The Alta-controversy - A contested and multi-faceted story.

# Introduction

The Alta-controversy was a much-discussed civic conflict from 1978 to 1982 revolving around the building of a hydro-powerplant on the mountain plateau of Finnmarksvidda, the submerging of a Sámi village, as well as the loss of pastoral land and the consequent civil unrest. The event is one of the few large-scale public disturbances in Norway’s contemporary history and is today mainly remembered for its large impact on the Sami community and the development of Sami rights.

This article investigates the memory of the Alta-controversy by quantitatively and qualitatively analysing how representations of the event have changed from the time of the event up until the present in newspapers. By utilizing a corpus consisting of Norwegian newspapers from the period (N ≈ 84 000), this article shows how Natural Language Processing(NLP) can be utilized to gain insights into how past events are represented in posterity and how these representations change over time.[[1]](#footnote-2)

We show some possible solutions for researchers on collective memory facing issues with the enormity of the available data. Not having to make any quantitative delimitations to our material increases the degree to which we can generalize how the Alta controversy is being referred to or framed at any given time in newspapers and, therefore, more precisely, say something about collective memory and its change.

Our survey has two main findings related to the memory of the Alta controversy in newspapers: First, it reveals that while the Alta controversy has been framed in various ways in the past, a Sami contextualization of the event is currently dominant. This contextualization, however, contains various and, at times, conflicting narratives which reflect the contemporary relationship between the Sami minority and the authorities. Secondly, it shows that newspapers' abilities to relate the Alta controversy to the present rely heavily on *how* the Alta controversy is made relevant, giving distinct traits to when the Alta controversy is mentioned in commemorations, analogies or as a contextualization to present events.

## Background and earlier research

Earlier research focuses on the Alta-controversy as an event that initializes Sami rights. Minde writes that the conflict progressed from being an environmental struggle to becoming an indigenous struggle, indicating that the Alta controversy became predominantly framed as a Sami happening already *during* the event.[[2]](#footnote-3) This view has become dominant in the scholarly literature about the event.[[3]](#footnote-4) However, other research and contemporary surveys indicate that there were other perspectives that were equally important than the framing of the Alta-controversy as a Sami event, which led to the fact that a majority supported the damming at the time of the conflict.[[4]](#footnote-5)

In present popular presentations of the Alta controversy, the event is portrayed as related to the Sami minority.[[5]](#footnote-6) However, conflicting narratives exist on the efficacy of these rights and whether the Alta controversy marked a true change in the relationship between the State and the Sami, as the minority still faces various issues of build-out of Sami lands. Most prominent of these is the Fosen controversy, where the Supreme Court has found the building of some 150 wind turbines renders reindeer herding impossible, thus violating Norway’s commitment to human rights.[[6]](#footnote-7)

## Research Questions

This article focuses on how past societal conflicts are represented in newspapers and whether division is maintained or, on the other hand, evolves towards more unified, homogenous portrayals of the social conflict over time. We have chosen a two-folded research question to reflect that our paper is both an investigation of the Alta controversy in particular, but also a test of novelle methods to accommodate critique of research on collective memories being reductionist of processes and not reflecting the collective.[[7]](#footnote-8)

Earlier research indicates that the Alta controversy is predominantly framed as an event related to the Sami minority, yet it remains unclear when and how this happened. Did it, as Minde suggests, happen during the Alta controversy as a decisive change in public opinion, or has it happened at some later point, e.g., with the introduction of Sami rights? The first research question is thus: "What could explain homogenization in the Alta controversy in Norwegian newspapers?"

Secondly, we aim to try out novel methods made available by technological advances made in the digital sphere, most notably artificial intelligence, and to test out whether these tools can be beneficial to historians working with large-size corpora. The second research question is, therefore: "How can natural language processing techniques be employed to analyze and interpret the narrative framings of historical events in newspaper texts?"

While this two-folded approach gives insights into how NLP can be utilized in a practical study of collective memories, it also gives us some limitations due to the sheer length constraints of the article. Consequently, this paper does not provide detailed technical descriptions of the methodologies employed nor an exhaustive exploration of the Alta controversy itself. Furthermore, our findings suggest that newspaper corpora should not be analyzed in isolation. They are part of a broader media ecosystem, influenced by academic research and evolving cultural dynamics. However, a comprehensive examination of these interconnections is beyond the scope of this article.

## A short resumé of the controversy

In 1968, the Norwegian Department of Water Resources and Electricity announced its plans to dam the Alta-Kautokeino River due to a calculated future power deficit in the northernmost part of Norway.[[8]](#footnote-9) The damming was sponsored by the Labour Party at a local, regional and national level, which also had governmental power during the conflict. The original project included a large reservoir that would flood the Sami village of Máze and large parts of the Finnmarksvidda, a mountain plateau essential for reindeer pastoralism.[[9]](#footnote-10) In addition, the damming would have significant consequences for the town of Alta and jeopardize the status of the Alta-Kautokeino watercourse as the best salmon river in the country.[[10]](#footnote-11)

Although Máze was protected from flooding in 1973 and the rest of the plans were significantly reduced in 1975 by removing the large water reservoirs from the project - the damming still became a major source of conflict from 1978. Key events include a Sami hunger strike and protests outside the Norwegian Parliament in 1979, a major protest where 800 participants blocked access to the construction site and were forcefully removed by the police, called ‘the battle of Stilla’. A subsequent second hunger strike and the occupancy of the prime minister's office by 14 Sami women followed the civil disobedience protests.[[11]](#footnote-12) While the damming was completed, the actions also led to the establishment of various public committees to secure the future of the Sami minority.[[12]](#footnote-13)

# Theory and direction

## How are intra-societal conflicts remembered within collectives?

One of the foundational myths of collective memories is their constituting effect on the collective itself. The original function of collective memories, suggested by the forefather of the concept, Maurice Halbwachs, was to explain the existence of shared identities across individuals with no personal bonds through an imagined common past.[[13]](#footnote-14) Other scholars of memory research, such as Ann Rigney, on the other hand, emphasize that it is the memories’ ability to create debate, discussions and adaptations into new social frameworks as instrumental to their continued remembrance. Rigney suggests that memories only stay alive as long as “people consider it worthwhile to argue about their meaning”[[14]](#footnote-15), and a stable memory will, on the contrary, lead to oblivion in the long run.

While the view on collective memories as fundamentally contestable can give meaning to why the Alta-controversy is remembered so vividly in posterity, it is also contradictive to the original use of the concept as defined by Halbwachs. Rather, this makes the Alta-controversy a *disputed memory* that continues to divide the population because the controversial issues from the conflict are still seen as both present and unresolved. Other scholars of collective memory, such as Aleida Assmann and Daniel Bar-Tal, argue that memories of intra-societal conflicts are not productive in the long run and can lead to the disintegration of society.[[15]](#footnote-16) In their view, it is not these disputed memories' ability to create a debate that makes them memorable, but it is what makes them fall into oblivion in the long run due to a sense of “functional forgetfulness” to protect society from its own disputed past.[[16]](#footnote-17)

However, it is also possible that the collective memory of the Alta-controversy is shaped by the perceived effects of the controversy onto later society. In this context, it is not the conflict itself which is the central focus, but rather the enduring consequences and echoes it left behind. If the theoretical implication of narrative theory is taken literarily, it is likely that the *meaning* of the Alta-controversy intertwines with subsequent societal developments and policies and is crucial in shaping the collective memory of the Alta controversy more so than the actual details of the event itself.[[17]](#footnote-18) For instance, significant advancements in Sami rights, such as the establishment of the Sámi Parliament in 1989, can be seen as a direct legacy of the Alta controversy, reflecting its long-term impact on Norwegian society. Conversely, ongoing disputes like the Fosen controversy challenge the extent of this progress, suggesting a continuity of the underlying issues of the Alta controversy and the present.

## Newspapers and collective memory

Newspapers play an instrumental role in the construction of collective memories, serving as critical gatekeepers within public discourse. They possess the authority to decide which events merit sustained public attention and are thus preserved in collective memory. Jill Edy delineates three primary methods through which newspapers engage with the past: through commemorations, by drawing historical analogies, and by providing historical context. These mechanisms influence the manner in which historical events are remembered and understood.[[18]](#footnote-19)

Various scholars have highlighted the practice of contextualizing current events by referencing the past, which offers journalists a powerful framework for interpreting contemporary issues.[[19]](#footnote-20) This approach enables newspapers to extract historical events from their temporal confines, significantly impacting how these events are perceived in terms of their meaning and significance today. In this vein, Barbie Zelizer characterizes journalism as a distinctive means of connecting past and present, thereby establishing journalists as "memory agents" who wield significant interpretative authority and selective capacity in their representations of history.[[20]](#footnote-21)

Historical analogies, on the other hand, do not rely on the causal relationship between the past and the present events; rather, they suggest that current circumstances resemble specific past events or conditions. This premise asserts that past experiences are essential for understanding and navigating contemporary challenges with uncertain outcomes. Such comparisons often imply that lessons from the past are applicable to present situations due to their similarity, thus, newspapers and journalists possess considerable influence in selecting *which* past events are invoked as analogies. Employing the past as an analogy to the present thus wields significant interpretive power; the selected analogy establishes a predictive framework for the future, drawing on historical precedents.[[21]](#footnote-22)

Commemorations do not inherently assert the immediate relevance of the past to the present but instead utilize anniversaries of specific events or individuals as opportunities for historical reflection. While these commemorations may appear solely retrospective, lacking direct links to contemporary contexts, Jill Edy highlights their significant role in negotiating historical meanings and forging unified narratives.[[22]](#footnote-23) Unlike historical analogies and contextualizations, which often introduce diverse and potentially conflicting interpretations that may be overlooked due to the fragmented nature of newspaper reporting, commemorations facilitate the re-examination and synthesis of these divergent narratives.[[23]](#footnote-24)

This integrative function is crucial as both journalists and audiences gravitate towards coherent stories that convey a semblance of objective reality. Commemorations, therefore, play a pivotal role in shaping authentic collective memories. In this framework, Edy aligns with traditional concepts of collective memory, which emphasize that representations of the past in newspapers gravitate towards a shared framework for understanding the past, and controversy must eventually be left behind in order to create a meaningful story for the present.

In the context of differing perceptions of what makes the past relevant to the present, we can imagine several different roles of the Alta controversy in posterity. The most obvious one is as arenas where different and conflicting narratives surface and debate the meaning of the event, and the event remains relevant as an unresolved conflict. However, we can also imagine that one of the conflicting narratives from the Alta-controversy becomes dominating over time, and other views exist only as marginal counter-memories. In this context, newspapers function as arenas where the hegemonic memory of the Alta-controversy is repeated and solidified. A third option is that a new narrative of the conflict is created in posterity, which does not coincide with any of the narratives from the conflict itself. Rather, the meaning of the event is tied to its perceived impact on society, and newspapers serve as spaces where the negotiation and evolution of collective memory take place, shaping the narrative in ways that extend beyond the immediate conflict. By using excerpts from newspapers as our primary data we can explore how these memory arenas are navigated throughout the entire period. Edy’s view on memory-making in newspapers serves both as a guide and as a polemic to our research, as presented in this paper.

## How can NLP used on newspapers make the analysis of the collective memory of the Alta-controversy more representative?

Wulf Kansteiner states that identical interpretations of the past within a group are one of the foundational myths of the field of Collective memory.[[24]](#footnote-25) However, the likelihood of a completely uniform view of the past within a group decreases as the size of the group increases.[[25]](#footnote-26) A monolithic view of the past events within large communities, like in our case, Norway, is therefore unlikely if we follow Kansteiner. The fact that we are dealing with the memory of a conflict where there still are numerous eyewitnesses further decreases this likelihood.[[26]](#footnote-27) These insights point to a need for methods that can illuminate multiple perspectives.

NLP is such an approach. Natural language processing relies on distributional semantics proposed by Firth and Harris.[[27]](#footnote-28) Within this framework, it is assumed that one can infer meaning from the relationship between words. These relationships are described mathematically in what is commonly refered to as a language model. One such language model is gpt-3.5, familiar to us through Chat gpt. These models show an impressive ability to produce language, but similar models can also be used to analyze language.

These methods, applied to newspapers, can illustrate how the Alta-controversy is remembered in various and conflicting ways within Norway. By using a corpus of Norwegian newspapers from the event to the present, it is possible to identify the different voices and modes of interpretation which exist simultaneously in the newspaper. We will categorize references of the Alta-controversy in the corpus according to the context around it. By measuring the relative size of these categories, e.g., a Sámi context, an environmental context, issues related to law and order, etc., it is possible to measure the relationships and distributions at any given time after the conflict. This approach will, therefore, make the study more representative of the variations which exist within the collective memory than if we were focusing on a smaller selection of sources. NLP can, therefore, nuance the idea of a uniform view of the past within a collective.

# Methods and material

In this study, we have leveraged new advances in artificial intelligence to our advantage. In this section, we will avoid covering the most technical aspects while presenting the process in the order that it was conducted. All the code used will be available on GitHub.

The data material for this study consists of a comprehensive corpus of printed Norwegian newspapers, spanning from 1978 to 2023, that reference the Alta controversy either directly or through synonymous terms. This extensive dataset has been enabled by Norway's "lov om avleveringsplikt," a legislative requirement mandating the submission of a copy of all publicly available documents to the Norwegian National Library (NB). Consequently, the NB has compiled a vast collection of materials, including a near-complete series of newspapers from the last century. These have been digitized and made available for scholarly research, providing a rich resource for examining the media portrayal and public discourse surrounding the Alta controversy over several decades.

These archival newspapers have been scanned and processed for machine readability by the NB, facilitating detailed textual analysis.[[28]](#footnote-29) Our study leverages the NB's publicly available API to systematically construct our corpus. This technological approach not only streamlines the extraction of relevant articles but also ensures a thorough and unbiased selection of sources, capturing a wide spectrum of perspectives on the Alta controversy.

Norway's media landscape is characterized by a high number of newspapers relative to its population, providing a rich and diverse selection of data for analysis.[[29]](#footnote-30) This abundance is partly due to the general press subsidies provided by the Norwegian government.[[30]](#footnote-31) Newspapers meeting certain criteria receive financial support through annual state budgets, which has contributed to the vitality of the press sector, including the Sami press.[[31]](#footnote-32) Publications such as “Sagat, "Sámi Áigi," "Min Áigi," "Ávvir," and "Áššu" serve the Sami community, publishing content in both Sami and Norwegian languages.

Unfortunately, the inclusion of Sami-language newspapers in our corpus was constrained by the limitations of the language models available, which are primarily designed for North Germanic languages. As a result, we were only able to include content from these newspapers when it was published in Norwegian. However, many of the Norwegian newspapers in our search also cover and relate to the Sami population. This setup allows us to capture significant perspectives on the Sami community, though it does not encompass all viewpoints due to these linguistic constraints.

There has been a notable shift in the Norwegian newspaper industry, transitioning from predominantly political party press to becoming largely independent editors, though often retaining a discernible political bias. This shift was already underway before the onset of the Alta controversy but had not completely concluded at the time of the event.[[32]](#footnote-33) Theoretically, this could have resulted in a majority of newspapers supporting the dam construction, aligning with the favourable stance of most political parties. However, our data does not reflect such tendencies; on the contrary, the coverage appears to be predominantly critical of the damming.

During our period, there has also been a transition from printed newspapers to digital online editions. As noted in *Den Norske Presses historie*, this transition has resulted in lower circulation numbers for printed newspapers, although the total number of newspaper titles has remained relatively stable.[[33]](#footnote-34)

Our analysis exclusively incorporates printed editions based on the assumption that the majority of articles published online are also available in print. This approach inevitably excludes some digital-only publications, particularly in recent years, but it was necessary to align with our methodology.

Moreover, our method accounts for the annual fluctuation in the number of newspapers by focusing on the relative frequency of references to the Alta controversy each year. This ensures that our findings are not skewed by the changes in the newspaper industry over time, providing a consistent basis for analyzing trends and patterns in the coverage of the Alta controversy.

To create our corpus, we set out to craft a search strategy which would capture as much as possible of what was written about the Alta-controversy.[[34]](#footnote-35) After many iterations, we opted for a strategy that matches terminology only used in relation to the Alta-controversy, like “Demonstrantene i Alta”.[[35]](#footnote-36) An unresolved problem is the quality of the scanned newspapers from NB. While in general excellent, we saw that in some cases, some letters are not properly recognized.[[36]](#footnote-37) Another problem is that although we have a quite broad search strategy, some cases discussing the Alta-Controversy have certainly been left out. We do, of course, not know which ones this is, else we had included them. We accounted for the two forms of written Norwegian language, Bokmål and Nynorsk.

After collecting all the newspapers matching our criteria, we wanted to extract text related to the Alta-controversy. To do this, we used NBs concordance search.[[37]](#footnote-38) This tool lets you take a word and extract n words before and after the same word. For example, if we look up “Alta-saken”, we will get all strings containing “Alta-saken”. Here is an example of such a string, the words gathered from the concordance search are in italics, and the search term is in bold: “*Og som et PR-trlck i* **Alta-saken** *er dette vel i og for seg greit nok . Men hvis denne sultestreiken skal ha noe mer alvorlig”*.[[38]](#footnote-39) After some data cleaning, we ended up with 74182 unique strings of words.[[39]](#footnote-40)

We ended up removing a lot of the announcements for television programs as they took up disproportionate amounts of space from 1985 and onwards. Some concordances are also quotes and widely circulated reports from news agencies, this was not excluded from our analysis. In the end, we have 83266 strings, which make up our corpus.[[40]](#footnote-41) In addition to the strings, our data consists of publication day, place, and newspaper. Many of the publication places we had to add in manually. A graph with blue lines

Description automatically generated Her is an overview of total number of times the Alta-controversy has been mentioned each year from 1983 until 2023. Note: 2023 was not fully available to us(yet).

The figure demonstrates the number of references to the Alta controversy distributed by year. While the figure demonstrates that the Alta-controversy is repeatedly considered relevant in posterity, it does not illuminate in which situations the event is considered relevant, nor does it show what aspects of the conflict are illuminated, or indeed how the conflict was discussed. It is important to keep in mind that these aggregated numbers obfuscate the highly stochastic nature of our data. Some days, the Alta-controversy is talked about everywhere, other days – nowhere.

In essence, our approach to the historical material is to utilize it primarily as remains.[[41]](#footnote-42) We are trying to detect changes in how the Alta-controversy has been talked about in the Norwegian press. The traditional way of doing this kind of quantitative analysis could be to manually read and code the data and then aggregate the data in various forms.[[42]](#footnote-43) Another way could be to investigate collocations and to do n-gram and colocation analysis.[[43]](#footnote-44) These approaches, although tested and tried, are prone to several biases.[[44]](#footnote-45)

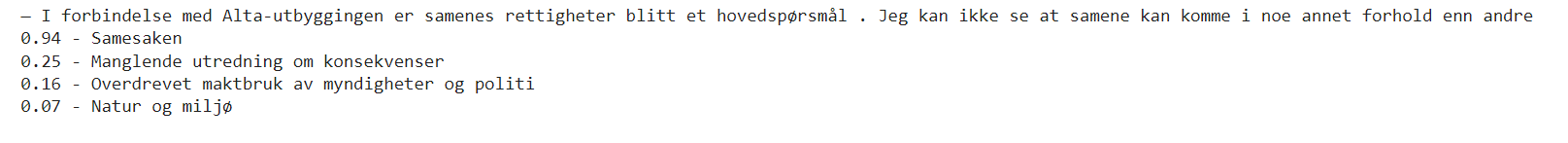
Our computational approach utilizes an *encoder-only transformer model*.[[45]](#footnote-46) In 2021 the first Norwegian transformer model appeared, Nbert.[[46]](#footnote-47) A transformer model is a large language model (LLM), which differs from earlier LLMs mostly by being cheaper to make – the architecture of earlier language models was prohibitively expensive. NBert is trained on data from the Norwegian colossal corpus, which includes large swaths of digitized Norwegian text from books, Wikipedia, newspapers and parliamentary speeches. In practice, it means that the model has been trained on newspapers with similar contexts to our corpus, and similar OCR errors as our corpus. This does, however, create some peculiarities. As we opted for a combined approach, we discovered that some of the excerpts which only differed in slight formatting, like a missing coma or a dash, had some impact on how the model handled them. In these language models there are thus some parts of the model which do not correspond well to our perception of meaning.

Although newer BERT models exist with better benchmarks for Norwegian, we have opted not to use them, as no specialized models have been trained on them. The specialized language model we are using is ScandiNLI. ScandiNLI is a zero-shot classification model, which means that the model can classify text in accordance with the labels that we have provided.[[47]](#footnote-48)

The models have been evaluated for accuracy on standardized benchmarks.[[48]](#footnote-49) ScandiNLI achieves an accuracy of 80.36% on these tests. Our configuration of the model returns a score between 1 and 0 for every label and sentence, where 1 indicates that the model is certain that the label is matching the sentence. Mislabelling would typically present itself as the model providing a much higher or lower number than our own assessment.[[49]](#footnote-50)Since we are trying to detect trends in this paper, this is a manageable problem. It should also be mentioned that the benchmark itself was machine-translated into Norwegian, making it a suboptimal indicator. We did, however, develop a tool to inspect peculiarities in our data to combat some of these errors.

We opted for a thourogh approach to verify the quality of our labels. We took 50 randomly selected sentences from our corpus and tested our labels on these sentences. We then modified the labels that seemed not to work as intended and reran the model with updated labels. We found that changing the labels slightly often solved the worst cases of mislabelling. The approach has some promise but could certainly benefit from further work. We wanted every sentence to have at least one label which was above 0.5. This was, unfortunately, not economically feasible in all cases. We thus managed to create some new ones as we went along, and this yielded some interesting perspectives. We also saw that the model was surprisingly able to infer the context of the concordance in many cases, which was surprising.[[50]](#footnote-51)

In the end, we ended up with 61 labels that capture different aspects of the Alta-controversy. An important label for this analysis is the label “Samesaken” – literary translated into “the Sami case”, though more correctly alluding to the broader context of the issue of Sami rights. The example below demonstrates how the label “Samesaken” manifests in practice, effectively identifying instances where the discourse on the Alta controversy intersects with or is influenced by, the broader struggle for Sami rights. In other words, when the label “Samesaken” yields a number close to 1 for a given text excerpt, we have assumed that the Alta controversy is situated within a Sami context, e.g. being described as a Sami event or leading to Sami rights.



We have used the average yearly scores for different labels to visualize trends, focusing mainly on the label “Samesaken”. To look closer into the more interesting developments, such as years showing a significantly increase in Sami framings of the Alta controversy, we have made a tool that enabled us to extract the sentences that were driving the trend. This way, our analysis in contains a large qualitative element. Subsequently, we have used these concordances to search up and read the newspaper article which pertains to the text excerpt, thus getting a better picture of the larger context and which narrative the Alta controversy is placed into.

Furthermore, we have made a tool that illustrates the distribution of references to the Alta-controversy during a chosen year. This way, we can see whether a rise in references to the Alta controversy is related to a particular date or, on the other hand, distributed evenly throughout the year. In general, we find that the references to the Alta controversy are stochastic and often related to contemporary events or anniversaries.

A graph of a graph showing the number of events

Description automatically generated with medium confidenceHistogram of 1989

This histogram shows the distribution of references of the Alta controversy in 1989. The red plot illustrates the total number of observations of the Alta Controversy in the corpus, while the blue plot shows to what degree these references match a chosen label, in this instance, “Samesaken”. When analyzing the concordances linked to the date 1989-01-25, we can see that they refer to a TV program regarding the forthcoming Sami Parliament, while 1989-10-10 refers to the actual opening date of the parliament. In both cases, the histogram illustrates that a high proportion of the total observations are related to the label “Samesaken”, as the blue plot is similar to the red plot, while on 1989-08-08, a much smaller proportion is related to the label. This way, we have been able to decide on what dates the Alta controversy has been mentioned in the newspapers, relate these dates to particular events, and, in the end, decide how the Alta controversy is related to this event.

These qualitative excurcions into the trends have led to many surprises and reconsiderations. This combined analysis provided an illuminating context for some of the spikes in the trend lines. Even though it was the graveyard of many beloved hypotheses.

Additionally, this quantitative element has allowed us to revise whether the method of using NLP to decide how the Alta controversy is contextualized matches our reading of the newspaper articles. Thus, this has given us both the opportunity to revise labels and add new ones as we have worked with the material, but also to decide to what extent these quantitative numbers match our understanding of what meaning is designated to the Alta controversy in the newspaper, and to what degree the labelling of text excerpts with NLP is a meaningful endeavour. Some of these reflections will be done during the analysis, others at the end of the article.

Our work process and analysis have primarily been written and conducted in R. All the data was collected through the open API from NB. This API had some quirks that we were unable to fully grasp, but it seemed fine in the end. We did, however have to use Python to set up and run the ScandiNLI Model. The testing of the labels was done in google Collab, but the final analysis was done over a couple of days locally on a M1max MacBook.

Reliability concerns that one is usually faced with when labelling datasets is mostly eliminated by using machine labelling. The algorithm computes a very similiar result every time, unlike most human-driven coding of data. The larger question remains, as always, the validity concerns. A recent paper by Anthropic showed that it is possible to interpret parts of these models mechanistically to explore the different relationships between different words and phrases.[[51]](#footnote-52) It is, however, too recent for us to be able to apply it in this context. Secondly, our corpus in this study and the corpus used to train the Norwegian language models is not a corpus without flaws. Manual inspections were required in many cases, and we are certain that further investments in enhancing the Norwegian National Library’s digitized data would be wise and beneficial for everyone using it.

Our method also has some limitations regarding identifying the authorship of our text strings, as this still requires labelling of all excerpts manually. Neither does our approach differentiate between content written by journalists, letters to the editor and editors' notes. This means that agency is not a part of our study, while still being an important topic in the field of collective memories. Rather, we focus on structural changes that take place within newspapers. However, through our qualitative investigations, we still get some sense of the different stakeholders in our material.

Additionally, the method does not have the ability to weigh different references to the Alta controversy against each other. Therefore, a mention in a small note will count equally to a headline. A major newspaper with thousands of subscribers is equal to a local newspaper, counting only a few. This means that our method does not take into account the different reception which our references have. Neither are our findings in newspapers equivalent to public opinion, as there exists a skewness in our material compared to the general population, e,g that local newspapers write more and differently about the event than national newspapers. Still, we believe that our data collected from newspapers give an important indication of the collective memory of the event and are nonetheless more representative than various other, more common approaches to gaining insight into the collective memory of a large group, such as a nation. Taking into account these limitations, we might conclude that the method considers newspapers as *reflections* rather than *creators* of collective memory.

Our methodology yields useful results, but this novel approach would benefit from more iterative work. There is still room for improvement in almost every aspect. Some would be quite costly but also very beneficial—others will take more iterations. We thus present a novel methodology, but as with anything truly novel, the actual limitations and biggest problems have yet to be discovered.

# Analysis, A periodization and a great many figures

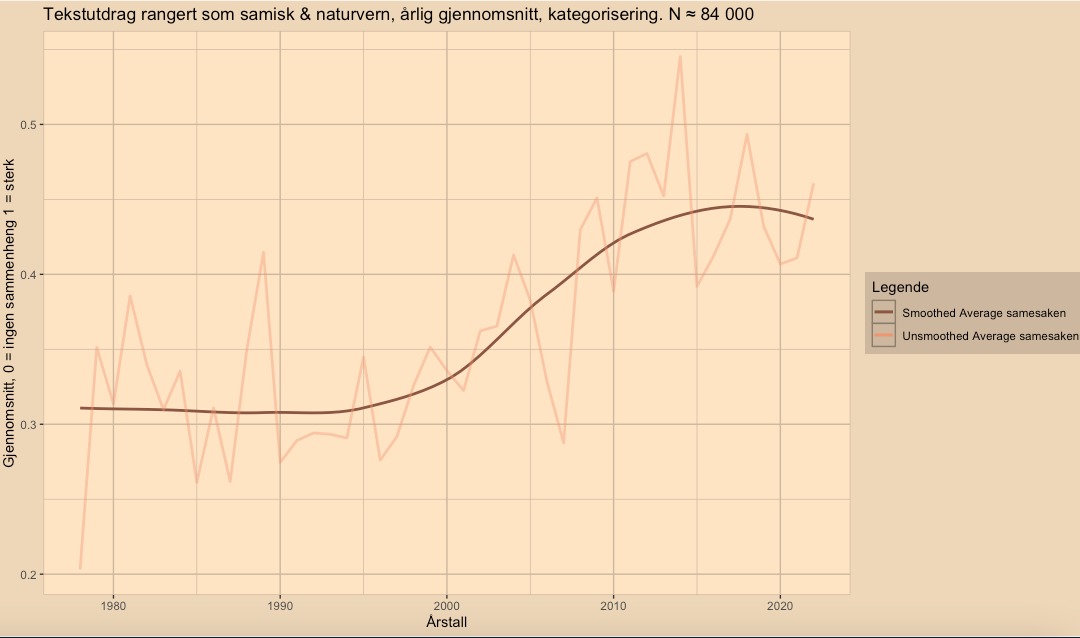


Figure 1 demonstrates the relationship between the Alta controversy and the term “Samesaken”

Figure 1 depicts the change in the frequency of newspaper mentions linking the Alta controversy to Sámi concerns, as related to the term "Samesaken". An observable upward trend within a 25-word range of "Alta-saken" or related terms showcases the increased association with Sámi issues over time—beginning with a nominal correlation of less than 0.1 in 1978 and climbing to roughly 0.35 by the 2010s. A zero value indicates no association, while a full value of 1 implies a complete correlation, according to the zero-shot model.

The figure illuminates the various theories on when and how the Alta controversy's portrayal as a Sámi event evolved and will, therefore, serve as the basis for the discussion of this article. Notably, it reveals an introduction of the Sámi-related framing during the peak of the controversy and a marked rise of such contextualization beginning around the year 2000.

The surge in correlation to 0.2 in 1979, and near 0.3 in 1981, from below 0.1 in 1978—a 150% increase—coincides with key moments such as the first hunger strike and the spontaneous sit-down protest in the prime minister's office in 1979, and the second hunger strike and the 'Battle of Stilla' in 1981. These events signal a substantial shift in public focus towards the Sámi minority's role in the conflict.

A graph on a screen

Description automatically generatedFigure 2 showing correlation with the label “Natur og miljø”(green) and compares it to the already shown “Samesaken” (red).

Figure 2 delineates the narrative shift within the Alta controversy's coverage from environmental concerns ("Natur og miljø") to an intensified focus on Sámi rights ("Samesaken"). Initially, environmental issues were more prominent, but as the controversy evolved, especially highlighted by events in 1979 and 1981, the emphasis noticeably shifted towards the Sámi context. This transition not only aligns with the findings of Minde and others, indicating a pivotal move from environmental to Sámi rights discussions but also showcases the effectiveness of our novel methodological approach. By utilizing NLP, our analysis confirms Minde’s thesis(2003,2005), thereby validating the potential and accuracy of these methods in tracing narrative evolutions within historical discourse. The reaffirmation of expected trends through our approach underlines its robustness and suggests its capability to offer insightful perspectives on the representation of societal conflicts in media narratives.

Furthermore, our analysis brings additional insights into the evolution of the Sámi framing, observing a significant intensification starting around two decades post-event. This not only indicates a change in the narrative but also a retrospective enhancement in the significance of the Sámi perspective within the public and media discourse on the Alta controversy. From the year 2000 onwards, there is a marked and consistent increase in the portrayal of the Alta controversy within a Sámi context, suggesting that the narrative’s persistence and growth are influenced by developments beyond the immediate aftermath of the controversy.

## The Alta-controversy as an excessive use of force and a mistake

The analysis of references to the Alta controversy in relation to 'The Sami issue' up until approximately 1995 yields an average relevance score of 0.2 out of a possible 1. This scale means that a score of 1 would indicate a perfect match between the Alta controversy and the label 'The Sami issue' across all references. Therefore, the obtained score of 0.2 suggests that, while the Sámi contextualization is present and notable, it only accounts for a fraction of the total discourse. Indeed, this highlights that a significant majority of sentences referencing the Alta controversy do not focus on 'The Sami issue', pointing to a diverse array of other themes and narratives being equally prominent in the discussion.

The combined quantitative and qualitative analysis demonstrates that the initial years after the conflict were mainly about pinning blame for why the conflict arose and escalated as it did. While the authorities had tried to narrate the Alta controversy as a necessary build-out due to the need for electricity and the protestors as opposing democratic will during the conflict, our data demonstrates that this narrative did not stick in the newspaper during the event or after. Figure 3 demonstrates how a large proportion of the references to the Alta controversy in newspapers can be contextualized as different sorts of critique against the authorities, represented by the red plot for "Exaggerated use of force by the police and authorities," the green for " Lack of investigation into consequences," and the blue showing the already illustrated Sámi framing. The figure demonstrates that the framing of the Alta-controversy as a governmental mistake was initially dominating references made to the event, as the two labels are the most utilized contextualizations of the Alta controversy during the first 20 years after the conflict.

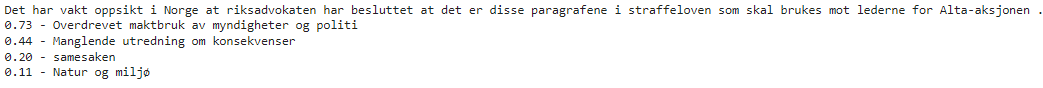
A screenshot of a graph

Description automatically generatedFigure 3 showing the labels “Exaggerated use of force by the police and authorities," the green for "Erroneous investigations regarding the consequences," and the blue showing the already illustrated Sámi framing.

An example illustrating how this criticism took shape is the 1983 trial against the leaders of the popular movement that organized the protests in Stilla. While the court found them guilty of insurrection, and in this sense supporting the authority’s narrative, newspaper coverage of the trial suggests that the event continued to be interpreted as a governmental mistake.

While public trials aim to serve as mechanisms for societal repair, addressing breaches in social norms by assigning responsibility and can, therefore, change the narrative of an event in the aftermath, this did not happen with the trial following the Alta controversy, according to our data. The judgement of the court did not lead to that the leaders of the popular movement were held responsible for the conflict in the newspapers. Edy claims that such normally fail for a number of reasons.[[52]](#footnote-53) In the case of the Alta controversy, this is likely because the trial was interpreted as another example of the authority’s misuse of force, as the charges were perceived as disproportionate, given the non-violent nature of the protests. This portrayal effectively elevated the leaders of the popular movement to a moral high ground, depicting them as visionaries unjustly persecuted by an overreactive state apparatus.

The following concordance exemplifies how the NLP model labels a concordance related to the trial and the critique against the government.



The concordance reads: "The decision of the Attorney General to charge the leaders of the Alta protests with these sections of the penal code has attracted attention”. The label "Exaggerated use of force by the police and authorities" has been given a score of 0,73, which is in line with the meaning of the sentence. The second highest score of 0,44, " Lack of investigation into consequences ", is, however, less in line with the content of the sentence, as it does not mention or point to any sort of consequence of the damming. In general, we can see that the lower-scoring labels often seem not fitting to the precepted meaning of a concordance, at least not in a human manner, while the higher-scoring label of a sentence is almost exclusively in line with the precepted meaning. One possible way to overcome such an issue is to remove all the lower-scoring labels from the data set because of their insecurity of capturing the content of a sentence, e.g. those scoring under 0,5. However, such a measure would also reduce the dataset significantly in size and thus lose representativity and much of the general discourse surrounding the Alta controversy.

The critique against the authorities was significantly amplified in 1987, with the revelation of new power calculations showing that the electricity from the Alta dam was not as crucial for regional needs as previously asserted by the Labour Party government. Such developments not only challenged the government's narrative of a highly necessary damming but also reinforced the notion of the controversy as a fundamental misstep, underscored by governmental miscalculations and misrepresentations. This development is visible in our data as this year, the label "Lack of investigation into consequences" is the highest scoring this year, as visualized by Figure 3. Interestingly, while the label was meant to detect contextualization of the event that focused on the negative environmental consequences to the river and its surroundings, it also effectively detected the perception of the build-out as based on erroneous power calculations – thus showing the model's ability to detect topics related to the labels that were fed into the model.

Central members of the Labour Party attempted to distance themselves and the organization from controversy by blaming the faulty power calculations and admitting that the project would not have been initiated with the currently available information.[[53]](#footnote-54) Most notably, by 1990, Gro Harlem Brundtland, a pivotal figure in the Labour Party who served as Prime Minister and Minister of Environment during the Alta controversy, conceded that the damming was unjustifiable based on subsequent energy projections.[[54]](#footnote-55)

However, as with the trial, all these acts attempting to relieve the authorities from the responsibility of the conflict failed. Rather, the Alta controversy became an embodiment of leadership error, and in particular, related to the Labour Party organization. Brundtland's involvement was particularly scrutinized due to her roles as the Minister of Environment, directly overseeing the environmental assessments, and later as Prime Minister. Her continued prominence within the party, serving as Prime Minister from 1990 to 1996, only amplified the link between the Labour Party and the Alta controversy in the following years.

This framing of the Alta controversy as a Labour Party folly institutionalized within public memory led to its use as a cautionary tale against repeating similar errors, particularly concerning environmental policy. Throughout the 1990s, the controversy became a standard reference point: proposed Labour Party power plant projects were invariably juxtaposed with the Alta controversy, invoking comparisons that underscored the potential for environmental oversight and civic unrest. The most notable application of this analogy was in debates over the construction of gas power plants, where the Labour Party's support for new energy solutions met with significant environmental opposition and civil disobedience. Moreover, the Alta controversy served as a broader metaphor for potential missteps by the Labour Party and Brundtland, including their advocacy for EU membership in the 1994 referendum, highlighting the lasting impact of the Alta episode on the party's legacy and decision-making processes.[[55]](#footnote-56)

## The Alta controversy as contextualization of Sami rights?

The main narrative meaning of the Alta-controversy during these initial years was as a governmental blunder and a leadership failure by the Labour Party. However, contemporaneous newspaper accounts also presented a variety of perspectives that enriched the discourse. These included views of the event as an environmental concern, eyewitness accounts from protesters, and narratives highlighting the struggle for Sámi rights. Concurrently, there were narratives that supported the authorities and the dam's construction, framing it as a necessary step for electricity provision or as upholding parliamentary decisions against protester obstruction.[[56]](#footnote-57) Our data, therefore confirm the observations of Edy, claiming that the period following a social conflict often features a rich diversity of narratives, where multiple interpretations coexist and even contradict one another.[[57]](#footnote-58) Over time, however, narrative convergence tends to distil these diverse accounts into a singular, dominant history, leading to the homogenization of memory regarding social conflicts. In the case of the Alta controversy, the emphasis on its impact on the Sámi minority emerged as the prevailing interpretation.

What led to this homogenization, with the Sámi rights framework eventually overshadowing other narratives, including the initially prevalent view of the event as a Labour Party leadership failure? A likely key factor was the waning relevance of the leadership error narrative. With Gro Harlem Brundtland's resignation as Prime Minister in 1996 and her subsequent retreat from national politics in 1997, the controversy's association with the Labour Party diminished. Moreover, the Labour Party shifted its stance from equating energy policy with employment and economic growth to prioritizing environmentalism and the conservation of watercourses. This transition was symbolically underscored in Prime Minister Jens Stoltenberg's New Year's speech of 2001, where he declared that "The Alta controversy was the beginning of the end of large hydropower plant buildouts".[[58]](#footnote-59)

In one respect, portraying the Alta controversy solely as a mistake and a leadership failure by the Labour Party was inherently retrospective, providing limited relevancy of the event to later society. This narrative, which concentrated exclusively on past errors while overlooking the prospective impacts on later society, became progressively disconnected from the broader societal changes that manifested in the aftermath. Consequently, as time advanced, the depiction of the Alta controversy simply as a misjudgment by the Labour Party lost its resonance in newspapers. This transformation highlights the dynamic nature of collective memory, where the significance of historical narratives wanes when they no longer shed light on contemporary and future societal directions.[[59]](#footnote-60) Additionally, this shift suggests a generational transition, with progressively fewer individuals having direct experience of the event, thereby paving the way for new interpretations of the event that resonate more with present concerns and collective aspirations.[[60]](#footnote-61)

The Sami contextualization of the Alta controversy, on the other hand, made the event seem relevant and have a tangible impact on later society. In the aftermath of the Alta controversy, the Sami minority's rights and institutions were gradually strengthened, which to a large extent can be connected with the public committees established during the Alta controversy and the general rise of interest towards the Sami minority during the event. Edy similarly suggests that policy changes can be effective redressive acts, as later political development dictates the content of past events.[[61]](#footnote-62) One possible explanation for the gradual change in newspapers towards framing the Alta controversy as related to the Sami minority is that the event became a powerful framework for journalists to explain the later development of Sami rights as they were introduced and became relevant. Following this train of thought: as the Alta controversy led to the development of Sami rights and institutions, hence the event was interpreted as a struggle for Sami rights. This thesis can also be supported by narrative theory, emphasizing that the perceived meaning of a story has retrodictive power on the details of the narrative – and the Sami presence in the conflict is emphasized to make the story coherent with the perceived meaning of the conflict - the origin of Sami rights.[[62]](#footnote-63)

How does this thesis seem to fit when comparing the data to known events in the development of Sami rights? Looking at the graph describing Alta-controversy contextualized as a Sami event, there is a rise in such framings in 1984, when the first report of the committee established during the Alta controversy was published and handed over to the Norwegian Parliament. The report included proposals for major expansions of Sámi political and juridical rights, such as the inclusion of the Sámi minority in the constitution and the establishment of a Sámi Parliament.[[63]](#footnote-64) However, when looking at references to the 1984 Sami commission report, direct references in media to the Alta controversy in the context of these advancements were relatively sparse, suggesting that the controversy's role as a direct catalyst was acknowledged but not emphasized in contemporary discourse. However, our method was not made to show *missing* references to the Alta controversy; thus, this tendency was discovered through qualitative analysis outside our corpus and prior knowledge about the development of Sami rights.

The amendment of the "Sámi Paragraph" in the constitution in 1988 further committed the Norwegian state to the Sámi minority's rights, drawing narrative connections back to the Alta controversy.[[64]](#footnote-65) Yet, similar to the 1984 report, these connections were not dominantly featured in newspaper narratives, pointing to a nuanced media engagement with the controversy's legacy in relation to Sámi rights developments.

A significant shift in narrative focus is noted in 1989, as the label “Samesaken” experiences a dramatic peak. This aligns with the first election to the Sámi Parliament and its inauguration. Here, the Alta controversy is explicitly cited as a backdrop to the establishment of the Sámi Parliament, indicating a stronger narrative link between the event and the advancement of Sámi political rights.[[65]](#footnote-66) These observations underscore a gradual narrative evolution where the Alta controversy's significance as a catalyst for Sámi rights becomes more pronounced.

Despite the generally positive coverage of the Parliament's opening, internal debates within the Sámi community and limited electoral participation highlight the complexities surrounding the representation and enactment of Sámi rights. The depiction of an uncertain future for Sámi rights and the Parliament's role in newspapers reflects ongoing tensions and ambiguities in the pursuit of these rights, challenging the notion of the Alta controversy as a straightforward point for their progression and improvement. This complexity suggests that while the Alta controversy undeniably contributed to the narrative and institutional momentum towards Sámi rights, its role and the subsequent narrative homogenization must be understood within a broader, multifaceted context of political, social, and communal dynamics that have shaped the Sámi rights movement.

After the opening of the Sami Parliament, Sami contextualization again drops and the rising trend does not start until roughly a decade later, around the year 2000. This indicates that the Parliament's establishment did not immediately cement the Sámi narrative as the dominant lens through which the Alta controversy was viewed in the media. Similarly to earlier pivotal moments like the first report of the Sámi committee and the constitutional amendment of 1988, the coverage of the Parliament's inauguration and the first election in 1989 sporadically referenced the Alta controversy. When a link between the Atla controversy and the Sami parliament is mentioned, it is mainly done because Sámi artist Mari Boine dedicated a joik[[66]](#footnote-67) to the hunger strikers of 1979 during the opening, who, notably, were not invited to the event due to the fear of them making radical statements that were not in line with the more moderate Sami Parliament.[[67]](#footnote-68) This internal division is also made note of by a minority of the journalists covering the event. [[68]](#footnote-69)

While the introduction of Sami rights increased the Sami framing of the Alta controversy, this increase is limited as only a minority of the newspaper reports on the development of Sami rights relate these issues to the Alta-controversy. The following year, 1990, marks a low point when looking at the graph showing the development of the label “Samesaken”, coinciding intriguingly with the Norwegian Parliament's ratification of ILO Convention 169. This international agreement, which mandates recognition of indigenous peoples' rights to traditionally used lands, is deeply connected to the Alta controversy in scholarly discourse, especially regarding the controversial issue of land rights demands made by Sámi activists and politicians during the conflict.[[69]](#footnote-70) However, contemporary newspaper coverage of the ratification scarcely mentioned the controversy, and when it did, it rarely tied it to the controversial issue of land rights, instead framing it as a broader enhancement of general rights.[[70]](#footnote-71)

The 1997 delivery of the second Sámi committee's report to the Norwegian Parliament on Sámi land use and rights in Finnmark did not often draw explicit links to the Alta controversy in newspaper narratives. Yet, it ignited significant debate within Finnmark over the distribution of land rights between the Sámi minority and the majority population. The "Finnmark Act" of 2005 that emerged from this report and the juridical obligations of ILO 169 aimed to return land ownership to the people of Finnmark through the organization *Finnmarkseiendommen*, with governance shared between the county council and the Sámi Parliament.[[71]](#footnote-72) This legislation was met with criticism from both sides in newspapers: those arguing it diluted Sámi rights and those who felt it provided undue advantages to the Sámi at the expense of the majority. The contention, particularly pronounced within Finnmark's local media, reflects broader discussions on indigenous rights and national identity. However, the national media's portrayal was largely positive, contrasting with the divisive local sentiment.

While the debate regarding Sami rights was increasing in newspapers, in particular in 1997 and 2005 with relation to the question of Sami land ownership rights, these years do not show the same spike in the label “Samesaken” as visible with the opening of the Sami parliament of 1989. Looking at the debate, there were relatively few references to the Alta controversy to contextualize this debate in the newspapers. While omitting the Alta controversy can be an example of tacit knowledge and avoiding something self-evident, newspapers may also have a limited ability to historically contextualize current events with the past as they play out. The proximity to the Alta controversy made it difficult to get the required distance to get an overview of the past and determine the actual long-term effects of the Alta controversy and its impact on present issues. Thus, these findings nuance Zelizer's description of the journalists' role as memory agents by relating the present to the past is limited with regards to the contemporary past.[[72]](#footnote-73)

Instead, references to the policy of Norwegianization from the late 19th and early 20th centuries frequently serve as a backdrop for discussing the necessity of advancing Sámi rights and institutions, marking a clear historical injustice that necessitates redress. This underscores a preference for linking contemporary Sámi rights developments to broader historical injustices and a more distant past over direct ties to specific events like the Alta controversy. The memory of the Alta controversy is much more likely to be called upon when serving as an analogy to present event, where obvious similarities in the present are compared to the past, and the Alta controversy serves as an experience to draw knowledge from but above all, to avoid, as visible when made relevant in the context of the Labour Party.

## Contextualization through commemoration

If the Alta controversy was not cited as the start of Sámi rights development in media narratives, what led to an increase in Sámi framings in newspapers? A plausible explanation lies in the various commemorations of the event, notably the anniversaries of the hunger strike in 1979 and the ‘Battle of Stilla’ in 1981. These commemorative moments served as pivotal junctures for reevaluating the event's significance and its long-term implications on society.

The 1991 anniversary predominantly portrayed the Alta controversy within an environmental struggle framework, making scant mention of Sámi involvement, even though the Sami Parliament was opened only two years in advance. In stark contrast, the 1999 commemorations significantly shifted focus towards the event's lasting societal impacts, particularly highlighting its role as a "turning point for the Sámi question in the Norwegian debate."[[73]](#footnote-74) This marked shift in narrative focus illustrates the evolving perception of the controversy's significance over time.

This trend continued with subsequent commemorations. For instance, the 25-year anniversary of the 1979 hunger strike was predominantly framed in connection with the Sámi presence and participation in the event. Analyzing the histogram for 2004, a year where references to the Alta controversy and the term “Samesaken” hit a record peak, it becomes evident that a majority of these mentions were tied to this anniversary in october.

A graph showing the time of a year

Description automatically generated with medium confidenceHistogram showing major peaks in reference to the Alta controversy in connection with the 25th anniversary of the hunger strikes in October 1979.

Conversely, the 2006 commemoration of the 25th anniversary of the ‘Battle of Stilla’ reverted to emphasizing themes such as the excessive use of force by authorities and the flawed environmental impact assessments due to this event being more associated with the clash between authorities and environmentalists in Stilla.

In general, it looks as if the commemorations, to a larger degree, capture the connection between the Alta controversy and the later introduction of Sami rights and refer to the Alta controversy as the *origin* of such development. At the time when such rights were introduced, however, journalists only, to a limited extent, made this connection. This can be seen in relation to both the limited time of journalists facing short deadlines but also a limited ability to function as historians while at the same time not yet having access to scholarly interpretation of present events. In comparison, feature news such as commemorations do not have the same deadlines and can, at the same time, rely on preexisting scholarly literature and interpretation.[[74]](#footnote-75) In this context, it is also highly relevant to mention the surge in academic literature and interpretation of the Alta controversy as an initializer of Sami rights that coincide with the increased Sami contextualization of the event in newspapers. Important contributions here include the texts of Minde(2003, 2005) and the museum exhibition “A Nation Emerges” at Tromsø Museum (2000). It is, therefore, likely that scholarly interpretation has affected the newspaper discourse, yet our method does not allow us to decide to what extent.

The rise in Sámi framing of the Alta controversy correlates more with the aftermath and commemoration of key events than with the immediate introduction of Sámi rights. It's during these moments of reflection that the scattered pieces of information can be synthesized to appreciate the long-term impacts of the Alta controversy on society, and the meaning of the event is negotiated. Distinctly, when the Alta controversy is used as an analogy to present issues, or when the event is used to contextualize development in the present time, it is the immediate relevancy of the event that leads to its newsworthiness, which does not contain a reevaluation of the past as seen withing commemorations.[[75]](#footnote-76) In the case of the Alta controversy, commemorative journalism integrates the Alta controversy with the later development of Sami rights and sees this event as the origin of later developments, retelling the story backwards from a vantage point of hindsight.

By 2010, data indicates a notable shift: Sámi framing of the Alta controversy surpasses the framings of the event being contextualized as a governmental mistake. This change is underscored by the 30th anniversary of the hunger strike and the ‘Battle of Stilla’ in 2009 and 2011, respectively, where a clear focus on the Sámi dimension emerges in the anniversary of both events. A significant factor in this narrative shift may be the passing of the Finnmark Act in 2005, which addressed the core demand of the hunger strikers—rights to land and water—for the Sámi minority. Thus, the period marked by the struggle for Sámi rights, initiated by the Alta controversy and the establishment of public committees, is seen to culminate with the Finnmark Act. In this sense, the passing of the Finnmark Act punctuates the period of struggle for Sami rights, which was initialized by the Alta protestors' demand for land rights. This periodization does, however, not happen with the introduction of the Finnmark Act itself, nor the commemoration of 2006, but rather some years later, in this case, the commemoration of the Alta controversy in 2009 and 2011.

Qualitative analysis of the commemorations reveals how the two narratives – The Alta controversy as the start of the development of Sami rights and as an unnecessary build-out forced through by the government – become integrated into one narrative. As both of these stories represent the side that opposed the building, they are not mutually exclusive but rather complement each other. In this sense, the story of the Alta-controversy, through the commemorative work in newspapers, becomes the story of an unnecessary buildout forced through by the government that, paradoxically, catalyzed the advancement of Sámi rights in Norway. This narrative transformation turns what might seem from an environmental standpoint as a meaningless loss into a significant victory for the Sámi minority, highlighting the controversy’s long-term positive outcomes.[[76]](#footnote-77)

Such a narrative that combines both these elements can also explain why the Alta controversy continues to be associated with lacking investigations and governmental misuse of force even when the Sami framing becomes the dominant interpretation of the event—as these narrative elements remain relevant to the narrative of Sami rights. Therefore, these contextualizations only decline marginally after the narrative of the event as a catalyst for Sami rights becomes dominant, as illustrated by Figure 3.

A notable driver behind the increased Sámi contextualization of the Alta controversy, albeit external to newspaper content yet discernible within it, is the high number of TV shows about the Alta controversy that are continuously being created and broadcasted in national media. These programs, becoming noticeable in the data around a decade after the controversy, seem to catalyze spikes in newspaper references to the Alta controversy, observed even when TV guide listings are excluded from the analysis. Interestingly, a notable portion does not directly reference the broadcasts. Yet, the timing and surge in mentions closely align with the airing of these shows, suggesting a strong but often indirect influence on the frequency of Alta controversy references in print media. However, a notable portion also includes reviews and promotions of these TV shows, which are identical across different newspapers as they are often provided by the TV distributor. While we had the possibility to exclude repeating text excerpts from the corpus, we opted not to do this as would exclude a large amount of data, such as letters to the editor sent to more than one newspaper at the time, news reports made by central press agencies and distributed to several newspapers. Therefore, these findings, while substantial, also contain some uncertainty.

The rise in newspaper mentions of the event in relation to the broadcasting of TV programs indicates that TV programs about the Alta controversy play a significant role in rejuvenating public and media interest in the event, contributing to a marked increase in newspaper mentions. The broadcasting of these programs correlates with heightened media attention to the Alta controversy, illustrating how television can indirectly shape newspaper discourse and public memory of historical events.

For example, looking at the histogram of 2014, the vast majority of the references to the Alta controversy coincide with the TV program related to the 25-year anniversary of the Sami Parliament, which was broadcast on 09.10.2014

A graph showing the number of events

Description automatically generated

Although a comprehensive analysis of these TV programs is beyond our current scope, it's reasonable to suggest that shows like the one commemorating the Sámi Parliament anniversary mirror the rising narrative of Sámi rights, situating the Alta controversy within this context. These programs act as informal commemorations, aligning with anniversaries and sharing characteristics with commemorative journalism found in newspapers. However, TV shows allow for more full-fledged stories and narrative connections, compared to the newspapers’ limitations in relation to length constraints and constant deadlines. Our analysis indicates that these shows likely create a significant impact on newspaper discourse, albeit with uncertainties with regard to the high number of repetitive text excerpts and the lack of overt references to the TV shows.[[77]](#footnote-78)

The relationship between television broadcasts and newspaper coverage underscores a multimedia approach to remembering and interpreting historical events. It posits TV programming as a catalyst for discourse shifts in print media, reflecting broader narrative trends without direct attribution. Assessing the full extent of TV's influence on shaping collective memory and its interaction with newspaper narratives, however, remains an area for future research.

## Interpreting the Alta controversy in relation to new conflicts between the State and the Sami

In our data, the contextualization of the Alta controversy as a Sami event continues into the late 2010s and into the 2020s, hitting new record peaks, particularly in 2023, as displayed by Figure 1. While this increase can partially be explained through the cementation of the Alta controversy as the origin of the development of Sami rights, we can also see another trend in our data that conflicts with this exclusively positivistic interpretation of the Alta controversy as an origin for Sami rights development.

During the late 2010s and up to the present date, we can see new tensions between the Sami minority on the one hand and developers and the State on the other regarding the usage of Sami lands. In particular, windmill turbines and mining companies are seeking to develop outfields and mountainous areas in search of renewable energy and minerals to accommodate the green shift while at the same being essential for the Sami minority as reindeer herding pastures.[[78]](#footnote-79) Two conflicts stand out in this term, the first being the Repparfjorden controversy, where a mining company has gained admission for depositing mining waste in the fjord, jeopardizing the life in the sea and the possibility of conducting fishery. The second conflict, the Fosen Controversy, is one of many conflicts regarding the construction of wind turbines in land used for reindeer herding pastries. However, what separates this conflict from others is that the Norwegian Supreme Court found the windmill parks violating Norway’s obligation to secure the Sami culture in 2021, as decided by the Human Rights Convention, which is integrated into the Norwegian law.

Both these conflicts are similar to the Alta controversy: Again, Sami rights are being confronted with the requirements of the majority society. While the distinct increase in the label “Samesaken” demonstrates the conceptual connection to contemporary debates regarding indigenous rights, it does not show how the newspaper discourse is positioned regarding this issue. To gain better insights into this matter, we made the two labels to decide how the newspaper references advocated the issue of Sami rights.

A screen shot of a graph

Description automatically generated

In Figure 4, we compare the two labels “Threat to Sami rights”, indicating that Sami rights development is deemed necessary and still not satisfactory, and on the other hand, “Special privileges”, which see this development as yielding exclusive rights to the Sami minority, presumably at the expense of others. While the label indicating pro-rights development has been dominating since the outbreak of the Alta controversy, we can see that the two different plots follow each other closely: dropping significantly after the conflict, remaining low throughout the late 80s and early 90s, before again rising in the 2000s. Looking qualitatively at the concordances responsible for this increase, we can see that this initial increase is mostly related to a local context and the issue of land rights in Finnmark and correlates with the debate regarding Sami vs Norwegian land rights – take in particular note of the “special privilege” label in 2005, at the introduction of the Finmark act.

This increase in conflict level continues closing up to the present day, explained by the contemporary controversies. Looking particularly at 2023, where the most dramatic increase is both at the absolute references to the Alta controversy, as demonstrated by Figure XX in the introduction, but also to the labels “Samesaken”, “Special privileges and “Threat to Sami rights, we can see in the histogram that the references to the Alta controversy are linked to two distinct events. The first one of these is the release of the film “La Elva Leve – Ellos Eatnu” by the director Ola Giæver(2023), which is a historical drama about the Alta controversy, where the main protagonist, Ester, played by the Sami artist and activists, Ella Marie Isaksen Hætta, decides to come forth with her Sami identity and join the protests against the damming. While Ester is a fictional character, the movie is based on real events. The movie gained critical acclaim and had high viewer numbers of 97 000 during its screening in the cinemas.[[79]](#footnote-80)

Reading the newspaper references to “La Elva Leve”(2003), both reviews and commentaries, the film immediately becomes related to the current issues of Repparfjorden and Fosen, and the most common reaction to the movie in the newspapers is that how the content of the film resembles the current situation, where Sami rights are threatened and not taken into account by the authorities. This connection can further be explained by the fact that the movie does not include the aftermath of the Alta controversy but rather stops at the removal of protesters in Stilla. Thus, the narrative of the Alta controversy becomes strikingly different from the commemorations seen some years earlier, where the event is depicted as a *meaningful loss* due to the later development of Sami rights.

The second event which sparks references to the Alta controversy in 2023 is the protests against the government's lacking response to the rulings of the Supreme Court with regard to the Fosen controversy. 500 days after the ruling, Sami activists and environmentalists made headlines by blocking the entrance of the Ministry of Petroleum and Energies, declaring that they would not leave until the wind turbines were removed. Later the same week, the activists also blocked several other ministries in Oslo. Newspaper mentioning’s of the protests point towards the clear similarity between the Alta controversy, undoubtedly facilitated by the release of the movie some weeks earlier. Additionally, the similarity is also highlighted by the activists themselves, illustrated by the slogan “Let the mountains live”, mimicking “Let the river live” used by the Alta protestors. Intriguingly, the film and the protests are closely linked together by Ella Maria Hætta Isaksen, who plays the main protagonist, Ester, in the film and is also the front figure of the protests. This strengthens the connection between the Alta controversy and the Fosen controversy, as Isaksen Hætta is being carried away by the police both in the movie theatres and in real life as if nothing has happened since the Alta controversy.

The comparison of the Alta controversy to the current issues challenges the notion of the Alta controversy as a decisive change and the start of improvement of Sami rights that is concluded with the Finnmark Act. Instead, making such a comparison creates a different narrative where Sami rights are not taken into account, as issues today are *identical* to those of the Alta controversy. Interestingly, the majority of the newspaper references do not mention the political effects of the Alta controversy but purely focus on the similarities of both events, which is in line with earlier indications of newspapers' high likelihood to see similarities with the past but limited ability to establish causal relationships. Additionally, portraying the Alta controversy as an origin for Sami rights would seem contradictory to the Fosen controversy, where such rights are deemed absent. This demonstrates both the newspapers' and collective memory's need for a coherent narrative, where the past is being retold to fit the present and inconsistencies that do not fit this narrative meaning are left out.

Thus, the usage of the Alta controversy as an analogy to the present in newspapers effectively removes the political impact of the Alta controversy from the present. Describing the past as *similar* to the present rather than as context to explain the current issues also highlights that while contextualizations tell a story of progression where the past is left behind for something different, analogies, on the other hand, point to the continuity of the past, where the issues remain the same and the repressive history of Norwegianization repeat itself.

However, removing the impacts of the Alta controversy onto later society altogether seems difficult as the event has gained a role as a decisive moment of change in the history of both the Sami minority and Norwegian society in general. While the political impact is to a large extent removed in this alternative narrative, the Alta controversy as a change in the relationship between the minority and majority is continued, and the event continues to be emphasized as a strengthening of Sami identity and status, still pertaining some context to current events. As Edy notes, reform is more likely than revolution when it comes to collective memory.[[80]](#footnote-81) Additionally, evoking the analogy between Fosen and Alta creates some expectations for the outcome of the Fosen controversy, especially if the wind turbines are not removed, based on the experiences of the Alta controversy, where a short-term loss meant a long-term victory, even though paradoxically, one does not acknowledge the political implications of the Alta controversy.

# Conclusion

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1. For an introduction to NLP, see: Jurafsky & Martin 2023 [↑](#footnote-ref-2)
2. Henry Minde, "The Alta case: From the local to the global and back again," in *Discourses and Silences. Indigenous Peoples, Risks and Resistance*, ed. Anaka Goodall and Justine Inns Cant Garth (Christchurch: University of Canterbury, 2005); Minde, "Discourses and Silences." [↑](#footnote-ref-3)
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5. Eigen aritkkel, upublisert [↑](#footnote-ref-6)
6. Norges Høyesterett, "Anke over Frostating lagmannsretts overskjønn 8. juni 2020," (2021). [↑](#footnote-ref-7)
7. Kansteiner [↑](#footnote-ref-8)
8. Lars Martin Hjorthol, *Alta - Kraftkampen som utfortdret statens makt* (Gyldendal Norske Forlag, 2006); Kjell Roger Eikeset, *Den mangfoldige bygdebyen (1964-2002)*, ed. Kjell Roger Eikeset, Stein Adler Bernhoft, and Trine Noodt (no#: Alta kommune, 2003). [↑](#footnote-ref-9)
9. Hjorthol, *Alta - Kraftkampen som utfortdret statens makt*; Evjen, Ryymin, and Andresen, *Samenes historie fra 1751 til 2010*. [↑](#footnote-ref-10)
10. Hjorthol, *Alta - Kraftkampen som utfortdret statens makt*; Eikeset, *Den mangfoldige bygdebyen (1964-2002)*. [↑](#footnote-ref-11)
11. Evjen, Ryymin, and Andresen, *Samenes historie fra 1751 til 2010*. Hjorthol, *Alta - Kraftkampen som utfortdret statens makt*. [↑](#footnote-ref-12)
12. Evjen, Ryymin, and Andresen, *Samenes historie fra 1751 til 2010*. [↑](#footnote-ref-13)
13. Maurice Halbwachs, *The collective memory* (New York: Harper & Row, 1980). [↑](#footnote-ref-14)
14. Ann Rigney, "The Dynamics of Remembrance: Texts Between

    Monumentality and Morphing," in *Cultural Memory Studies : An International and Interdisciplinary Handbook*, ed. Astrid Erll, Ansgar Nünning, and Sara Young (Berlin/Boston, GERMANY: De Gruyter, Inc., 2008). [↑](#footnote-ref-15)
15. Aleida Assmann, "Memory, Individual and Collective," Oxford Handbooks of Political Science (Oxford University Press, 2006); Daniel Bar-Tal, *Intractable conflicts : socio-psychological foundations and dynamics* (Cambridge: Cambridge University Press, 2013). [↑](#footnote-ref-16)
16. Aleida Assmann, "Canon and Archive," Medien und Kulturelle Erinnerung (BERLIN 30: BERLIN 30: Walter De Gruyter, 2008). ALSO: Nietzsche say this!! [↑](#footnote-ref-17)
17. {White, 1974 #113}{Lévi-Strauss, 1966 #244} [↑](#footnote-ref-18)
18. {Edy, 1999 #263} [↑](#footnote-ref-19)
19. Lang & Lang 1989, Zelizer, Edy [↑](#footnote-ref-20)
20. {Zelizer, 2008 #220} [↑](#footnote-ref-21)
21. {Edy, 2006 #221} [↑](#footnote-ref-22)
22. {Edy, 1999 #263} [↑](#footnote-ref-23)
23. {Edy, 2006 #221} [↑](#footnote-ref-24)
24. Wulf Kansteiner, "Finding Meaning in Memory: A Methodological Critique of Collective Memory Studies," *History and Theory* 41, no. 2 (2002). [↑](#footnote-ref-25)
25. Kansteiner, "Finding Meaning in Memory: A Methodological Critique of Collective Memory Studies." [↑](#footnote-ref-26)
26. {Kansteiner, 2002 #10} [↑](#footnote-ref-27)
27. Firth and Harris [↑](#footnote-ref-28)
28. referanse [↑](#footnote-ref-29)
29. Syvertsen et. Al 2014, 25-29 [↑](#footnote-ref-30)
30. Norsk presses historie, [↑](#footnote-ref-31)
31. Skogerbø [↑](#footnote-ref-32)
32. Norsk presses historie, 113-148 [↑](#footnote-ref-33)
33. Norsk pressehistorie, 416-419 [↑](#footnote-ref-34)
34. The search strategy is attached as an Appendix. [↑](#footnote-ref-35)
35. “The protestors in Alta” [↑](#footnote-ref-36)
36. This was also a problem for the researchers creating the first Norwegian transformer model, see: Kummervold 2021 [↑](#footnote-ref-37)
37. See the documentation for the API for more details of its inner workings: NB 2019 [↑](#footnote-ref-38)
38. Referanse + This concordance also show the formentioned OCR issue “PR-trick” is rendered as “PR-trlck”. [↑](#footnote-ref-39)
39. Described in the appendix [↑](#footnote-ref-40)
40. The number is larger than the number of unique strings, mainly due to news agencies circulating the same report across several newspapers. [↑](#footnote-ref-41)
41. Rüsen 2017:134; Tjelmeland 2004: 121-123 [↑](#footnote-ref-42)
42. This is how most studies on newspapers are conducted in a social science context. [↑](#footnote-ref-43)
43. Johnsen 2021; Lie et. al. 2022 [↑](#footnote-ref-44)
44. referanse [↑](#footnote-ref-45)
45. Vaswani et. al. 2017; Devlin et. al. 2018 [↑](#footnote-ref-46)
46. Kummervold 2021 [↑](#footnote-ref-47)
47. Yin 2019 [↑](#footnote-ref-48)
48. Williams et al. 2018 [↑](#footnote-ref-49)
49. In most cases this is due to our concordances being truncated right before a critical part of the sentence. [↑](#footnote-ref-50)
50. This could be caused by overlap between the dataset and our corpus. [↑](#footnote-ref-51)
51. Antropic 2023 [↑](#footnote-ref-52)
52. [↑](#footnote-ref-53)
53. See e.g NTB, "Altautbyggingen et feilgrep?," *Helgeland Arbeiderblad* (Norge;Nordland;;Vefsn;;;;), 1987-04-25 1987, https://urn.nb.no/URN:NBN:no-nb\_digavis\_helgelandarbeiderblad\_null\_null\_19870425\_58\_94\_1. [↑](#footnote-ref-54)
54. See e.g NB [↑](#footnote-ref-55)
55. See e.g NB [↑](#footnote-ref-56)
56. See e.g NB [↑](#footnote-ref-57)
57. {Edy, 2006 #221} [↑](#footnote-ref-58)
58. Simen Granviken, "Adresseavisen 2001.01.13," *Adresseavisen* (Trondheim), 2001-01-13 2001, https://urn.nb.no/URN:NBN:no-nb\_digavis\_adresseavisen\_null\_null\_20010113\_235\_11\_1. [↑](#footnote-ref-59)
59. [↑](#footnote-ref-60)
60. Assmann, "Memory, Individual and Collective." [↑](#footnote-ref-61)
61. {Edy, 2006 #221} [↑](#footnote-ref-62)
62. {White, 1974 #113} [↑](#footnote-ref-63)
63. Den samiske medborgergen, s66-67 [↑](#footnote-ref-64)
64. Den Samiske medborgergen, s 67-69 [↑](#footnote-ref-65)
65. See e.g *Nordlys 1989.10.11*, (Norge;Troms og Finnmark;;Tromsø;;;;, 1989-10-11, 1989). https://urn.nb.no/URN:NBN:no-nb\_digavis\_nordlys\_null\_null\_19891011\_88\_235\_1. [↑](#footnote-ref-66)
66. [↑](#footnote-ref-67)
67. Samenes historie, s390 [↑](#footnote-ref-68)
68. *Nordlys 1989.10.11*. [↑](#footnote-ref-69)
69. Samenes historie s418-420, Minde 2005 s 25-29 [↑](#footnote-ref-70)
70. [↑](#footnote-ref-71)
71. Semb I Samepolitikkens utvikling, s 40-60, Samenes historie s [↑](#footnote-ref-72)
72. Zelizer, "Journalism’s Memory Work." [↑](#footnote-ref-73)
73. NTB, "Stormen i Stilla," *Namdalsavisa* (Namsos), 1999-12-10 1999, https://urn.nb.no/URN:NBN:no-nb\_digavis\_namdalsavisa\_null\_null\_19991210\_82\_286\_1. [↑](#footnote-ref-74)
74. {Edy, 2006 #221} [↑](#footnote-ref-75)
75. Edy, *Troubled pasts: News and the collective memory of social unrest*. [↑](#footnote-ref-76)
76. Eigen artikkel, upublisert [↑](#footnote-ref-77)
77. Burde nok ha ein referanse på relevant teori her ein plass. [↑](#footnote-ref-78)
78. Green colonialism, eigen artikkel? [↑](#footnote-ref-79)
79. Bransjeblad [↑](#footnote-ref-80)
80. [↑](#footnote-ref-81)