture emerging efforts to frame extractivism as a public democratic expression threatened by elites and thus requiring public defense.<sup>32</sup> This framework positions “ordinary people” as victims of powerful liberal elites imposing their values on society.<sup>33</sup> Canadian Facebook groups promoted this framework, spreading claims that fossil fuel extraction “benefits everyone.”<sup>34</sup> This aligns with increasing market and media tendencies to view Canadian oil as “low-carbon” and therefore “ethical,”<sup>35</sup> a greenwashing tactic advanced by supposedly independent groups despite their heavy interest in the sector.<sup>36</sup>

Climate denial and opposition are particularly mobilized by conservative networks in both Canada and the United States.<sup>37</sup> In the United States, partisan polarization is a key factor in disseminating misinformation.<sup>38</sup> Similarly in Canada, targeting conservative audiences remains a powerful strategy. After tracking climate-related Facebook content for a year, climate communications scholar Shane Gunster identified a dense (and well-coordinated) network of Canadian conservative actors who are especially adept at driving significant social media traffic to anti-climate action content and directing their audiences to further promote it on their own personal networks.<sup>39</sup> This reflects an established tactic of the climate “countermovement” in both Canada and the United States to target conservatives with anti-climate change messages in an effort to instigate media outlets to report on the “uncertainties” of climate science.<sup>40</sup> This narrative delayed regulation by sowing distrust in institutions and experts and by casting doubt on climate change – in short, by prolonging the debate.<sup>41</sup>

More broadly, while Canadian Conservatives have moved to the left on issues of immigration and same-sex marriage, they have simultaneously moved to the right on environmental issues,

leading to a growing party gap in policy beliefs on climate.<sup>42</sup> For some, these party gaps are consistent with the economic motivations of key climate opponents,<sup>43</sup> namely the Canadian oil and gas industry, and related industry associations such as the Canadian Association of Petroleum Producers, who have fiercely protected their economic interests by delaying pathways to effective climate mitigation over the last fifty years.<sup>44</sup> Chief among them is the Canadian subsidiary to ExxonMobil, Imperial Oil, that has a documented history of funding climate denial and lobbying against government action to address climate change.<sup>45</sup> While the forms of climate opposition have certainly evolved, motivations and political interests have remained.

## **Conclusion: What can history teach us about polarization today?**

Historical research is crucial in demonstrating how susceptibility to propaganda is not necessarily a consequence of consuming a few pieces of flawed information, but rather how it is (or can be) the product of broader societal, political, and economic factors. Election interference has become a feature of open democratic elections. This follows similar patterns to other historical forms of disinformation that seek to polarize by building on existing societal cleavages, including environmental issues.

The debate about anthropogenic climate change has always been political – that is to say, shaped by vested actors, institutions, political and economic interests as well as ideological and regulatory agendas.<sup>46</sup> Indeed, the primary objectives of climate obstruction today are to drive the public agenda to accept delaying action and to influence the political process towards policies that do not support climate action.<sup>47</sup> These tactics are similar to those used in the 2020 U.S. election, for example, where mis- and dis-information circulated online about concerns with ballot counting errors resulting in a “stolen election” and a series of calls for re-counts, delaying official announcements of election results.<sup>48</sup>

By engaging with the vested interests of politically motivated groups, we can deepen the accountability measures needed to address public polarization as well as responses to climate mitigation and electoral politics. This allows us to move beyond exclusively technological fixes including corrections and fact-checking, which can inadvertently sustain the spread of debunked stories. As Wendy H.K Chun emphasizes, attending to these broader politics and histories moves us beyond irreconcilable debates over whether something is real, toward engaging with the outcomes and impacts.

Many are justifiably calling for greater accountability from platform companies and governments to address the circulation and monetization of mis- and dis-information. That is an important part of the puzzle. But so too are broader factors. The history and politics of climate obstruction and electoral interference remind us to address democratic, economic, social, and environmental concerns too.

## **Endnotes**

- Klepper, D. (2023). Climate change misinformation ‘rocket boosters’ on Elon Musk’s Twitter. CTV News. <https://www.ctvnews.ca/climate-and-environment/climate-change-misinformation-rocket-boosters-on-elon-musk-s-twitter-1.6237051>.
- ISD. Deny, deceive, delay: Documenting and responding to climate disinformation at COP26 and beyond. ISD. <https://www.isdglobal.org/wp-content/uploads/2022/06/Summative-Report-COP26.pdf>; see also AVAAZ. (2021). Meta-denial: How Facebook fails to keep up

- with the evolving tactics of today’s climate misinformers. AVAAZ <[https://secure.avaaz.org/campaign/en/facebook\\_climate\\_misinformation/](https://secure.avaaz.org/campaign/en/facebook_climate_misinformation/)>; Alegre, S. (n.d.) Big tech’s dirty secret: How big tech’s toxic business model undermines action against climate change. Global Action Plan. <[https://www.globalactionplan.org.uk/files/big\\_tech\\_report.pdf](https://www.globalactionplan.org.uk/files/big_tech_report.pdf)>.
- The Coalition Against Climate Disinformation and the Centre for Countering Digital Hate. (2023). YouTube’s Climate Denial Dollars. <https://foe.org/wp-content/uploads/2023/04/YouTubes-Climate-Denial-Dollars.pdf>
  - IPCC Working Group II. (2022). Climate change 2022: Impacts, adaptation and vulnerability. IPCC. <<https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>>; see also Bellamy, J. (2020). Climate change disinformation and polarization in Canadian society. North American and Arctic Defense and Security Network. <https://www.naadsn.ca/wp-content/uploads/2020/12/20-dec-Bellamy-Disinformation.pdf>; Strudwicke, I. J., and Grant, W. J. (2020). #JunkScience: Investigating pseudoscience disinformation in the Russian Internet Research Agency tweets. *Public Understanding of Science* 29(5), 459–472.
  - Kreiss, D., & McGregor, S. C. (2023). A review and provocation: On polarization and platforms. *New Media & Society*; see also Marwick, A., Kuo, R., Cameron, S.J., and Weigel, M. (2021). *Critical disinformation studies: A syllabus*. Center for Information, Technology, & Public Life (CITAP).
  - Kreiss, D. and McGregor, S. C. (2023). A review and provocation: On polarization and platforms. *New Media & Society*; see also Tworek, H. (2021). Policy lessons from five historical patterns in information manipulation. In *The Disinformation Age: Politics, Technology, and Disruptive Communication in the United States*. Cambridge University Press, pp. 169-189.
  - Climate obstruction is the umbrella term for various obstacles to address climate change “ranging from literal denial of anthropogenic climate change to the opposition, delay or dismissal of effective climate policies, at corporate, governmental, societal and individual levels, for various economic, political and psychological reason.” See also Ekberg, K. et al. (2022). *Climate obstruction: How denial, delay and inaction are heating the planet*. Taylor & Francis; McKie, R.E. (2021). Obstruction, delay, and transnationalism: Examining the online climate change counter-movement. *Energy Research & Social Science*, 80(102217); Brulle, R.J., Hall, G., Loy, L. and Shell-Smith, K. (2021). Obstructing action: Foundation funding and US climate change counter-movement organizations. *Climatic Change* 166(17).
  - Hamilton, J.M. and Tworek, H. (2020). Fake news: An usable history. In *Fake News! Misinformation in the Media*. Louisiana State University Press, pp. 13-31.
  - Hamilton, A. (1788). Federalist No. 68. The Avalon Project. <[https://avalon.law.yale.edu/18th\\_century/fed68.asp](https://avalon.law.yale.edu/18th_century/fed68.asp)>.
  - Levitsky, S. and Ziblatt, D. (2018). *How democracies die*. Penguin Random House.
  - Levin, D. (2020). *Meddling in the ballot box: The causes and effects of partisan electoral interventions*. Oxford University Press, p.4.
  - Ibid.
  - Rid, T. (2020). *Active measures: The secret history of disinformation and political warfare*. Macmillan.
  - Ibid., p.244.
  - Pew Research Center. (2022). Americans’ views of government: Decades of distrust, enduring support for its role. <https://www.pewresearch.org/politics/2022/06/06/americans-views-of-government-decades-of-distrust-enduring-support-for-its-role/>.

- Reuters Institute for the Study of Journalism. (2022). Digital News Report, p. 63.
- Ibid., p.119.
- Alice Marwick, Rachel Kuo, Shanice Cameron and Moira Weigel [https://citap.unc.edu/wp-content/uploads/2023/02/Marwick\\_Kuo\\_Cameron\\_Weigel\\_2021\\_CriticalDisinformationStudiesSyllabus.pdf](https://citap.unc.edu/wp-content/uploads/2023/02/Marwick_Kuo_Cameron_Weigel_2021_CriticalDisinformationStudiesSyllabus.pdf)
- Oreskes, N. (2010). Merchants of doubt : How a handful of scientists obscured the truth on issues from tobacco smoke to global warming. Bloomsbury Press; Chun, W. (2015). On hypo-real models or global climate change: A challenge for the humanities. Critical Inquiry 41, p.91.
- Angus Reid Institute. Election 44: Most view this vote as “more important” than 2019; personal stakes involved for three-quarters. Angus Reid. <<https://angusreid.org/federal-election-top-issues/>>.
- Influence Map. (2021). Climate change and digital advertising: The oil and gas industry’s digital advertising strategy. Influence Map. <https://influencemap.org/report/Climate-Change-and-Digital-Advertising-a40c8116160668aa2d865da2f5abe91b#1>; see also Bridgman, A. et al. (2022). Mis- and disinformation during the 2021 Canadian federal election. Media Ecosystem Observatory. <<https://www.mediatechdemocracy.com/all-work/mis-and-disinformation-during-the-2021-canadian-federal-election>>.
- Gallant, C. (2022). Is Trudeau planning a climate lockdown? Gallant, C. (2022). Is Trudeau planning a climate lockdown? YouTube. <[https://www.youtube.com/watch?v=EM8Bx5jur5s&ab\\_channel=CherylGallant](https://www.youtube.com/watch?v=EM8Bx5jur5s&ab_channel=CherylGallant)>; see also Maharasigam-Shah, E. and Vaux, P. (2021). Climate lockdown and the culture wars: How COVID-19 sparked a new narrative against climate action. ISD. <<https://www.isdglobal.org/wp-content/uploads/2021/10/20211014-ISDG-25-Climate-Lockdown-Part-1-V92.pdf>>.
- Ibid.
- Maharasigam-Shah, E. and Vaux, P. (2021). Climate lockdown and the culture wars: How COVID-19 sparked a new narrative against climate action. ISD. <<https://www.isdglobal.org/wp-content/uploads/2021/10/20211014-ISDG-25-Climate-Lockdown-Part-1-V92.pdf>>
- Bridgman, A. et al. (2022). Mis- and disinformation during the 2021 Canadian federal election. Media Ecosystem Observatory. <<https://www.mediatechdemocracy.com/all-work/mis-and-disinformation-during-the-2021-canadian-federal-election>>.
- Maharasigam-Shah, E. and Vaux, P. (2021). Climate lockdown and the culture wars: How COVID-19 sparked a new narrative against climate action. ISD. <<https://www.isdglobal.org/wp-content/uploads/2021/10/20211014-ISDG-25-Climate-Lockdown-Part-1-V92.pdf>>.
- 1. (2021). Is Justin Trudeau saying “what we learned from this COVID crisis, we will be applying to the climate crisis” a warning about climate lockdowns?” Twitter. <https://twitter.com/RebelNewsOnline/status/1432369398157881353>.
- Chun, W. (2021). Beyond verification: Algorithmic authenticity and polarizing trust. SSRN Items < <https://items.ssrn.org/beyond-disinformation/beyond-verification-algorithmic-authenticity-and-polarizing-trust/> >
- Carroll, W.K., Daub, S., and Gunster, S. (2022). Regime of obstruction: Fossil capitalism and the many facets of climate denial in Canada. Handbook of Anti-Environmentalism, 216-233.
- Weart, S.R. (2008). The discovery of global warming. Harvard University Press.
- Friends of the Earth. (2020). Climate, clicks, capitalism, and conspiracists. Friends of the

- Earth. <<https://foe-us.medium.com/climate-clicks-capitalism-and-crazies-a336640b47d>>.
- Gunster, S. Fleet, D., Neubauer, R. (2021). Challenging petro-nationalism: Another Canada is possible? *Journal of Canadian Studies* 55(1), 57-87.
  - Ibid.
  - Ibid.
  - Hayes, H.A., and Frenzel, J. (2023). Techno-solutionism and strategies of delay: The Bay du Nord Development Project. *Heliotrope*. <https://www.heliotropejournal.net/helio/techno-solutionism-and-strategies-of-delay>.
  - Kinder, J. (2020). From dirty oil to ethical oil: Petroturfing and the cultural politics of Canadian oil after social media. *Journal of Environmental Media* 1(2).
  - Hornsey, M.J., Harris, E.A., Fielding, K.S. (2018). Relationships among conspiratorial beliefs, conservatism, and climate scepticism across nations. *Nature Climate Change* 8. <https://www.nature.com/articles/s41558-018-0157-2>; Gunster, S. Fleet, D., Neubauer, R. (2021). Challenging petro-nationalism: Another Canada is possible? *Journal of Canadian Studies* 55(1), 57-87.
  - Osmundsen, M. et al. (2021). Partisan polarization is the primary psychological motivation behind political fake news: News haring on Twitter. *American Political Science Review*.
  - Gunster, S. Fleet, D., Neubauer, R. (2021). Challenging petro-nationalism: Another Canada is possible? *Journal of Canadian Studies* 55(1), 57.
  - Westervelt, A. (2019). How the fossil fuel industry got the media to think climate change was debatable. *The Washington Post*. <<https://www.washingtonpost.com/outlook/2019/01/10/how-fossil-fuel-industry-got-media-think-climate-change-was-debatable/>>; Climate files. (1998). American petroleum institute global climate science communications team action plan. *Climate Files*. <https://www.climatefiles.com/trade-group/american-petroleum-institute/1998-global-climate-science-communications-team-action-plan/>; Climate files. (1991). Information council for the environment climate denial ad campaign. *Climate Files*. <<http://www.climatefiles.com/denial-groups/ice-ad-campaign/>>; Carroll, W.K., Daub, S., and Gunster, S. (2022). Regime of obstruction: Fossil capitalism and the many facets of climate denial in Canada. *Handbook of Anti-Environmentalism*, 216-233; Gutstein, D. (2018). The big stall: How big oil and think tanks are blocking action on climate change in Canada. *James Lorimer & Company*.
  - Climate Social Science Network. (2021). The structure of obstruction: Understanding opposition to climate change action in the United States. *CSSN Briefing*. <[https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing\\_\\_Obstruction-2.pdf](https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing__Obstruction-2.pdf)>; see also Dunlap, R.E. and Brulle, R.J. (2020). Sources and amplifiers of climate change denial. In D. C. Holmes & L. M. Richardson, L. M. (Eds.) *Research Handbook on Communicating Climate Change*. Edward Elgar.
  - Merkley, E. (2023). Mass Polarization in Canada: What's Causing It? Why Should We Care? <https://www.mediatechdemocracy.com/all-work/mass-polarization-in-canada-whats-causing-it-why-should-we-care>
  - Dunlap, R.E. and Brulle, R.J. (2020). Sources and amplifiers of climate change denial. In D. C. Holmes & L. M. Richardson, L. M. (Eds.) *Research Handbook on Communicating Climate Change*. Edward Elgar.
  - Other prominent institutions of climate denial in Canada include the Canadian Taxpayers Federation, Imperial Oil, Cenovus Energy, Canadian Natural Resources Limited, and TC Energy and the Fraser Institute.



- Climate Files. (n.d.) Introduction to the Imperial Oil archival document collection. Climate Files. <<https://www.climatefiles.com/bp/introduction-to-the-imperial-oil-archival-document-collection/>>; see also Dembecki, J. (2022). The petroleum papers: Inside the far-right conspiracy to cover up climate change. Greystone Books.
- [https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC\\_AR6\\_WGII\\_FinalDraft\\_FullReport.pdf](https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf).
- Climate Social Science Network. (2021). The structure of obstruction: Understanding opposition to climate change action in the United States. CSSN Briefing. <[https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing\\_-\\_Obstruction-2.pdf](https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing_-_Obstruction-2.pdf)>.
- Kang, M.S. (2020). The 2020 election results are delayed, but there is a bright side: Voting wasn't a huge problem. NBC News. <<https://www.nbcnews.com/think/opinion/election-results-delayed-bright-side-voting-ncna1246368>>.