Visiting Climate for Change at the Norwegian Petroleum Museum

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"We Must All Be Ready for Major Changes"

Visiting Climate for Change at the Norwegian Petroleum Museum

Lise Camilla Ruud and Erik Thorstensen

Abstract • This article analyzes a current exhibition, *Climate for Change*, which opened at the Norwegian Petroleum Museum in 2019. By engaging with the way in which the exhibition constructs a "we," the article proceeds to examine how agency for mitigation is presented and analyzed. It assesses how futures are created and what types of futures emerge. These themes are addressed with reference to insights from museum research and energy humanities. The choices in the exhibition point toward a traditional understanding of continuities, of agency, and of future visions while tending toward a reduction of Norwegian accountability for climate change.

Keywords • climate change, energy humanities, exhibition analysis, future-making, museum, oil

In 2019, a new permanent exhibition, *Climate for Change*, opened at the Norwegian Petroleum Museum in Stavanger. The title of the exhibition points to both the possibility of and the need for change. The message is made clear on a poster at the entrance, "We must gear up for an energy revolution—and we must all be ready for major changes." This issue of the *Journal of Educational Media, Memory, and Society* sheds light on cultures of remembrance, museum exhibitions, and educational narratives on progress orientated toward the memory of modern technology. As Christian Kehrt and Daniel Brandau argue in the introduction, industry museums increasingly represent traditional and past "places of progress." The Norwegian Petroleum Museum is an industry museum telling the story of progress as it happens. However, the all-

encompassing place of oil in the global economy and in Norwegian socioeconomic reality is unsustainable.² Consequently, central voices in the study of museums and climate change call for creating collective solutions in and through museums.³ A closely related challenge for museums is how to take charge over the way futures are created and how museum practices with respect to climate change should be decolonized.⁴ This article contributes by analyzing how narratives of "T" and "we" are created in *Climate for Change*. Furthermore, we address the nature of the narratives of progress and narratives of the future that emerge from this exhibition. These narratives are central to addressing and discussing the exhibition's educational goals.

Museums are important societal places for public debate and critical reflection and can act as agents of change. Climate change, according to the curators and scholars Jenny Newell, Libby Robin, and Kirsten Wehner, "demands urgent transformations in the way we think about ourselves and our world," and museums are "effective places for supporting conversations about and action on this issue." In their view, climate change exhibitions are "the most distinctive way museums can engage with climate change" because they "bring together people and objects in ways that collapse past and present, near and far, eliding the linear chronologies of modernist progress." According to Robert R. Janes, climate exhibitions are also climate politics. Janes warns museums against perpetuating the myth of green growth, sees panic and resistance from below as central museum responses, and urges museums to acknowledge climate change as a fundamentally destructive and deadly force. Recent scholarship on climate change in museums suggests that science-based, fair, inclusive, and immediate action is the main task of museums, museum professionals, and museum didactics.

In this article, insights from museum research will be combined with concepts from the burgeoning field of energy humanities. Energy humanities addresses the relationship between the

emergence and growth of modern societies, on the one hand, and energy sources and their exploitation and use, on the other. These phenomena are understood to be deeply interrelated. Modernity is based on its material dependency on energy, and most dimensions of life in modern societies are understood as interwoven with and dependent upon an intense use of energy. The idea of free, modern, and responsible individuals with claims to a range of liberties is understood as founded on an increasing use of energy, especially fossil energy. An empowerment of individuals (in the sense that they may come to feel that their contributions matter) and a fostering of a sense of belonging and collectivity among visitors are important matters in the conveyance of climate change.

This analysis will focus on two controversial issues related to climate change. The first concerns climate change collectivity. What kind of a "We" is conveyed in the exhibition, and how is the individual visitor drawn into collectives larger than herself? How are the "We" and the "I" of the exhibition supposed to be ready for, and contribute to, sustainable changes? The inclusion of visitors in a larger collective often occurs via a sense of belonging and remembrance. The second issue to be addressed is thus how different kinds of alternative energy futures are presented in order to create such a sense of belonging. Central to the discussion is how educational tools and hands-on installations are used to promote visitors' reflections on alternative energy futures.

When it comes to the methods adopted for this article, we approached *Climate for Change* and the surrounding exhibitions at the Petroleum Museum with an open mind, two cameras, and two notepads. We began by asking a curator how they had managed to square the circle between being proud of oil and gas while discussing climate change. Our study is related to what Erica L. Tucker calls "exhibit analysis," where the content and the interrelation between

the exhibition design, objects, and texts are the centers of attention.¹¹ As noted by Stephanie Moser, an exhibit analysis should address the overall architecture, the museum spaces, the design and colors, and the interaction between text and objects.¹² This article builds upon a day-long visit by both authors to the Norwegian Petroleum Museum in May 2019.



Figure 1. Entrance to the Norwegian Petroleum Museum. The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Erik Thorstensen)

The Norwegian Petroleum Museum

The first major oil discovery on the Norwegian continental shelf was made in 1969, and since then, government engagement in and regulation of the petroleum industry has been strategic and strong, securing national ownership and societal welfare.¹³ Since the beginnings of the country's

oil age, governments have stressed that the "petroleum resources belong to the Norwegian people and shall benefit the entire society" and shall contribute to "a qualitatively better society." Norway has become one of the wealthiest countries in the world because of offshore petroleum resources and the way in which ownership of and profit from these resources have been managed politically. This wealth allows the government to generously fund cultural institutions such as museums. The government's cultural policy emphasizes the independent, critical role of museums and other cultural institutions, which are encouraged and expected to criticize past and present social and political practices. 15

The Norwegian government has entrusted the Norwegian Petroleum Museum with the responsibility to convey, research, and collect knowledge related to the development of the petroleum industry and its importance to Norwegian society. The museum was established in 1999 in a five thousand square-meter building located in the harbor area of Stavanger. The front façade, which faces the town, is covered in gneiss, while the back façade, which simulates the cylindrical shapes of offshore oil platforms, faces the fjord. The museum features a variety of exhibitions that present Norwegian petroleum history and explain the natural processes through which petroleum emerges. ¹⁶

While the Norwegian state is the main sponsor of the museum, a range of oil companies also contribute to the funding and development of its exhibitions. The museum lists a range of oil-related sponsors on its website. These include Equinor, ConocoPhilips, AkerBP, Total, Eni, Lundin, Neptune Energy, Repsol, Wintershall Dea, Suncor Energy, Spirit Energy, Oceaneering, Subsea 7, and Lotos Norge—all involved in different aspects of oil production.¹⁷

The *Climate for Change* exhibition is located inside one of the "cylinders" facing the fjord at the back of the museum building. The exhibition hall is circular, and the exhibition is

designed in the form of two circular spaces with a model of how the temperature of earth has increased in the center.



Figure 2. Overview of *Climate for Change* with a model of an overheating planet Earth in the middle. The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Erik Thorstensen)

The outer circle runs along the walls of the cylindrical hall and provides a frame for understanding climate change based on energy history, global politics, and natural science. The inner circle is made up of five stations with columns posing questions to the visitor, such as "Are you part of the climate problem?" and "What role does Norway play?" Each station is structured with a heading formulated as a question, clearly inviting visitors to engage with the issue. Below this question is a primary text, which gives an overview of the issue. Each station also features

small additional topics and texts with accompanying illustrations, which sometimes include interactive elements. The other three questions concern economy, technology, and future potential solutions and will be addressed in the second section of this article. While the *Climate for Change* exhibition is the primary focus of our analysis, we will also draw on elements from other exhibitions and from the museum's architecture.

The "We" and the "I" of Climate for Change

The exhibition starts with a projected film of a burning fire on the floor at the entrance. A brief text states that "we have mastered fire for a million years." Before arriving here, we have passed various exhibitions, all with a focus on Norwegian oil history. *Climate for Change* takes a broader perspective as it introduces us to a global setting and a deep human history. The projected fire works as a general and ahistorical illustration of the human need for energy. While various kinds of a Norwegian "we" dominate the rest of the museum, there is another "we" at play here: a global mankind, a million-year-old "we."

The projected fire works as a starting point for the first part of the outer circle of the exhibition. This part presents the development and consumption of energy in the form of a timeline. While the "we" of the projected fire is defined in terms of the human species' need for energy, here the "we" is presented as a collectivity that emerged around the year 1700. A series of technological innovations, which enabled the increased use of energy from the 1700s onward, such as the steam machine, are presented in a sequential line on the wall. Above these, a bar chart covers the entire wall and demonstrates with different colors the increase in the use of nuclear power, oil, gas, coal, bioenergy, hydropower, solar power, and wind power. The bar

chart indicates an enormous rise in energy consumption from 1950 onward and demonstrates how fossil fuels today make up 80 percent of total global energy use.

Timelines are a common mode of display in museums. Museum researcher and historian Steven Lubar has argued that timelines appear as "a natural, intuitive way to present and understand the past." They recreate the past and imply "assumptions about the narrative structure of history, about the primacy of chronological understanding, and about progress."

The million-year-old "we" that introduces the exhibition is followed by another collective that emerged around 1700. Since it is hard to imagine that any meaningful idea of a "we" can remain stable for a million years, it is unclear how visitors are supposed to work out the very long period of time between the two collectives. The notion of fire as a starting point works in an ahistorical and universal way ("we humans always have and always will need energy and the present situation seems to be the logical and natural continuation of this need"). The bar chart does not help the visitor identify the role of Western technological developments, as it is difficult to work out the huge temporal gap in any direction other than from the universal past and toward the present situation. Timelines are powerful frameworks for understanding the passing of time, and what they present seems natural, according to Lubar. Chronologically ordered pasts convincingly show things "as they really were," and timeline designs make us see how one thing follows the other naturally and with apparent necessity.²¹

Technological and scientific developments from the 1700s onward went hand in hand with the increased consumption of energy. George H. Handley has argued that "Enlightenment allowed us to conceive of ourselves as autonomous individuals who could trace our own accountability, but climate change has introduced the problem of a human agency that is so profoundly collective that accountability for the changes wrought on the climate is no easy

matter to trace."²² The increased consumption of fossil fuel energy has enabled the coming into being of the free and accountable individual but has also enabled the emergence of a global "we", a "we" on an enormous scale.

Following the curved space of the exhibition hall, the visitor proceeds from the energy timeline to another wall dedicated to the United Nations' (UN's) Sustainable Development Goals (SDGs). This architectural association enables the tale of progress presented in the timeline to become connected to the SDGs. It is as if the sequential and logical next step in the narrative of progress would be the realization of the SDGs. According to curator Henry McGhie, the SDGs might provide a common purpose for all museums.²³ However, other voices warn against an unreflective or strategic misuse of the SDGs.²⁴ In the move from energy history to SDGs, a different notion of progress emerges; namely, a view of progress as change. The SDGs are portrayed as a stable future in which all citizens of the earth live sustainable lives.

The use of the SDGs in the context of the exhibition can be problematized via historian Dipesh Chakrabarty's argument that this kind of a new global "we" is a collectivity that lacks any ontological dimension that could promote a joint agency. In Chakrabarty's words, "there is no corresponding 'humanity' that in its oneness can act as a political agent." The relation between the global and the individual is detached. Within environmental humanities, one sees the human species as a geophysical force contributing to climate change. Climate change results from human agency as a global, collective entity. However, as Chakrabarty has argued, it is difficult for us humans to experience ourselves as such a geophysical, collective force. If the global collectivity lacks the capacity to act, is it then up to accountable individuals to act in more sustainable ways?



Figure 3. The station "Are you a part of the climate problem?" with fragmented mirrors. The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Erik Thorstensen)

The inner circle of the exhibition consists of five stations, each of which poses a question and offers explanatory texts. One of these stations focuses on the role of the individual ("Are you part of the climate problem?"). The question is illustrated by rectangular mirror tiles assembled on a pillar (Figure 3). The mirrors show a fragmented reflection of the visitor, and the installation works as a visual parallel, suggesting that it is difficult to grasp one's own significance for the climate problem, just as it is difficult to see oneself clearly in the fragmented mirrors. The design and the question align with and complement each other.

A participatory approach to knowledge formation has become central to museums over the past three decades, and visitors are often encouraged to take part via different educational means designed to make them reflect critically upon the issue at hand.²⁷ The station that addresses the individual's role features two different hands-on educational installations. One of these is a touchscreen where the visitor can answer questions in order to calculate her own carbon footprint. The authors of this article tried it out, and at first, we achieved footprints of five and ten tons of CO₂, respectively. After trying several more times, where we pretended never to eat meat, not to have cars, and to abstain from airplane travel, we found that our footprints remained more or less the same. The decisive factors proved to be the size of one's house, income, and the number of persons living in one's household. Adopting a high standard of living is in itself problematic, and the installation made us reflect upon the need for systemic changes in order for individual change to take place.



Figure 4. The metal figures with weights underneath. "Rich countries have the biggest emissions." The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Lise Camilla Ruud)

A poster nearby explains that the average Norwegian citizen has a climate footprint of 8.4 tons of CO₂ and that this footprint must be reduced to 1.5 to 2 tons if the goals in the Paris Agreement are to be met.

The second hands-on activity is an interactive installation consisting of a table featuring a world map with small human figures made of steel (Figure 4). The figures are attached to weights of different sizes, and the visitor can lift the figures and note the difference in weight between them. The weight differences illustrate how carbon footprints vary between countries around the world. Both installations are well-suited for reflection. While the first one holds the visitor to account by calculating one's individual footprint, the second makes one literally feel the weight of the enormous global inequality In energy consumption.

These installations make the visitor aware of the global effects of her own way of living, and these insights are followed up with the question, "How do you want to contribute?" The accompanying text suggests that each of us might lead a more sustainable life if we were to use less energy, vote strategically in elections, eat local food, choose an education that enables us to develop climate solutions, and use bicycles rather than cars. The text concludes with the words, "You are actually a part of the climate problem. And you are fortunately part of the solution—if you want to be!"

Climate change challenges the conventional view of the connection between action and knowledge according to which whoever knows what is right or good will also do the right or the good. The changing climate and its consequences are very well known, but emissions continue regardless. It is beyond doubt that changes toward a sustainable future will include measures that we do not particularly want to implement. Chakrabarty has observed that "the mansion of

modern freedoms stands on an ever-expanding base of fossil-fuel use. Most of our freedoms so far have been energy-intensive."²⁸ The freedom of the modern individual is founded on the intense consumption of energy, and changes toward a more sustainable future will imply that we, as individuals, give up on many of our freedoms.

This may represent a tricky dilemma for museums. In *Climate for Change*, this dilemma comes to the fore in the enthusiastic appeal, "You are fortunately part of the solution—if you want to be!" Participatory approaches in museums are fundamentally democratic, and knowledge-making is understood as a shared project that takes place between free and responsible individual citizens.²⁹ In order to make sustainable changes, however, the idea that individuals only need to be encouraged to partake (and that this partaking is voluntary) is insufficient. As Handley observes, "the collective nature of our agency has made it far too easy for individuals and nations to deny or hide their own accountability."³⁰ Perhaps a more radical approach to energy history than the one employed in the timeline could have aided visitors to reflect more critically on the connections between the increase in energy use and their own position as free, modern, and self-sufficient individuals (the same kind of individual that is the ideal museum visitor).

While it is difficult to envision one's belonging within the global energy-consuming collective, one's identity as part of a national collective is more comprehensible for the visitor. Norway has become extremely rich due to the petroleum industry, and among the five stations in the inner circle, one concerns the role and responsibility of Norway as a nation. "What role does Norway play?" is the main heading at this station. The visitor can search for explanations in the accompanying texts, such as "Norway meets two percent of world demand for oil and three percent of global gas consumption." Two percent or 3 percent, the visitor may think, is actually

not very much at all. The explanatory text continues to state that this 2 percent or 3 percent "makes us a wealthy country," that Norway has only 0.07 percent of the world's population, that it is a country rich in natural resources, is self-supplied with energy, and is "the world's best country to live in." The explanations could be described as alarmingly soothing, and Norway's role appears to be almost insignificant.

The Norwegian way of life is very privileged, and it is a comfortable "We" to be drawn into. However, numbers and percentages might diminish or weaken one's feeling of responsibility for action. In another exhibition at the museum about the Norwegian petroleum economy, the same point is given a wholly different framing ("Little Norway is a great power as the world's third largest gas exporter and the twelfth biggest oil exporter" and "The country's prosperity allows it to play a bigger international role than its size would suggest"). In comparison with this exhibition, Norway disappears as a petroleum superpower in the climate change exhibition. A plausible reading among visitors would then be that since the country is rendered very small, the ensuing responsibility of the Norwegian "We" cannot be that large either.

The opposite point of view is also present in the texts on Norway's role. One photograph shows ten smiling activists from Nature and Youth, a Norwegian environmental nongovernmental organization, gathered on a deserted parking lot and holding a banner with the text, "Norwegian oil makes the earth boil." This poster presents the dilemma between economy and sustainability ("How can the country continue to produce petroleum—and keep exploring for more—while being credible in its desire to help save the world from the climate crisis caused by CO₂ emissions?").

This dilemma is presented as a discussion between opposite views, and there is no longer a collective Norwegian "we" present. Rather, the population is divided by their different points of view. Among those who oppose petroleum extraction, the "young people" are presented as the primary actors. Young people are "protesting against politicians they accuse of failing to take enough responsibility" and against "an industry which contributes to big greenhouse gas emissions." This presentation of a divided Norwegian "we" enables visitors to choose a point of view on the dilemma. The choice is placed in the hands of the free, responsible, and accountable individual, and both points of view appear legitimate. The resulting "we" is thus one characterized by disagreement, a collectivity also resulting from the little attention given to environmental organizations and engagement in the exhibition.

Making the Future

While the façade facing the fjord is constructed with elements similar to the ones used in the petroleum industry, the opposite façade, which faces the town, is covered with gneiss, the most common bedrock in Norway. Arriving at the museum, we paused to watch this gneiss-covered façade. On the architect's website, we had read that this part of the building was like "a paraphrase of the Norwegian base mountain, where the natural forces have created sediments and deposits to the North Sea over millions of years." The bedrock constitutes the oldest geological formations on earth and, to a large extent, is made up of gneiss and granite. On the continental shelf, the bedrock is covered by newer sedimentary strata, and petroleum is located in these upper strata. Bedrock is a geological concept, but in Norwegian, the concept also connotes national qualities. The expression "the Norwegian bedrock" (det norske grunnfjellet) suggests

solid and eternal national qualities; the bedrock represents an unchangeable foundation defining both who we Norwegians are and the solid ground from which we stem.

Earlier, we addressed the global "we" of the timeline of energy consumption and noted how the timeline continues into the future with the global agreement to create a sustainable future, stretching toward 2030 as the year for the realization of the UN's SDGs. These global goals are exhibited under the heading "Course set towards 2030," and the circular exhibition design presents a structured narrative around climate change and climate change mitigation where past, present, and future are connected in terms of progress and change. In the following section, we will discuss the stations with the headings: "Can Growth and Prosperity Save the Climate?"; "Who Should Solve the Problems?"; and "Is New Technology the Solution?" These questions will be discussed with reference to the narratives of the future evoked by *Climate for Change*; the elements of the future that seem to be lacking from discussions within the field of energy humanities and the way in which one interactive installation creates a specific conceptualization of the future.

The station with the heading "Who Should Solve the Problems?" explains that solutions to climate change demand "binding collaboration" between states, sectors, and individuals. The adjoining horizontal text reads, "World leaders have a responsibility to take care of the planet. They have committed themselves to specific goals for reducing emissions." The text notes that climate change is global and that the responsibility is conferred upon "world leaders," and explains how rich countries have committed themselves to the Paris Agreement and thereby agreed to pay more and to help poorer countries with measures and transitions. This station tells a consistent story of how "world leaders" are the central figures in stopping climate change.

They figure as responsible when it comes to treaties, national measures, or setting up a functioning CO₂ quota system.

A nearby poster explains the importance of new technologies while suggesting doubt on the part of the author. The text reads, "New cars in Norway must be emission-free by 2025. And domestic air travel must be electrically powered by 2040. That may sound like a fanciful ambition, but the target has been set by the government." In an accompanying text (under the header "Can Growth and Prosperity Save the Climate?"), we read that there are three types of risks threatening national welfare: first, the risk of selling something that fewer people want; second, the risk of destruction and damage and third, the risk of legal action. Here, the destruction of nature is presented as a risk on the same level as less demand for oil and gas and the possibility that states might be prosecuted for their involvement in climate destruction. This narrative strategy amounts to an economistic understanding of climate change and nature with no other alternatives presented to the visitor.

In his analysis of different popular as well as scientific accounts of energy futures, a central contributor to energy humanities, cultural theorist Imre Szeman, differentiates between accounts of Strategic Realism, Techno-utopianism, and Apocalyptic Environmentalism.³³

Strategic Realism provides an account of a future where states will pursue geopolitical priorities based on access to energy in a period of energy scarcity. Here, the main actor is the individual state. Strategic Realism is based on the notion of continuity from the past and present institutional structure into the future. In *Climate for Change*, both the economistic understanding based on current valuation regimes and the reliance on the current geopolitical structures point in the direction of a Strategic Realist future.



Figure 5. The Paris Agreement and consequences of climate change. The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Erik Thorstensen)

The second part of the outer circle depicts the universe with planets and galaxies and provides facts on global climate change, an introduction to the Intergovernmental Panel on Climate Change, and explanations of the notion of a CO₂ budget and other global issues (Figure 6). Here, under the heading "This is What We Have Left," we read that "scientists have worked out how much the earth can take of CO₂ and how much other greenhouse gases the atmosphere can absorb before the global temperature rises by more than two degrees Celsius, with unmanageable consequences for all life. We can call this total our CO₂ budget." A station a few

meters away tells that the target of the Paris Agreement is to limit global warming to 1.5 degrees Celsius.

A central message of *Climate for Change* formulates that "Tomorrow's growth and affluence must be achieved without greenhouse gas emissions." However, according to Imre Szeman, one could understand the current institutional setup and global division of power as based on energy consumption from fossil fuels. ³⁴ Consequently, a transition from fossil fuels to other energy sources might redraw the map of power relations and thereby also reconfigure strategic alliances between countries and between companies. ³⁵ Such energy transitions and ensuing institutional changes may have fundamental effects on the way we relate to others, to ecosystems, and to what counts as knowledge, innovation, and values. ³⁶

Making an exhibition about the future consequently becomes very challenging. Not only do we not know what this future will be like in factual or biophysical terms but we also lack knowledge of the political entities and conceptualizations of value that might exist. Furthermore, there is a vocal debate on the target of CO₂ reductions.³⁷ As the exhibition presents reductions of 1.5 degrees and 2 degrees as goals, these are given political and moral priority over more restrictive (or permissive) views. With the heading "This is What We Have Left," the exhibition runs the danger of indicating that the critical limit is somewhere in the future. This tendency of moving climate change into the future is seen by environmental philosopher John Foster as an element of the failed politics of the fight against climate change.³⁸



Figure 6. Overview of *Climate for Change* from the station "Is New Technology the Answer?" The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Lise Camilla Ruud)

As previously outlined with reference to the installation consisting of a table with a world map and human figures in steel of different resistance or weight to illustrate carbon footprint, the exhibition *Climate for Change* invites visitors to engage directly. This engagement is also sought for the future. At the station "Is New Technology the Answer?" (Figure 6), we read that "future growth and prosperity cannot be based on fossil energy sources." Associated with the question regarding new technologies, in the inner circle there is an installation consisting of a table with what looks like toy bricks connected to metal rods (Figure 7). The installation works as follows. The visitor turns the bricks, and when all the bricks on one rod show the same color, they indicate a future energy mix that makes it feasible to reach the target of 2 degrees Celsius. There

are three different scenarios. Two are from Equinor and Shell and a third from DNV GL, a risk and classification specialist. Unsurprisingly, Equinor sketches a future with a large cut in coal while the extraction of oil and gas remain at the present level. The two other scenarios closely resemble Equinor's analysis.



Figure 7. The energy mix of the future. The Petroleum Museum, Stavanger, Norway, 19 May 2019. (© Erik Thorstensen)

Here, visitors play in order to tell a story about the future of energy. In order to analyze the relationship between the future and the story about the future, we will use insights from the didactics of historical consciousness. This approach has been used to analyze the way in which stories about the past are presented in museums.³⁹ Therefore, it might just as well be applied to

the construction of futures. The critical element in this line of history didactics consists of an approach toward the past and history as fields for individual and collective exploration and questioning. For museums, this has the implication that visitors should analyze and discuss parts and the whole both as past and as history in order to discover narrative patterns and critically assess them.⁴⁰

The remodeling of potential energy futures mixes with the possibilities of achieving a "correct answer" via the color codes and allows visitors to recreate visions of the future where oil and gas are still produced at massive scale. As the correct answer is given in advance, reproducing it is questionable whether the game stimulates reflection upon alternatives. The important point here, seen from a didactics of history viewpoint, is that the visitor has little opportunity to discuss critically the narration of the future, ⁴¹ which seems to contrast with the museum's pedagogical ideal. When museums encourage reflection and action, then the ideal is that such reflection (and the potentially ensuing action) should happen voluntarily and based on an individual's own reasoning.

The strategic realist future suggested by *Climate for Change* echoes the view of a Norwegian oil past that also appears elsewhere in Norwegian memory culture (and in the Petroleum Museum). Ideas of collective ownership and welfare inform government policies and may also explain why there has been so little controversy over a climate exhibition inside a petroleum museum in Norway.⁴²

Moreover, this orientation toward the future in *Climate for Change* resonates with the Petroleum Museum's narrative that points to an oil future, as illustrated by the timeline *Petrorama* from 1999.⁴³ The timeline starts in 1959 and has since been continuously updated with new events but without any expressed endpoint. In her analysis of the narration of

Petrorama, Camilla Ruud concludes that "progress is anchored in a culturally specific narrative on progress; chance and luck, magic and reality" and that "success and destruction run in parallel, structured as a familiar and pleasant rhythm." This form of storytelling about a future without an ending is seen by Barbara Adam and Chris Groves as a narrative where the harmful consequences of current actions remain out of control of the storyteller. All three stories (the Norwegian oil past, the climate future, and the oil future) share a vision of progress.

Conclusions

The call of Newell, Robin, and Wehner for exhibitions on climate change to investigate transformations seems not to have been heeded by the curators of *Climate for Change*.⁴⁷ The exhibition limits itself to discussing changes rather than transformations. However, it does present some of the background for discussing transformations with elements that investigate and explain the connection between lifestyles and climate change.

The introductory timeline to *Climate for Change* functions as an ordering of disparate elements into a complete story and thereby provides a sense of coherence. Narratively, this coherence seems to indicate that there is a point of view and consequently an agent that might be able to solve the climate crisis, namely the UN's SDGs. However, it is precisely the absence of such a collective agent that Chakrabarty has pointed to as one of the underlying aporias in successfully addressing climate change. As Norway is the one clear collective that stands out in *Climate for Change*. As we have shown, the exhibition reduces the country's responsibility to mitigate by making it small with regard to emissions while presenting it as important elsewhere in the museum.

In this article, we have related the exhibition of climate change to agency and time. We find that *Climate for Change* attempts to stabilize and create a continuity via the introduction of a "we." Stabilization and coherency are further sought using a timeline design that provides an image of a natural sequence of events. The narrative of a logical and necessary connection between the natural and the cultural is further consolidated by the gneiss-covered façade. The future presented in *Climate for Change* lacks discussions over possible transformations and remains committed to a prolongation of the institutional and geopolitical status quo. *Climate for Change* rests upon and amplifies traditional historiographies of progress and change. This continuation is created via repetitions of predetermined futures, a lack of engagement with targets other than those specified in the Paris Agreement and an absence of discussion over how to understand the future.

Furthermore, the exhibition perpetuates an understanding of the free individual that is taken for granted as a premise in modern, democratic museum didactics. However, this freedom seems to lack further philosophical and sociocultural reflection. One could say that the exhibition sends a paradoxical message. On the one hand, there is a voluntarist message (that problems can be solved by free will alone), while on the other hand, there is a message of trusting the authorities. The voluntarist message is found in statements such as "you're fortunately part of the solution—if you want to be." The trust messages are found in expressions such as "the target has been set by the government."

This paradox has several dimensions. The first dimension is that *Climate for Change* does not encourage a voluntarist approach to trusting politicians. The second dimension is the lack of a connection between politicians and the people (as in democracy theory, where the local, regional, and national parliaments are "the people," as democracy literally means "people's

rule"). A third dimension of the paradox resides in the question whether we can really solve the climate problem by appealing to each individual's free will. The antiauthoritarian knowledge regime of the museum does not necessarily call for action. In this instance, we find it to be on a collision course with the need for all-encompassing and deep measures regarding the problem of climate change. Furthermore, equating political choice with free will runs the risk of creating a story where combating climate change is somewhat at odds with a democratic society and is best left to authoritarian regimes.⁴⁹

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Notes

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- 3. Robert R. Janes, "Museums in Perilous Times," *Museum Management and Curatorship* 35, no. 6 (2020): 587–598, here 595, https://doi.org/10.1080/09647775.2020.1836998; Bridget McKenzie, "Climate Museums UK: A Contemporary Response to the Earth Crisis," *Museum Management and Curatorship* 35, no. 6 (2020): 671–83,

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- 4. Julie Decker, "Climate of Change," *Museum Management and Curatorship* 35, no. 6 (2020): 636–652, here 639–641, https://doi.org/10.1080/09647775.2020.1836999.
- 5. Jenny Newell, Libby Robin, and Kirsten Wehner, "Introduction: Curating Connections in a Climate-Changed World," in *Curating the Future: Museums, Communities and Climate Change*, ed. Jenny Newell, Libby Robin, and Kirsten Wehner (New York: Routledge, 2017), 1–16.
 6. Ibid., 5.
- 7. Janes, "Museums in Perilous Times," 588
- 8. Sarah Sutton, "The Evolving Responsibility of Museum Work in the Time of Climate Change," *Museum Management and Curatorship* 35, no. 6 (2020): 618–635, here 622–623, https://doi.org/10.1080/09647775.2020.1837000; Decker, "Climate of Change"; Sarah Sutton, "Museums as Agents and Settings for Climate Hope," *Nordisk Museologi* 30, no. 3 (2021): 14–28, here 18–19, https://doi.org/10.5617/nm.8627.
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- 10. Imre Szeman, "Conjectures on World Energy Literature: Or, What Is Petroculture?," *Journal of Postcolonial Writing* 53, no. 3 (2017): 277–288, here 286, https://doi.org/10.1080/17449855.2017.1337672; Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35, no. 2 (2009): 197–222, here 207–212, https://doi.org/10.1086/596640.
- 11. Erica L. Tucker, "Museum Studies," in *The Oxford Handbook of Qualitative Research*, ed. Patricia Leavy (Oxford: Oxford University Press, 2014), 341-356.
- 12. Stephanie Moser, "The Devil Is in the Detail: Museum Displays and the Creation of Knowledge," *Museum Anthropology* 33, no. 1 (2010): 22–32, here 24–29, https://doi.org/https://doi.org/10.1111/j.1548-1379.2010.01072.x.

- 13. Helge Ryggvik, "A Short History of the Norwegian Oil Industry: From Protected National Champions to Internationally Competitive Multinationals," *Business History Review* 89, no. 1 (2015): 3–41, here 6–7, https://doi.org/10.1017/S0007680515000045; Einar Lie, "Learning by Failing," *Scandinavian Journal of History* 43, no. 2 (2018): 284–299, here 290–294, https://doi.org/10.1080/03468755.2018.1430657; Paul Cleary, *Trillion Dollar Baby: How Norway Beat the Oil Giants and Won a Lasting Fortune* (London: Biteback Publishing, 2017). 14. The quotes are from the latest white paper on petroleum policy and industry: Ministry of Petroleum and Energy, "An industry for the future—Norway's petroleum activities", (White paper, Norwegian Ministry of Petroleum and Energy, 24 June 2011), accessed 7 February 2021, https://www.regjeringen.no/contentassets/19da7cee551741b28edae71cc9aae287/engb/pdfs/stm201020110028000en_pdfs.pdf; https://www.regjeringen.no/en/dokumenter/meld.-st.-28-20102011/id649699/.
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- 26. Chakrabarty, "Postcolonial Studies," 14-15.
- 27. See Sharon Macdonald, "Interconnecting: Museum Visiting and Exhibition Design," *CoDesign* 3 (2007): 149–162; Nina Simon, *The Participatory Museum* (Santa Cruz: Museum 2.0, 2010), and Rachel C. Smith and Ole S. Iversen, "Participatory Heritage Innovation: Designing Dialogic Sites of Engagement," *Digital Creativity* 25, no. 3 (2014): 255–268.
- 28. Chakrabarty, "The Climate of History," 208.
- 29. See Richard Sandell, "Museums as Agents of Social Inclusion," *Museum Management and Curatorship* 17, no. 4 (1998): 401–418, and Simon, *Participatory Museum*.
- 30. Handley, "Climate Change," 333.
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