

# Economics from the Top Down

new ideas in economics and the social sciences

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## Massaging the Message: How Oilpatch Newspapers Censor the News

**Blair Fix**

December 24, 2023



In their book [Manufacturing Consent](#), Edward Herman and Noam Chomsky argue that the mainstream media functions largely as a propaganda arm for the state. When the war drum beats, the corporate media tows the government's line, censoring facts that don't fit the official narrative.

Outside of war, media bias is typically less overt. But to the careful observer, it can still be discerned. In this case, our careful observer is Canadian oil critic [Regan Boychuk](#).

Boychuk lives in Calgary — a prairie city that is famous for two things. Calgary hosts the [world's largest rodeo](#). And it is the corporate heart of the Canadian oil business. Calgary ... home to cowboys and crude-oil CEOs.

As you might guess, our story of media censorship is not about cowboys. Calgary's main newspaper, the *Herald*, is staunchly pro-oil. And that means its editorial pages are filled with oilpatch jingoism. However, the rest of the paper is an archetype of neutral reporting.

Just kidding.

Unsurprisingly, the *Herald's* pro-oil stance shapes the content that appears in the paper. This post takes a quantitative look at the editorial 'curation'.

Most of the heavy lifting has been done by Boychuk, who had the brilliant idea to track the reporting of environmental journalist [Mike De Souza](#). Between November 2010 and July 2013, De Souza wrote a series of articles documenting scandals related to the Canadian oilpatch, and its staunch defender, the Harper government.

At the time, De Souza was working for *Postmedia*, a news conglomerate that operated a wire service for its many subsidiaries. So when De Souza's pieces were published, they were delivered to local papers like the *Ottawa Citizen*, the *Edmonton Journal*, and the *Calgary Herald*.

Here's the catch. Although owned by the same conglomerate, these local papers had leeway to edit (or shelve) their wire-service articles. The result, Boychuk realized, was a controlled setting to analyze media censorship. Earlier this year, Boychuk published his findings in a piece called '[Proximity to Power: The oilpatch & Alberta's major dailies](#)'.

My contribution here is mostly visual. I've taken Boychuk's investigation and translated it into charts. The results largely speak for themselves. As De Souza's articles approached the center of Canadian oil-and-gas power in Calgary, they were increasingly gutted, and their message changed. It's a fascinating case study of how business interests shape the news.

## **The geography (and geology) of Canadian oil-industry power**

This post is mostly about the myopia of human bickering. But since that's a depressing topic, let's start with something more majestic. Let's frame the ideological landscape of the Canadian oilpatch by looking at the big picture of fossil fuels.

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Long before humans existed, life on Earth was doing chemical magic, taking energy from the sun and converting it into biomass. In the ancient seas, dead organisms fell to the seabed where they slowly accumulated. Over the eons, the Earth ground and compressed this seafloor biomass until its chemistry changed into the hydrocarbons we call 'oil'.

In many regions, this oil remained locked under the sea. But in other places, moving continents and changing climates pushed the seabed above water, where it awaited discovery by a scrappy group of primates.

The North American plains are one of these above-ground-waiting-to-be-discovered places.

One hundred million years ago, though, the great plains were not 'plains' at all. They were a [sea](#) that ran the length of today's North America, connecting the Arctic Ocean to the Gulf of Mexico. On the seabed, biology and geology

did their thing, slowly forming an immense deposit of oil. When the poles later froze and sea levels sank, the whole area rose above land, awaiting primate infestation.

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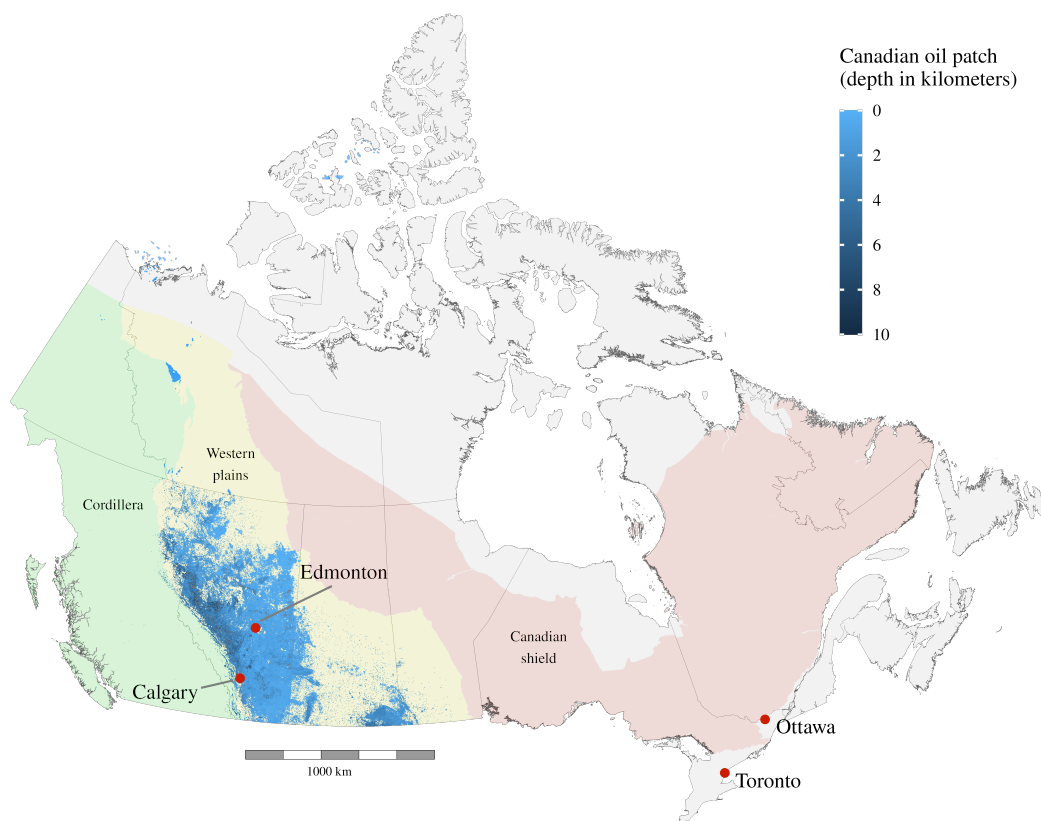
It's here that we return to human myopia. Roughly ten thousand years ago, the great plains were discovered by indigenous peoples. Much later, Europeans conquered the territory, setting up a nation-state called 'Canada'. In the 20th century, Canadians began to exploit the fossil fuels underfoot, drilling hundreds of thousands of oil wells, building teeming oil-driven cities, and, of course, squabbling about the business of exploiting oil.

Before we focus on this fossil-fuel bickering, though, let's connect the big picture of geology and geography to the Canadian ideological landscape. Due to quirks of geology, oil formed in the west of North America. But due to quirks of human history, Europeans conquered the continent from the east. As a consequence, eastern centers of power — cities like Toronto and Ottawa — were established long before western oil was discovered. And so these cities never became dominated by the oil business.

The same was not true for the western cities of Edmonton and Calgary. At the turn of the 20th century, both places were rural backwaters — settlements with a few thousand people. But the discovery of oil changed that. By the late 20th century, Edmonton had grown into a sprawling industrial hub for the Canadian oilpatch. And Calgary became the oil business' corporate epicenter, with a downtown brimming with oil-company headquarters. In short, the politics of both cities became dominated by the oil business.

Pulling together this interplay of geology and geography, Figure 1 shows the big picture of Canadian oilpatch myopia. In Canada's east sit the cities of Toronto and Ottawa — centers of corporate and government power with no oil to their name. In the west sit Edmonton and Calgary — cities that are geographically in the thick of the Canadian oilpatch, and ideologically under its spell.

Looking at this map of Canada, keep the geography in mind as we turn to the ideologically charged business of publishing the news. We'll watch Mike De Souza's environmental reporting get sliced and diced as it leaves *Postmedia* (headquartered in Toronto) and journeys to papers in Ottawa, Edmonton and Calgary.



### Figure 1: The big picture of Canadian oilpatch myopia

Canada's oil reserves formed millions of years ago under an ancient sea that eventually became North America's great plains. The result is that today, the western cities of Edmonton and Calgary lie in the thick of the oilpatch, and are ideologically under its spell. Meanwhile, Europeans conquered North America from the east, long before oil was discovered. So that's where the centers of corporate and government power are located — in Toronto and Ottawa, respectively. (Side note: this map plots data for over 700,000 oil wells, with depth shown in color. Zoom in for a closer view of the individual wells.) [Sources and methods](#)



Of course, it's conceivable that our three papers — the *Ottawa Citizen*, the *Edmonton Journal*, and the *Calgary Herald* — could treat De Souza's work with an equal hand. But as you'll see, that's not what happened.

## Environmental reporting during the Harper years

To set the stage for De Souza's journalism, let's wind the clock back to 2006. In Canada, it was a year of jarring political change — the moment when neocon politician Stephen Harper became Prime Minister.<sup>1</sup> It's not an exaggeration to say that Harper — a former employee of Imperial Oil and resident of Calgary — ran the country for the benefit of oil companies. As you'd expect, a string of controversies ensued. And De Souza was there to document the political flames, publishing a string of exposés.

In 2014, De Souza left *Postmedia*, prompting environmental magazine *The Narwhal* to write a [retrospective](#) ranking his twenty most important pieces. Seeing the opportunity to study censorship, muckraking investigator Regan Boychuk took these twenty pieces and tracked down how (or if) they'd been published by the *Ottawa Citizen*, the *Edmonton Journal*, and the *Calgary Herald*.

In ['Proximity to Power'](#), Boychuk conducted an article-by-article analysis of the censorship. In this post, we'll leave the specifics of De Souza's articles behind. Instead, we'll take a bird's-eye view of how his reporting was censored as it approached the heart of the Canadian oil business.

## Saving space? . . . Or saving face?

Every day, newspaper editors face a dilemma: far more stories are written than can possibly be published. The result is a kind of constant 'editorial churn' in which numerous worthy stories are axed.

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<sup>1</sup>Harper's ascent was jarring in much the same way as the election of George Bush south of the border. It's not like the previous governments — the Clinton administration in the US and the Chrétien regime in Canada — were progressive. They weren't. But they hid their neoliberal zeal below banal centrist rhetoric. Not so with Bush or Harper, who governed with neocon bravado.

Turning to Mike De Souza's environmental reporting, editorial churn means that for banal, space-saving reasons, some of his stories will inevitably get cut as they journey from paper to paper. But amidst this churn, there could also be politically motivated censorship. So how can we separate this censorship from the non-political churn?

Regan Boychuk has devised a simple solution: we see if the 'churn' has a geographic pattern. We watch a sample of De Souza's reporting leave *Postmedia*, and then observe how the articles get cut as they travel across the country. When we carry out this exercise, we find that the editorial 'churn' has a conspicuous direction.

Figure 2 shows the pattern. As we approach the heart of oil-and-gas power in Calgary, newspapers mysteriously run out of space for De Souza's reporting. Of the 20 De Souza articles that left *Postmedia*, the *Ottawa Citizen* was able to publish 14, the *Edmonton Journal* had room for 12, while the *Calgary Herald* had space for only 11. Funny. When the *Herald* 'saves space', it looks a lot like saving the oil business' face.

## Diving shallow

Before we lay charges of 'censorship', we should consider some non-incendiary explanations for the pattern in Figure 2.

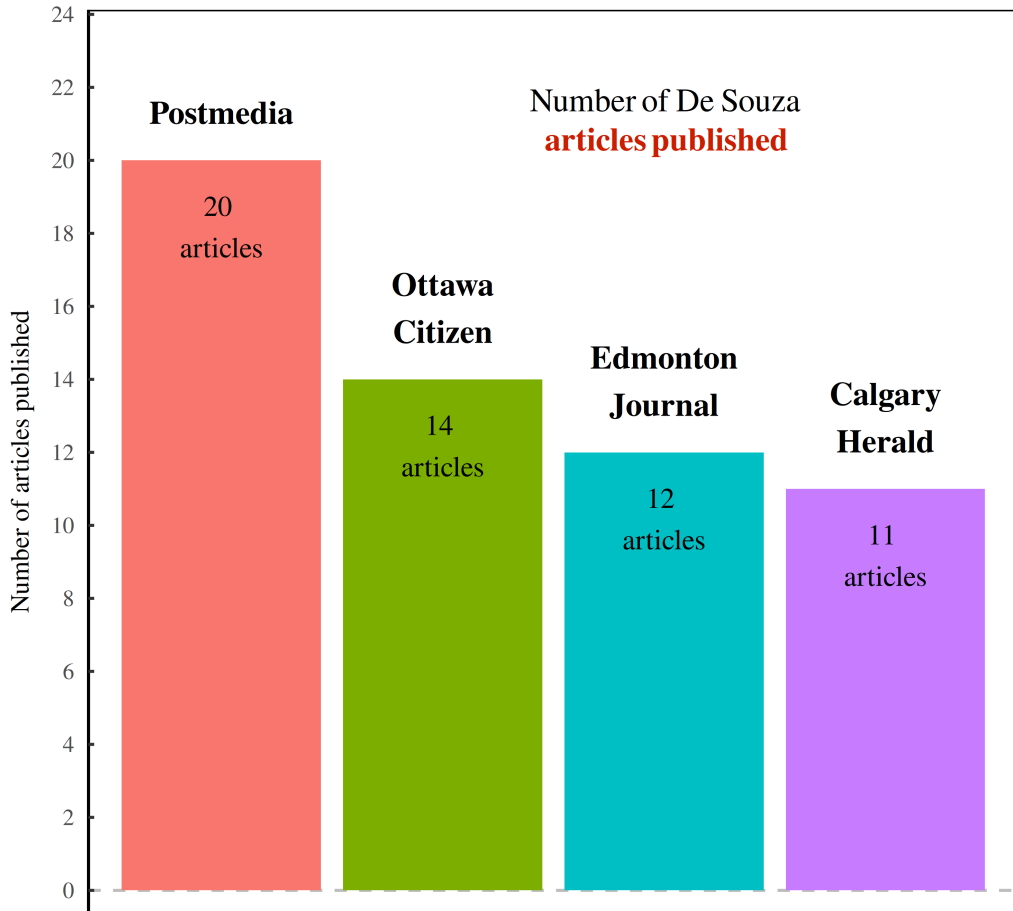
Here's a possibility: maybe the *Herald* opted for depth over breadth. In other words, the *Herald* might have published fewer of De Souza's articles because it was saving space for long-form content. If so, then counting *words* (instead of articles) should remove our geographic trend.

Except that it doesn't.

Figure 3 shows the pattern. When we count the number of De Souza words published, we again find that the editorial churn has a geographic direction. As we journey to the corporate epicenter of the Canadian oilpatch, newspapers spill less and less ink publishing De Souza's work.

## Back-page news

Although the case for 'objectivity' looks bleak, let's continue to hand the *Herald* olive branches. When it comes to De Souza's work, maybe the *Herald* is substituting prominence for quantity — making a splash by publishing a few pieces at the front of the paper.

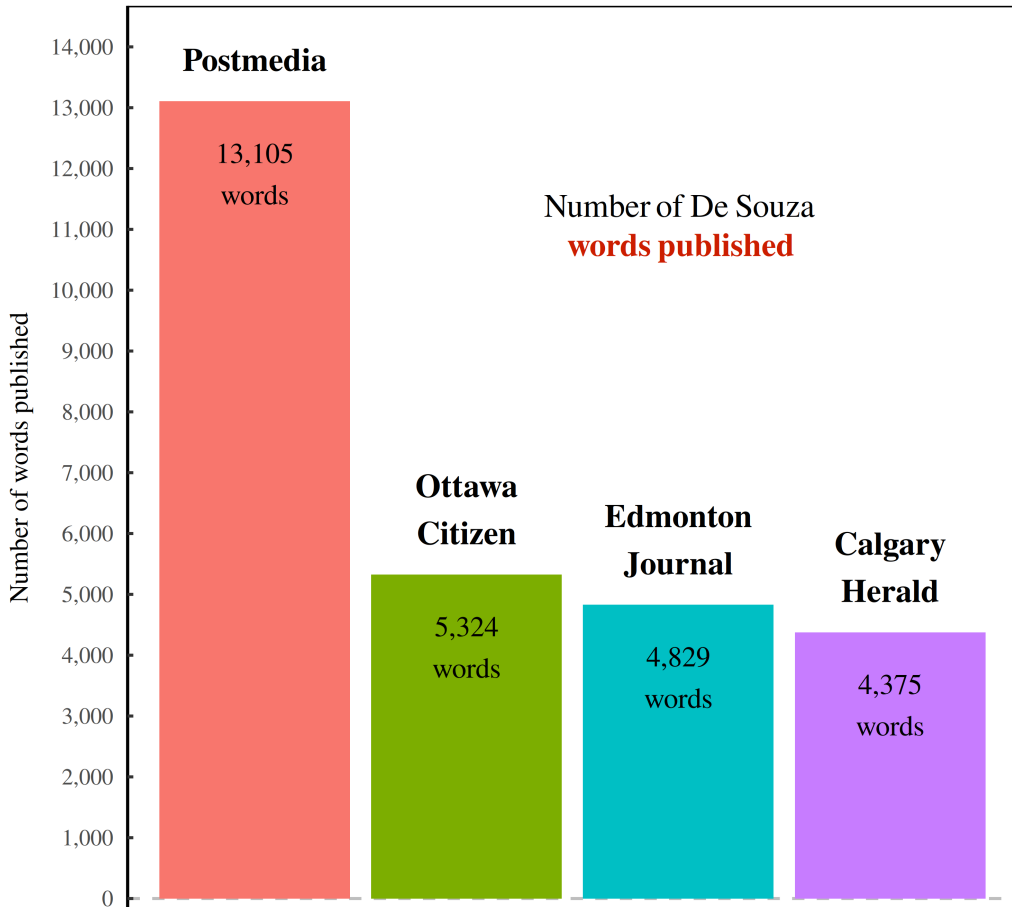


**Figure 2: Saving space or save face? A geographic pattern to newspapers’ ‘editorial churn’**

This figure tracks twenty Mike De Souza articles as they leave *Postmedia* and travel to subsidiary papers in Ottawa, Edmonton, and Calgary. Curiously, papers closer to the heart of oil-and-gas power seem to have less space for De Souza’s environmental journalism. [Sources and methods](#)

Unfortunately, the opposite seems to be true. Not only did the *Herald* print fewer De Souza articles, it tended to bury these pieces at the back of the paper. Figure 4 runs the numbers.

Looking at the evidence, the contrast between the *Citizen* and the *Herald* is stark. In the *Citizen*, most of De Souza’s pieces were published in the first four pages of the paper. But in the *Herald*, none of De Souza’s pieces graced the first four pages, and several were placed deep within the paper. In short, if the *Herald* editors aren’t biased against De Souza’s environmental reporting, they have a funny way of showing it.



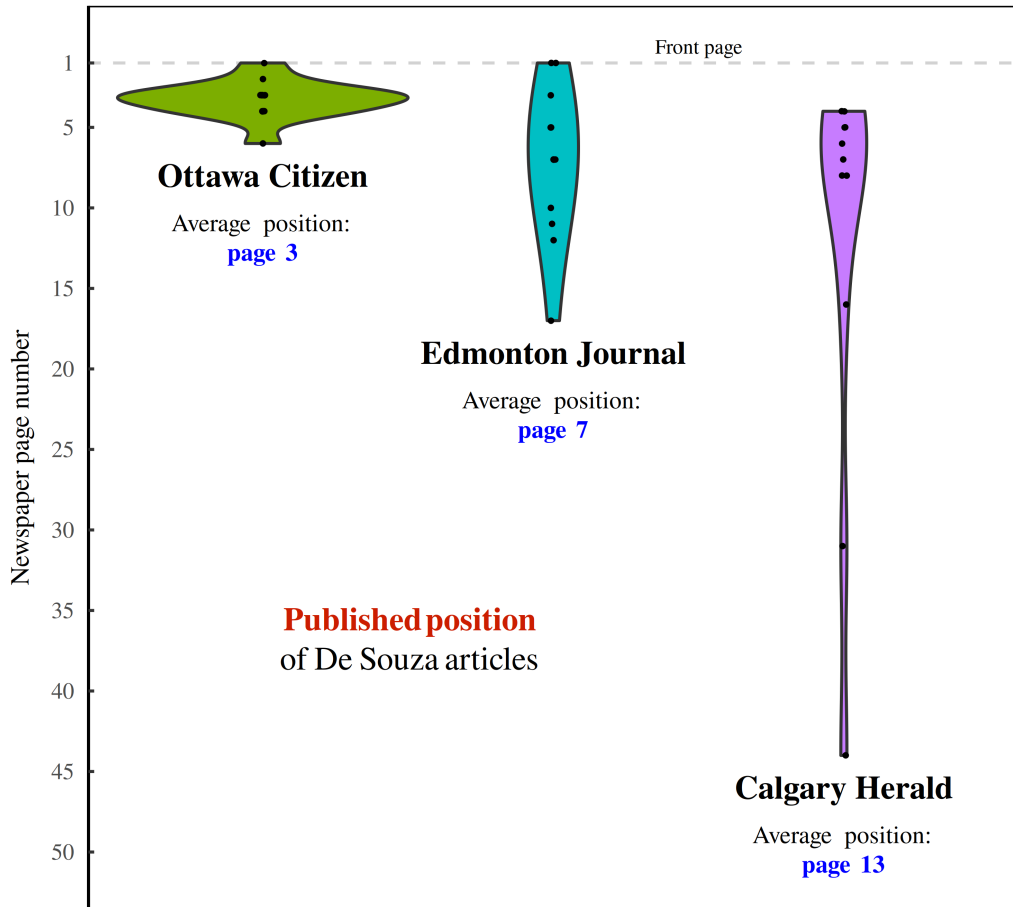
**Figure 3: Diving shallow — a curious case of declining De Souza word counts**

As De Souza’s twenty articles travel from *Postmedia* into the oilpatch (headquartered in Calgary) the total published wordcount declines. [Sources and methods](#)

## Headlines hacked

Forging ahead, perhaps there’s a more creative way to show that the *Herald* really cares about De Souza’s journalism. Maybe the proof lurks within its headlines.

On that front, let’s turn to Figure 5. Here, each word cloud shows the top dozen (or so) words that appear in the published headlines of De Souza’s articles. If the *Herald* is trying to preserve De Souza’s message, it has an odd way of showing it. The *Herald*’s headline vocabulary seems palpably different than the source material from *Postmedia*.



**Figure 4: Back-page news — the published location of De Souza's articles**

For each newspaper, the 'violins' show the distribution of the published location of De Souza's articles. Black points show the location of individual articles. As we move from the *Citizen* to the *Herald*, De Souza's reporting gets pushed to the back of the paper. [Sources and methods](#)

Let's put some numbers to this game of headline hackery. We'll start with the ten most frequent words used in De Souza's *Postmedia* headlines. Then we'll track the frequency of these words as our headlines journey across the country.

Figure 6 shows the results, which remind me of a bad game of telephone. As De Souza's headlines move from the *Citizen* to the *Journal* to the *Herald*, the original message gets progressively lost.

### Top words in De Souza headlines

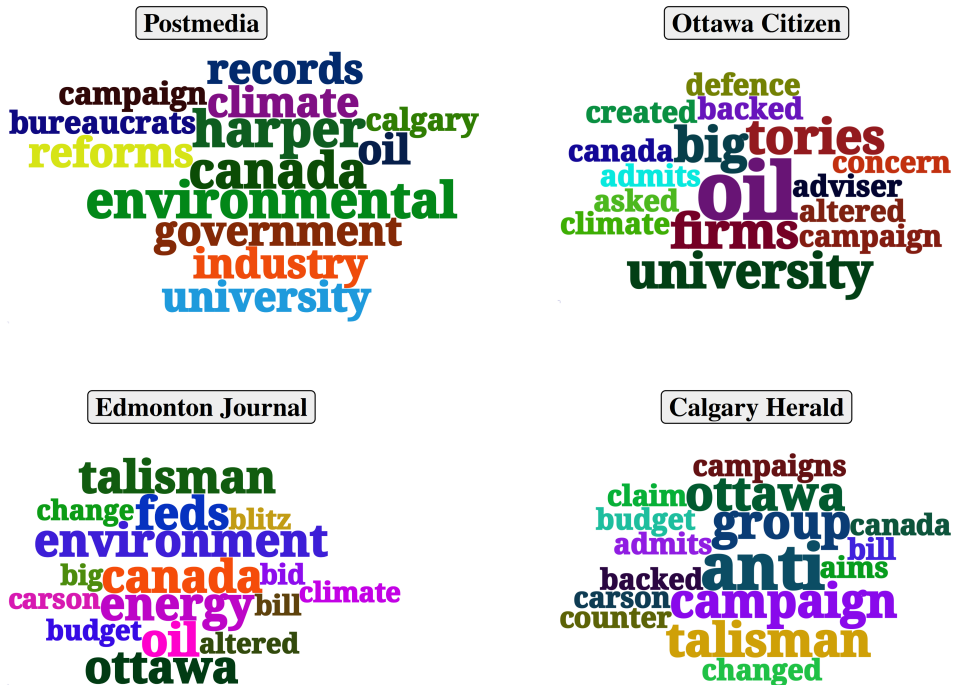


Figure 5: Hacking De Souza's headlines

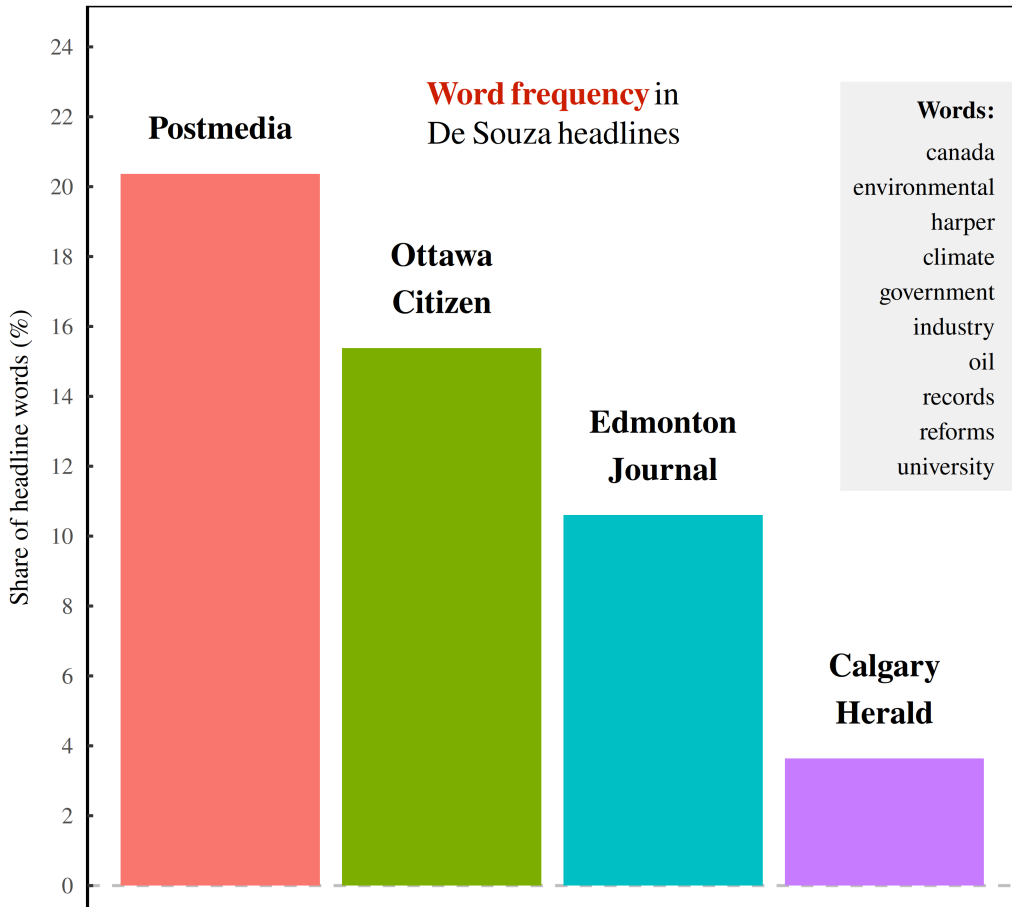
Each word cloud shows the dozen (or so) most-used words in the published headlines of De Souza's articles. Font size indicates word frequency. [Sources and methods](#)

## Content, creatively curated

So far, the *Herald's* editorial churn looks a lot like censorship. But let's not give up. Perhaps the key to the *Herald's* lack of De Souza bias lies in the content of its published articles.

Speaking of content, there's no substitute for actually reading the different versions of De Souza's articles and observing how the text changes. If this close reading interests you, head over to ['The De Souza Files'](#), where you can browse annotated versions of each published De Souza article.

Here, though, I'm going to skip the close reading and instead, count words. In what follows, I use word frequency to measure how the content of De Souza's writing varies across papers. The patterns are ... not subtle.



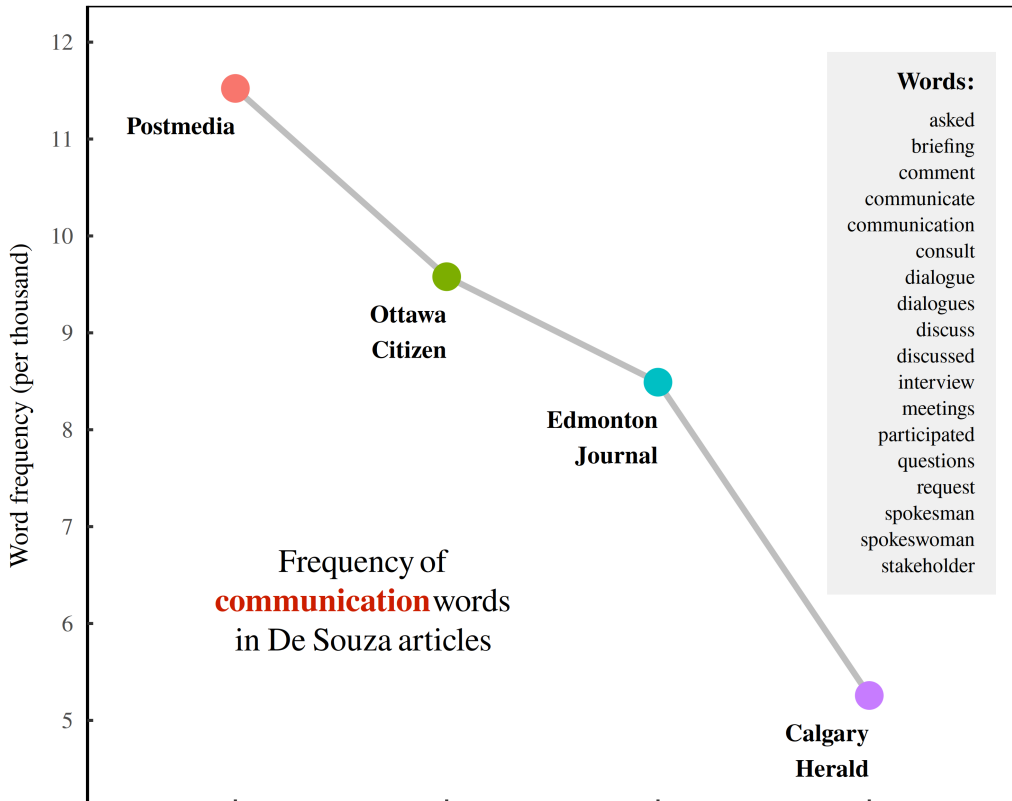
**Figure 6: A game of De Souza telephone? Tracking headline vocabulary across newspapers**

This figure tracks the frequency of the ten words shown in the grey panel. (These words are the most frequent vocabulary in De Souza’s *Postmedia* headlines.) As we journey to the center of oil-and-gas power in Calgary, these headline words gradually disappear — like a game of telephone gone wrong. [Sources and methods](#)

## Communication clawbacks

Looking at our De Souza content, let’s start with words that describe *communication*. For some reason, the frequency of these words declines precipitously as we journey into the Canadian oilpatch. Figure 7 shows the pattern.

So why is the *Herald* cutting communication content? Here’s my guess. These communication words are associated with the nuts and bolts of good investigative journalism — the part where a journalist describes what people say.



**Figure 7: Communication clawbacks**

As we move from *Postmedia* to the *Herald*, communication words become less frequent in the published versions of De Souza's articles. [Sources and methods](#)

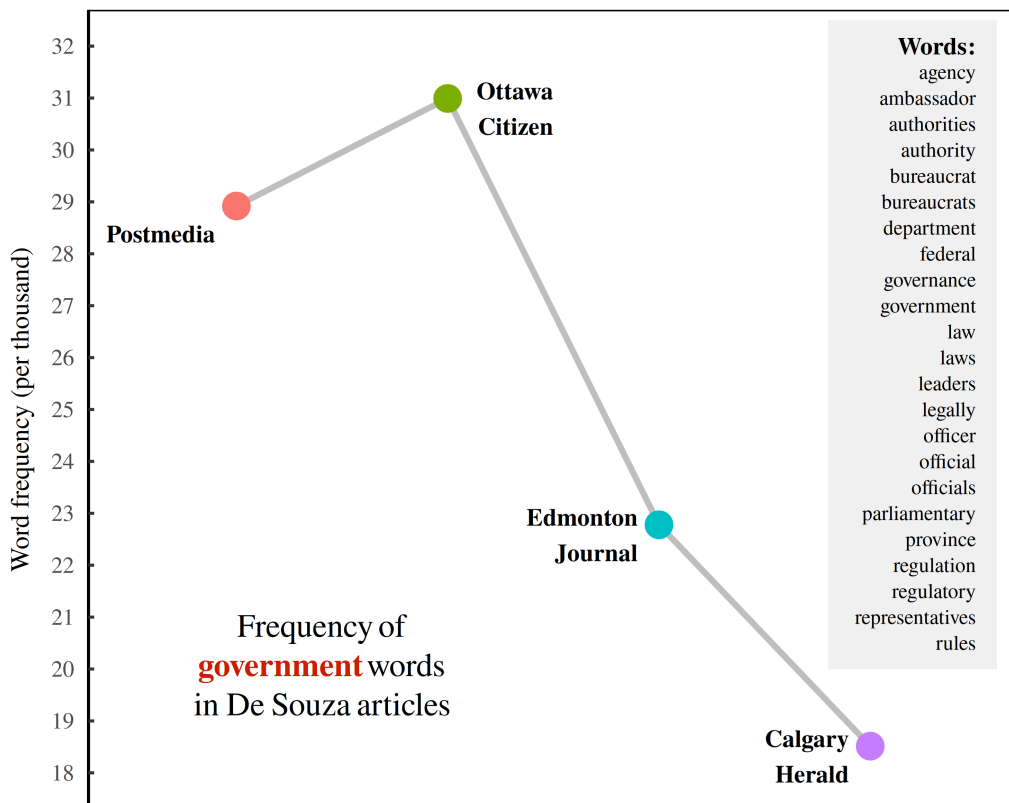
If you happen to gut this investigative reporting, a plausible side effect is that you gut the language of communication. In short, the pattern in Figure 7 smells of biased editing.

## Glossing over government

Next, let's look at vocabulary associated with *government*. Figure 8 shows how this vocabulary varies across the different versions of De Souza's articles. After a modest surge in the *Ottawa Citizen*, government language collapses as we head into the oilpatch.

Given that the *Citizen* is published in the national capital, it's understandable that it would have a governmental emphasis. But what's with the *Journal* and the *Herald*? Why would they gut governmental language?





**Figure 8: Glossing over government**

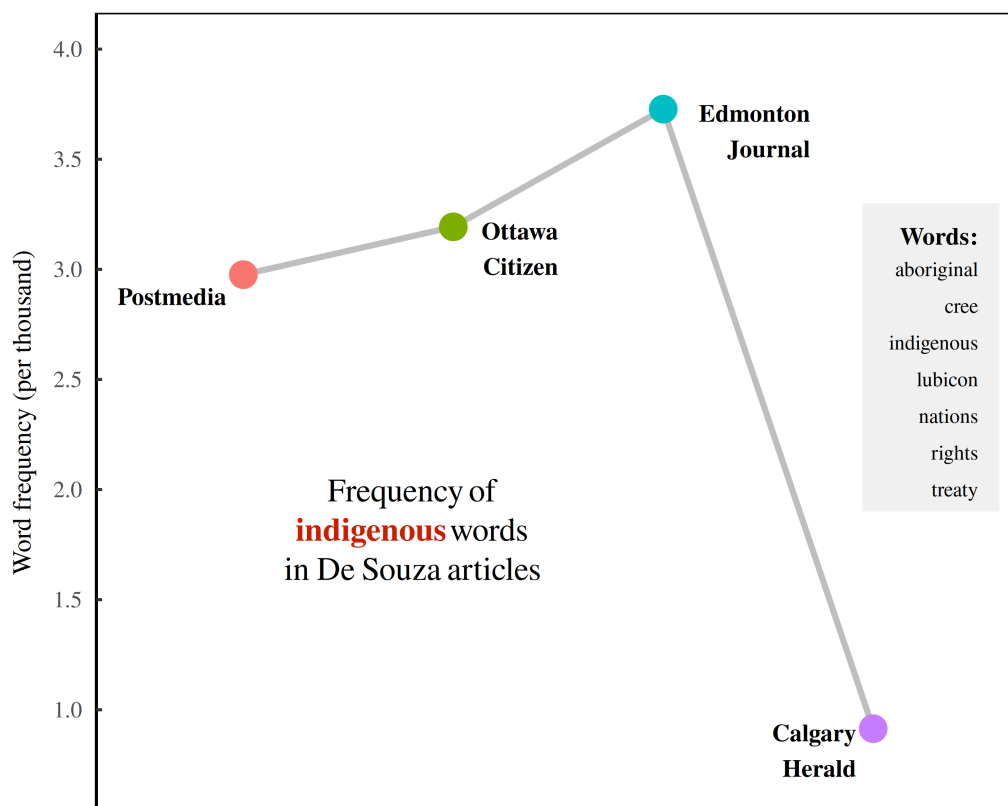
As we move from *Postmedia* to the *Herald*, government words become less frequent in the published versions of De Souza's articles. [Sources and methods](#)

To understand the pattern, recall that our De Souza articles documented a series of scandals involving the Harper government — a regime that was staunchly pro oil. Now, if you happened to publish a pro-Harper, pro-oil newspaper, you might want to dampen news about government scandals. And if you carried out this dampening, you might end up cutting lots of government vocabulary, giving rise to a pattern much like Figure 7.

Hmm ... there's that censorship smell again.

## Indigenous exclusion

Speaking of the aroma of censorship, let's look at Figure 9. Here, I've plotted the frequency of words referring to indigenous peoples. For some reason, in the *Herald* versions of our De Souza articles, this indigenous vocabulary collapses.



**Figure 9: Indigenous exclusion**

As we move from *Postmedia* to the *Herald*, indigenous words become less frequent in the published versions of De Souza’s articles. [Sources and methods](#)

To understand this pattern of indigenous extirpation, it helps to understand the relationship that indigenous peoples have with big oil.

Going back a century, indigenous peoples signed a series of treaties with the Canadian government — treaties that they believed would preserve indigenous land. But by ‘treaty’, the Canadian government mostly meant ‘piece of paper that we will honor until we discover natural resources on your land.’ When the resource boom started, the (hidden) understanding was that *different* pieces of paper took precedence — the legal documents that leased indigenous lands for corporate exploitation.

Fortunately, the Canadian government has since embarked on a mission of ‘truth and reconciliation’. So there’s no need to worry about the on-going exploitation of indigenous lands, or the censorship of indigenous issues.

What's that you say? Something about the 'oilsands'? Well that's uncomfortable. Yes, there does seem to be a huge land rush to secure exploitation rights to the oilsands. And this massive resource trove does seem to cover a significant swath of treaty land, as Figure 10 illustrates. But I'm sure that oil companies have a harmonious relationship with indigenous groups, with no need for corporate censorship.

What's that you say? Indigenous groups have been taking provincial governments to court, challenging oilsands lease agreements . . . [and winning](#)? Well, that does look bad. But I'm sure oil companies are playing fair.

True, this 'fair play' sometimes has the air of one-sidedness. For example, it seems that historically, when the Alberta government consulted indigenous groups about oilsands exploitation, it did so on a project-by-project basis. And it seems that this tunnel-vision had the effect of downplaying cumulative impacts, much to the chagrin of First Nations communities.

In this light, it does seem that a pro-oil, pro-corporate paper would have compelling reasons to censor indigenous issues from the reporting of an environmental journalist. So again, the *Herald's* behavior has the scent of censorship.

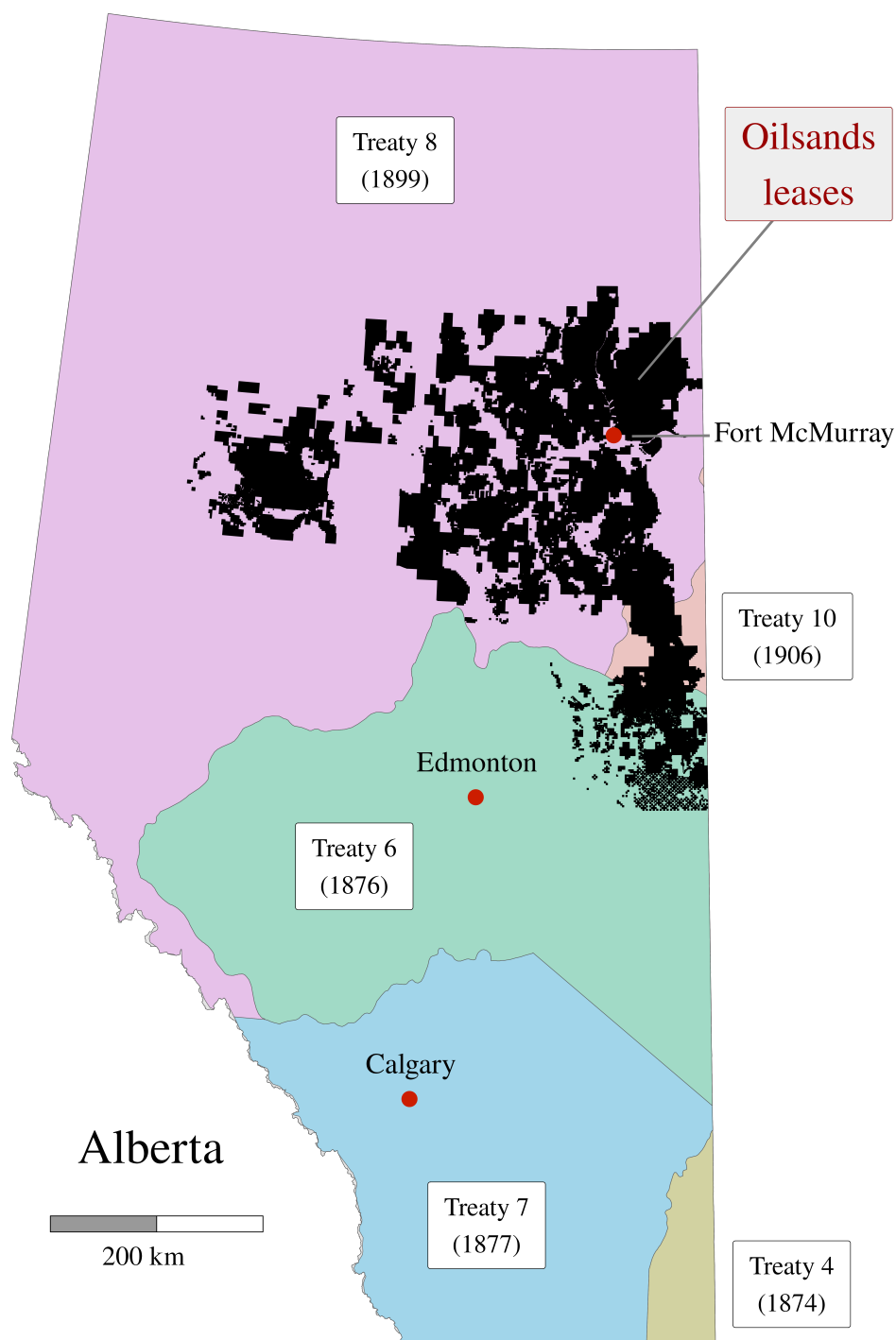
## Removing resistance

Continuing with our censorship sniff test, it seems that when the *Herald* published De Souza's work, it rescinded words describing *resistance*. Figure 11 shows the pattern.

Now admittedly, this evidence doesn't look good. At face value, it seems like the *Herald* is running a PR machine — a machine that guts language describing anti-oil resistance. Alternatively, the *Herald* was just chronically short on space, and these resistance words were by chance, the first to go.

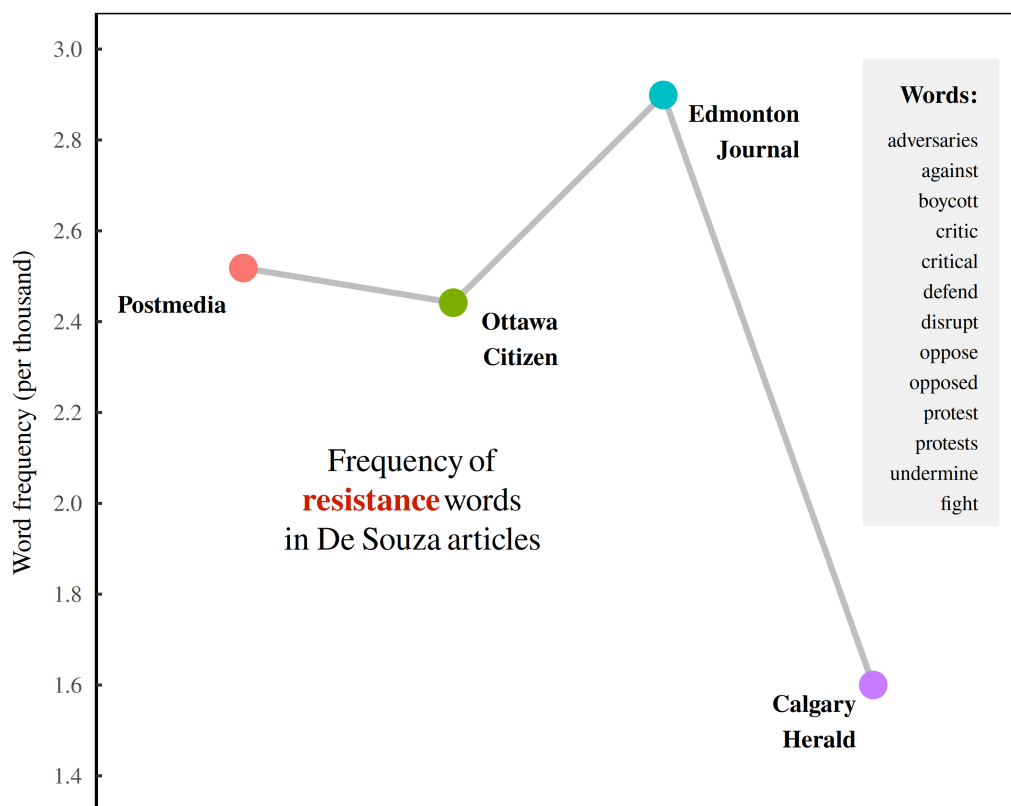
## Glorifying growth-speak

So far, we've quantified the *Herald's* tendency to cut certain themes from De Souza's writing. While the direct effect of this cutting is to de-emphasize what was gutted, the indirect effect is to emphasize what remains. And what remains, it turns out, is *growth-speak*.



**Figure 10: A fossil-fuel land rush — oilsands lease agreements on treaty lands**

The colored regions show the Alberta territory cover by historic First Nations treaties, signed with the federal government during the late 19th and early 20th century. The black regions indicate land agreements for oilsands extraction, made with the Alberta provincial government. [Sources and methods](#)

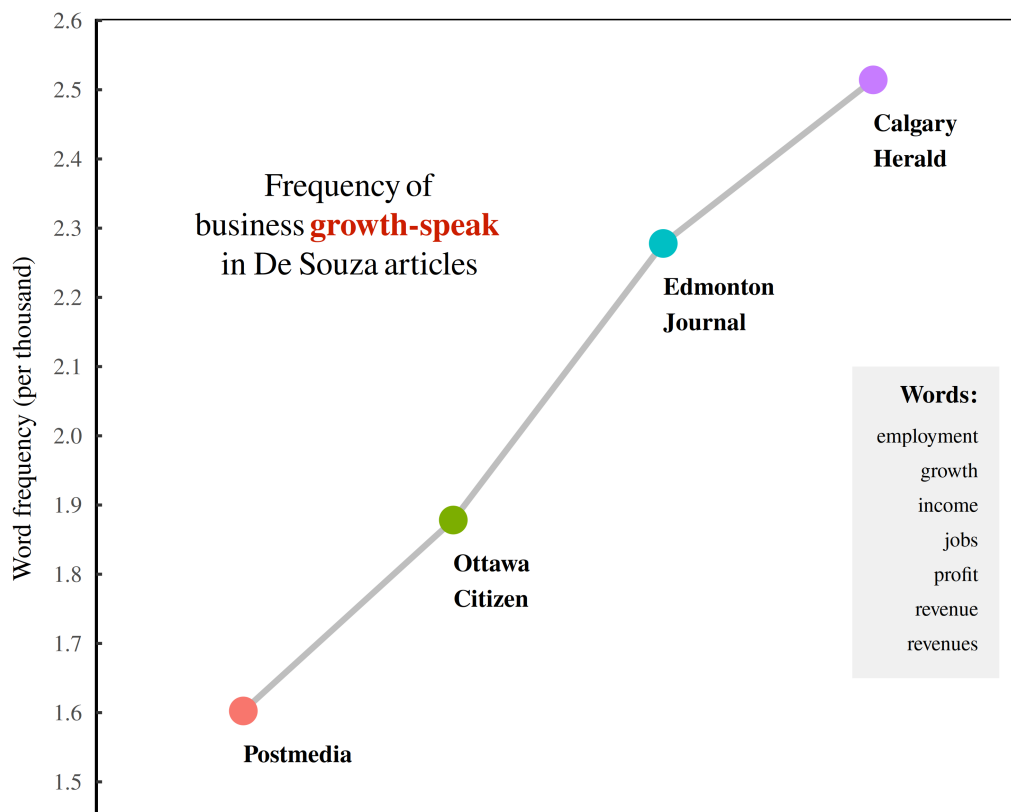


**Figure 11: Removing resistance**

In the *Herald* versions of De Souza’s articles, words describing ‘resistance’ are noticeably less frequent than in the original pieces. [Sources and methods](#)

This is my term for words like ‘income’, ‘jobs’, and ‘profit’ — vocabulary that gets wielded whenever someone wants to justify ecological harm in the name of economic growth. In De Souza’s reporting, growth-speak appears as he seeks comments from various government and industry representatives.

As we head into the oilpatch, hefty chunks of De Souza’s reporting get cut. But for some reason, the language of growth-speak avoids the knife. The result is the trend in Figure 12 — an magical rise of growth-speak on the road to Calgary. It’s as if the *Herald* edited De Souza’s reporting in a way that emphasized oil-business revenue. Now why would a pro-oil paper, located at the corporate heart of the oilpatch, do a thing like that?



**Figure 12: Glorifying growth-speak**

As we move from *Postmedia* to the *Herald*, business growth-speak becomes more frequent in the published versions of De Souza's articles. [Sources and methods](#)

## Oil-business consent

Looking at the weight of evidence, we get the clear impression that Mike De Souza's environmental journalism didn't get a fair shake. As his pieces made the journey into oil country, they were curated in a rather conspicuous way.

Numerous articles were cut. And the ones that did get published were pushed to the back of the paper. Headlines were changed. Text was gutted, de-emphasizing themes of communication, government, indigeneity, and resistance. Meanwhile, as if by magic, the language of growth-speak got emphasized.

In sum, the editorial evidence reeks of censorship.

I doubt that Herman and Chomsky would be surprised. In *Manufacturing Consent*, they note that since the corporate media is funded by ads, it is beholden to the interests of business.

That said, business capture doesn't mean that all corporate journalism is heavily censored. Far from it. Topics that offend a niche set of businesses are fair game, so long as that niche is a marginal advertising client. But when that niche becomes the dominant player — like the oil business is in Calgary — the demands of censorship set in.

Thus we get the *Calgary Herald's* blatant gutting of Mike De Souza's environmental reporting. It's disturbing behavior ... if you think that newspapers have a duty to deliver inconvenient truths. But while this duty may be part of newspapers' journalistic motto, it's not part of their business model. So in a business sense, the *Herald* was just doing its job — making sure that journalism didn't interfere with the more important business of selling oil.

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## Sources and methods

### The De Souza Files

For the interested reader, I've made a webpage (below) where you can browse the published versions of De Souza's articles.

<https://sciencedesk.economicsfromthetopdown.com/data/2023/desouza/home.html>

### Article position

Here's how I quantify the page number of De Souza's articles. In the simple case that the article is published in the *A* section, the page number is simply the section page number (i.e.  $A7 = \text{page } 7$ ). This covers all but two cases — both of which are in the *Herald*.

The *Herald* saw fit to bury two De Souza articles in the *D* section. To quantify the position of these articles, I used ProQuest data to figure out how many pages were in the *A*, *B* and *C* sections of the relevant *Herald* issue. Then I summed this page count and added it to the section page number in the *D* section.

## Map data

- Shape files for Canada (Figure 1) and Alberta (Figure 10) are from Statistics Canada and can be downloaded [here](#).
- Shape files for the geological regions of Canada (Figure 1) are from Natural Resources Canada, and can be download [here](#).
- Shape files for Alberta oil wells (Figure 1) are from the Alberta Energy Regulator, and are available [here](#). I used depth and location data for ‘bottom holes’.
- Data for BC oil wells (Figure 1) is from the BC Energy Regulator (formerly the BC Oil and Gas Commission). A list of available data lives [here](#). I used the following datasets:
  - Drilling Data for All Wells in BC [BCOGC-41984]
  - Directional Survey Data [BCOGC-2354]
- Data for Saskatchewan oil wells (Figure 1) is from the Government of Saskatchewan, and can be downloaded [here](#).
- Data for Manitoba oil wells (Figure 1) is from the Government of Manitoba and is available [here](#).
- For oil wells in the Northwest Territories (Figure 1), I couldn’t find data about actual wells. As a substitute, I used data for oil-and-gas rights (i.e. well leases). The data is available [here](#).

Note: In Manitoba and the Northwest territories, I couldn’t find data for oil-well depth. So I assumed a generic depth of 1 km.

- Shape files for First Nations Treaties (Figure 10) are from Global Forest Watch, and can be download [here](#).
- Shape files for oilsands leases are from the Alberta Energy Regulator, and can be downloaded [here](#).



**Further reading**

Achbar, M., & Wintonick, P. (1992). *Manufacturing consent: Noam Chomsky and the media*. [https://www.youtube.com/watch?v = Li2m3rvs00I](https://www.youtube.com/watch?v=Li2m3rvs00I)

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Linnitt, C. (2014). Mike De Souza's 20 most important articles for Postmedia. *The Narwhal*. <https://thenarwhal.ca/mike-de-souza-s-20-most-important-articles-postmedia/>