This chapter considers cultural variation in the oil-tourism interface. Cultural visibility is an important aspect of social power, which can be leveraged by oil sector, tourism sector, or social movement players to gain political efficacy. Cultural visibility can also help reinforce or potentially challenge the economic power of oil sector or tourism sector interests. Here, we focus on how culture is used to evaluate extractive and attractive development models, and how those evaluations give rise to specific configurations of social and symbolic boundaries—the oil-tourism interface—that vary across each of our five cases.

The oil-tourism interface is grounded in a relational approach to comparative cultural analysis (Emirbayer 1997; Lamont and Thévenot 2000; Lamont et al. 2016) that emphasizes how players use and deploy culture in institutionally constrained arenas to solve problems (Burkhus and Ignatow 2019; Leschziner 2019; Swidler 1986, 2013; Vaisey 2009), draw consequential distinctions between what is “good” or “bad” (Lamont 1992, 2012), and provide socially acceptable justifications and explanations (Boltanski and Thévenot 1999; Tilly 2006; Vaisey 2009). In “using” cultural tools—concepts, narratives, stories, rituals, ideologies, etc.—to these ends, people construct social and symbolic boundaries that
shape a wide variety of important outcomes (Lamont and Molnár 2002; Lamont and Thévenot 2000). These cultural dynamics shape approaches to environmental policy and governance, as well as the construction of cultural blind spots or other forms of collective unawareness and socially organized denial (Friedman 2019; Norgaard 2011).

From this broader literature on repertoires of evaluation and boundary processes, we place a particular emphasis on how evaluations of tourism and oil development are differentially embedded within institutionalized “orders of worth” that appeal to broadly shared conceptions of the common good, and which mark certain types of things and actions (e.g. nature, environmental conservation; economy, increasing profits) as more or less valuable (Boltanski and Thévenot 2006; Thévenot et al. 2000; Thornton and Ocasio 2008). Boltanski and Thévenot (2006) identify 6 orders of worth, including inspired worth, which ascribes value to spiritual commitment, natural beauty, and indifference to material goods and money; domestic worth, which ascribes value to tradition, intimate relationships, and social hierarchies; opinion worth, which ascribes value to fame and popularity; civic worth, which ascribes value to collectives and shared conventions and culture; market worth, which ascribes value to wealth and profit; and industrial worth, which ascribes value to technical skill and efficiency, professionalism. To this initial list of 6, others have added an ecological/green order of worth that ascribes value to nature and promotes environmental protection and conservation and responses to climate change (e.g. Kukkonen et al. 2020; Lafaye and Thévenot 1993; Scott 2020; Ylä-Anttila and Kukkonen 2014; Ylä-Anttila and Luhtakallio 2016).

As might be expected, our cross-case comparisons reveal that general discussions of the environment tend to be characterized by inspirational worth (focused on the beauty of nature), but ecological and industrial orders of worth play an unambiguous role in shaping how tourism and oil development models are evaluated. Across cases, we see that oil development is primarily evaluated in terms of an industrial order of worth which emphasizes the role of technical innovations and the competence of sophisticated risk management. When it comes to evaluations of tourism development, we more often see invocations of an ecological order of worth that strongly emphasizes the importance of nature,
understanding and protecting local ecologies, and responding to global climate change. In Chapter 1, we noted three facets of social-ecological relationships with oceans as travel pathways, natural resource pools, and objects of political contestation and scientific concern over ecological problems. The comparative cultural analysis in this chapter demonstrates how oceans are differently valued across our case study regions.

The \textit{tourism + ecological worth} and \textit{oil + industrial worth} pairings are broadly consistent across our cases, but as shown in Table 3.1, the relative importance of each varies.

The core findings reported in this chapter stem from qualitative and comparative analysis, triangulated with computational text analysis. We draw on the full range of data informing this book—interviews, ethnographic field notes, documents, websites, and news stories—to deepen our understanding of the cultural dimensions of the oil-tourism interface. Our multi-method approach is detailed in the Epilogue on Methodology, but we briefly introduce the basics of our computational text analysis to provide context for the results presented below.

Our computational text analysis uses a special class of topic models to analyse news stories on oil and/or tourism from each of the five cases. Topic models are widely used in cultural sociology, in part because of their affinities with relational theories of meaning and language (Blei 2012; DiMaggio et al. 2013; Light and Cunningham 2016; McLevey 2021; Mohr et al. 2013; Nelson 2020; Roose et al. 2018). Topic models are a class of machine learning models that enable us to identify and explore latent “topics” in unstructured text data. They assume that texts—in our case, news stories—are composed of multiple “topics” in different proportions. For example, a news story about the impacts of tourism development in rural settings might include “topics” for environment, wildlife, camping, employment, and economic benefits. Each of these topics consists of words that have different probabilities of occurring. The word “puffin,” for example, might have a high probability of appearing in topics such as wildlife, nature, and the environment, but a low probability of appearing in a topic concerning employment.

In most cases, topic models are fully unsupervised, meaning that researchers inductively identify topics in a collection of texts to better understand their relationships to one another without specifying in
| Country                  | Oil development | Tourism development | Industrial worth | Ecological worth | Market worth | Inspirational worth | Key Blended Orders       |
|-------------------------|-----------------|---------------------|------------------|------------------|--------------|---------------------|--------------------------|
| Scotland                | High            | High                | High             | High             | High         | High                | Industrial + Ecological   |
| Norway                  | High            | Low                 | High             | Low              | High         | High                | Industrial + Ecological + Market |
| Newfoundland and Labrador | High          | Low                 | High             | Low              | High         | High                | Industrial + Market      |
| Denmark                 | Low             | High                | Low              | High             | High         | High                | Ecological + Market      |
| Iceland                 | Low             | High                | Low              | High             | High         | High                | Ecological + Market      |
advance what one expects to find. Given that we seek to understand and compare specific discourses across cases in a way that blends inductive and deductive inquiry, we employed semi-supervised hierarchical models (Gallagher et al. 2017) that look for coherent topics around sets of focal concepts derived from our qualitative analysis. It accomplishes this by tracing cultural variation on both the meso-level—in the form of topics, comprised of clusters of cultural units (such as specific concepts)—and on the macro level, in the form of more general “discourses” that, when combined with our qualitative and comparative analysis, can help shed light on the broader orders of worth at play in each of our cases.

Below, we provide a more detailed discussion of the specifics of each case. Each begins with an overview of the key findings from our qualitative and comparative analyses and is then triangulated with results of a computational text analysis. The chapter concludes with a high-level comparison of cultural similarities and differences in the oil-tourism interface, and the relative importance of ecological and industrial orders of worth in each.

Complementary Orders of Worth in Scotland

When discussing the environment, our Scottish participants most frequently invoked the beauty of coastal landscapes; the iconic inland Highlands; wildlife such as seabirds, seals, whales, and dolphins; hiking; and beach walking. All of these illustrate an inspirational order of worth when discussing the environment in general. A participant from the tourism sector described the Scottish tourism image as follows: “If I had to generalize, it would be the perception of the Highlands, its mountains, its open moorlands. It’s… you know, almost a medieval vision of, you know, like endless tracts of forests and stags” (SCO_TOU_01). A government participant similarly notes that “Wildlife tourism [seabirds, seals] is recognized as being really important for Scotland” (SCO_GOV_07). This way of conceptualizing the environment is more clearly aligned with nature-oriented tourism than with oil and other extractive industry and tends towards an inspirational order of worth that stresses iconic nature and wildlife.
For many of our interview participants, the positive impacts of tourism were primarily framed in terms of economic benefits, including as providing ways to make a living in rural communities, and by extension emphasize market worth. As a tourism sector participant puts it: “So, tourism can be a catalyst for social sustainability in terms of creation of jobs, creation of enterprise growth, which allows communities to exist in areas where, maybe inward investment is more difficult for other areas” (SCO_TOU_01). However, we also see a strong emphasis on ecological worth in the emphasis on environmental sustainability, especially when tourism development is compared to oil and other extractive industries. As the same participant puts it, “There is much more cognizance today … that there needs to be this balance between maintaining economic growth but to ensure that economic growth through tourism, you have to protect the environment” (SCO_TOU_01). We see a further indication of the role of ecological worth from participants who promote tourism as a tool for legitimating nature preservation initiatives and as opening opportunities for environmental education.

Our participants were also reflexive about the negative environmental impacts of tourism. They highlighted overcrowding of camping grounds, trail degradation, garbage and waste, the challenges of accommodating RVs, potential challenges to wilderness values, and the development of otherwise undesirable infrastructure. A government participant describes local environmental impacts as follows:

I think perhaps the road infrastructure in a lot of places is not quite able to cope with the number of people. Obviously, if you keep building more roads that increases the impact on that area, so it’s a bit of a difficult one to solve. Perhaps it can be solved by better public transport. … The National Nature Reserves, they have to manage visitors quite heavily or quite carefully because they get lots of soil erosion in certain areas and litter is an issue as well. (SCO_GOV_14)

The need to properly manage AirBnB and similar short-term rentals also came up as a potentially negative social impact. To a lesser extent, there are concerns about the impacts of tourism development on employment and labour in the context of Brexit, as well as the need to adapt to
generational shifts as baby boomers age out of the tourism market and millennials become increasingly central (fieldnotes, March 17, 2017).

In general, we see a shared understanding that the localized environmental and social impacts can be managed with more effective tourism governance and codes of conduct. These understandings reflect a blend of ecological, market, and civic orders of worth in evaluating tourism development.

Participants also emphasized more global impacts, the most salient of which is the contribution of tourism to climate change due to the carbon intensity of travel by cars, buses, planes, and cruise ships. For example, a government participant notes:

I suppose more and more people are coming in by plane, which environmentally—there’s issues there around emissions. I suppose that’s true of every [place] which has a tourism sector. Beyond that, it’s difficult to see, I think. Environmental regulations are being tightened all the time, I think more and more people are conscious about these things. (SCO_GOV_05)

This quote captures the tensions inherent to tourism between locally sustainable development and the broader issues of carbon-intensive transportation.

Despite the strong emphasis on tourism in talk about the environment, the Scottish case is characterized by an emphasis on economics and market worth, including the place of oil development in the potential economic situation of an independent Scotland. When it comes to oil and climate change, the main themes centre on government policy responses, risks and impacts, and the notion of the “energy trilemma,” which we discuss below. This shifts the focus from a discussion of ecological worth to industrial worth by emphasizing the importance of technologically innovative responses to climate change.

Much of the discourse around the Scotland’s oil sector is very positive, explicitly linked with economic development, positioned as an important part of regional history and culture, viewed as a cause of migration to Scotland, and connected to the potential for Scottish independence. For example, there is an emphasis on how the oil sector transformed
Aberdeen from a fishing centre to a more prosperous oil city following the decline of the fishery. An oil sector participant sums up the positive impacts as follows:

Before oil Aberdeen was quite a rural, probably quite homogenous, probably quite—you know, parochial, maybe? As I say, I'm not a sociologist. But now it's a much more diverse city and region. Lots of different cultures, lots of different experiences. (SCO_OIL_19)

One particularly visible example of the centrality of oil in talk about the environment is at the Aberdeen Maritime Museum, which features exhibits that portray coastal environments as historically and culturally important sites of oil extraction, and as a focus of corporate environmental responsibility. Indeed, part of the narrative is that the Scottish North Sea is largely a post-peak seascape, so issues of decommissioning, environmental sustainability, and renewable energy transitions are increasingly salient (fieldnotes, March 6, 2017).

Our participants also describe the drawbacks of oil development, including negative economic impacts associated with the volatile nature of oil prices, and the oil price declines of recent years. As a government participant puts it, “It’s brought a lot of wealth and prosperity. When […] the price falls, it brings a lot of hardship and heartache. … In the last couple of years, people who have found it very difficult to live with redundancy. People who have held very highly paid jobs. And suddenly got nothing to do” (SCO_GOV_06). Another government participant makes similar observations about Aberdeen as a host community:

But certainly, Aberdeen when the oil price is higher—Aberdeen is prosperous. House prices are high, lots of new shops open, all those sorts of luxury businesses that people can afford when things are going well. They all do very well, restaurants do very well. As soon as it drops everything starts to close, that’s what’s happening in the last few years, and you can see that it’s very closely — the value, the welfare — is very closely related to the oil price. (SCO_GOV_14)

The price of oil has since dropped even more dramatically in the context of the COVID-19 global pandemic, which began after our data
collection was completed. Our participants also emphasized environmental risks (especially for seabirds), biodiversity issues, controversy over fracking, and contributions to climate change, but these issues were less central than issues that were more clearly oriented towards economics and market worth.

Despite acknowledging these and other risks, the general perception is that risk mitigation is well done and technological innovations promise positive responses to climate change, further illustrating the general process of blending industrial and ecological worth. The famous Brent Spar conflict is invoked—for example in the Aberdeen Maritime Museum—as a moment where the Scottish oil sector began taking environmental responsibility more seriously. In fact, participants from the Scottish oil industry described how oil development could be done in ways that respond positively to climate change, such as by lowering the carbon intensity of oil extraction through technological innovations. For example, an oil sector participant states:

I think that people do recognize, and the industry, I think, itself broadly recognizes, the need to move to lower carbon. And of course, some of the technologies and hardware can be used for renewables as well. So, there’s know-how that can be utilized for offshore wind, etc. (SCO_OIL_19)

More generally, oil sector data—especially from Shell, Oil & Gas UK, and BP—makes extensive use of environmental sustainability discourse that emphasizes decommissioning old wells and mitigating oil risks, while also asserting the potential coexistence of fossil fuels and renewables. For others, such as web content from Equinor, responses to climate change are linked to talk of transitions away from oil and towards “energy” more broadly. In this way, ecological and industrial worth are further blended.

The “energy trilemma” is a challenge connecting many of these themes in the Scottish case: (1) the world has a growing demand for energy, (2) oil is a major historical driver of economic development and wellbeing

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1The timing of our data collection is relevant here. Setting aside the impact of the COVID-19 global pandemic on oil prices, the interviews for the Scottish case took place when oil prices were already in decline. This likely influenced the emphasis on volatility.
in Scotland, and (3) we are living in an increasingly carbon-constrained world that demands aggressive climate action. The challenge is how to balance these three competing priorities. Decommissioning is an important part of this struggle, including how to do so in an environmentally responsible manner, and whether the industry or the public sector should bear the financial burden.

We triangulate our findings from the qualitative analysis of the interviews, field notes, documents, and websites with topic models of news stories. In the Scottish case, we find that independence and Scotland’s relationship with Great Britain is the dominant theme in this data. The terms most strongly associated with this topic are unambiguous: independence, referendum, independent, westminster, vote, union, alex_salmond, political, voter, snp. The second most dominant topic focuses on the rise and fall of oil prices, reflecting concerns with volatility raised by our interview participants and illustrative of the importance of the market order of worth. Following these two topics, we find many distinct topics on a range of issues, with most focusing on energy (including renewables), tourism (including hospitality and differences between rural and urban tourism), and finally nature and the environment.

When we look at the results of the hierarchical topic model, shown in Fig. 3.1, we see that each specific topic is clustered into more general discourses that maintain a clear separation between tourism development and oil development. This is the case in nearly all instances, which supports the general finding that these two development models are treated as parallel pathways in Scotland.

The central unlabelled node in Fig. 3.1 is the “top” of the hierarchy connecting all discourse clusters. The width of each black line indicates the strength of the association between topics and clusters. The black nodes with white numbers identify the discourse clusters, within which each topic is identified by a number and a list of the most important words and bigrams.
Fig. 3.1  Macro-level discourse network for Scotland
While this topic model does include some “junk topics”—which, because these models are semi-supervised, is a finding\(^2\)—the key takeaway for our purposes is that none of the discourse clusters bring talk about tourism development and oil development together, and no concepts or terms that are associated with either type of development model appear together in any other topics, such as economics and climate change.

In sum, across all our data sources we see persistent patterns. Talk about the environment tends to emphasize inspirational worth, focused as it is on iconic seascapes and wildlife. Nature-oriented tourism dominates talk of the environment specifically, and evaluations of tourism development are clearly embedded in a more general ecological order of worth. However, discussions of oil are more central to the Scottish case, which is partly due to the historic role that oil played in the Scottish economy, the current “energy trilemma,” and the social and economic benefits of oil development given the potential future of an independent Scotland. For the most part, the discourse around oil in Scotland is positive, with an emphasis on technological innovation, environmental sustainability, and the gradual shift to renewable energies, during which many believe fossil fuels and renewables will coexist. In this case, industrial worth is clearly dominant, with a secondary focus on market worth. We find few explicit connections between tourism and oil development models in the Scottish case, though industrial and market worth are occasionally invoked in evaluations of tourism, and ecological worth is sometimes invoked in assessments of oil development. Overall, oil and tourism are conceptualized as complementary and parallel development pathways. Ecological and industrial worth appear in complementary ways and are occasionally blended.

\(^2\)Our semi-supervised learning approach gently nudges the topic model towards a list of focal concepts that are shared across the models for all five cases. If any of those focal concepts returns a nonsensical “junk” topic, it means that there is no coherent topic or theme that forms around that focal concept in the specific case. Topic 24 (with keywords on the upper left of Fig. 3.1 is such an example).
The Dominance of Industrial Worth in Norway and Newfoundland and Labrador

Norway

The sea and coastal environments are central components of Norwegian culture, spanning from Viking history and folklore, to rural fisheries, to iconic fjords and seascapes. Despite the obvious presence of a nature-oriented inspirational order of worth when discussing the environment, Norway differs substantially from our other cases in that talk of coastal environments is dominated by considerations of oil extraction and oil prospectivity, particularly in the Norwegian Sea and increasingly in the Barents Sea. In general, we found that the oil industry is valued and seen as economically significant, technologically innovative, and an important part of Norwegian history and culture. As a government participant put it:

This [the oil sector] is of immense importance for Norway being by far Norway’s largest and by far the most profitable industry. So, it creates jobs all along the coast. And it generates income to the national treasury that finances education, transportation, healthcare. Large part of Norway. So, it’s of immense importance for national income. (NWY_GOV_02)

This positive assessment of the economic and social impacts of oil development is shared by many environmental participants, despite their critical views of future oil development. As an ENGO participant puts it, “Positive impact would be that we have a lot of money. We’re the richest country on the planet, as they say, because we have the oil fund. Although that’s equally as much about sound political decisions as it is about oil. And, you know, you have a lot of jobs” (NWY_NGO_02). Oil development is seen as having positive social and economic impacts on local communities and is seen as a source of pride, especially when it comes to Statoil as a public oil company (now rebranded as Equinor,

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3Discussed in Chapter 2.
which is a hybrid public-private company). The centrality of the market order or worth is clearly on display here.

As we expect given the role of oil in Norway’s political economy, many of our participants saw the Norwegian oil sector as a major economic driver and as the foundation for the country’s social welfare system and high quality of life. While some have concerns about dependence on oil and contributions to climate change, Norway is viewed by many as a global leader in terms of technological innovation, as well as being more socially responsible and environmentally sustainable than elsewhere in the world. Like Scotland, then, we see appeals to industrial worth in response to environmental concerns that are rooted in ecological worth. For example, a government participant notes:

We have a very long tradition in Norway for really driving [health and environmental] standards in the industry for decades, really. When it comes to emissions to sea there was strict regulations … for emissions to sea. We’ve already [had], since the early 1990s, a very high CO₂ tax for emissions to air, climate greenhouse gas emissions. (NWY_GOV_02)

Further illustrating this uneven blending of orders of worth, many of our participants emphasize the potential of technological solutions to climate change, including transitions to renewable energies, carbon capture and storage, efforts to displace “dirtier” fossil fuels from the global energy system, and running biodiversity protection programmes. This re-envisions the oil sector more broadly as an “energy sector” in which oil and renewable energies might coexist.

Despite this positivity and technological optimism, our participants also articulated environmental risks associated with oil, and invoked ecological worth. For the most part, the central issues are contributions to climate change or the risks to fisheries and vulnerable Arctic ecologies. An ENGO participant describes their opposition to the expansion of oil development as follows:

The fisheries impact. But also, the tourism. You have a lot of tourism in that area [Lofoten] as well, which will suffer if you go for it. … because the fisheries are our second biggest income in Norway the one that you
always can compare to oil and gas industry. And, of course, you have the world’s biggest cod stock in Lofoten. ... And you have the biggest coldwater and deepwater coral reefs in that area. You have the biggest seabird colony on mainland Europe in that area. So, there’s vast numbers of important biological species there and habitats. (NWY_NGO_04)

When it comes to tourism development, on the other hand, “being close to nature” is frequently invoked as a tourism attractor but also as characteristic of Norway and Norwegianness. When asked about what draws tourists to the region, an ENGO participant replies, invoking inspirational worth: “It’s, of course, the nature. And the natural experiences. The Lofoten Islands. Its majestic. And looks really beautiful. I think that’s the one thing that draws people the most” (NWY_NGO_02).

Our participants focus on the beauty of coastal environments, fjords, mountains, the Northern Lights, and wildlife (especially whales and seabirds), and describe interacting with the environment by hiking, boat tours, and cruises. This inspirational worth is blended with market worth, with tourism seen as yielding positive economic benefits to host communities, including remote communities like Lofoten. For example, a government participant emphasizes the importance of tourism development for rural communities by saying, “Many of the municipalities and small societies have challenges about having enough jobs. They’re getting fewer. We don’t have enough interesting jobs for the young. They’re moving away from the islands and that. I would say that the tourist industry can be an answer” (NWY_GOV_16). In addition, the potential of tourism-fisheries synergies is often emphasized, as is the potential for using tourism as a tool for environmental education.

Our participants were cognizant of tourism’s limitations and negative consequences in the form of overcrowding of tourism spaces, travel routes, localized waste management issues, or the displacement of rental housing by an ascendant AirBnB. For example, a government participant tells us:

We have people coming to Lofoten all year around now—there won’t be time for the nature to restore itself. ... So, I think we’ll see the scars of this summer for a long time because people will just continue to come as
well. So, if we don’t do anything it won’t be sustainable anymore, I think. (NWY_GOV_18)

Another government participant similarly emphasizes the infrastructure gap in dealing with the negative local impacts of tourism: “The hikes through the mountains don’t have the infrastructure, don’t have sanitary facilities. You cannot get rid of the garbage. They’re overcrowded with—the municipalities don’t have a system where they empty the garbage containers” (NWY_GOV_16). As in Scotland, participants expressed the perceived need for better tourism governance, not a retreat from tourism development. In other words, our participants did not see tourism as inherently more sustainable than other development models; rather it must be managed properly. A government participant sums this up as follows, “We want the tourists. We want them to come here. We want them to experience the same things as we do every day. But the main problem is we don’t have the infrastructure to cope with that number that is coming” (NWY_GOV_19). The carbon intensity of cruise ship tourism impacts on Arctic nature (e.g. Svalbard), and impacts on other natural areas came up as issues that need to be addressed. For the most part, these tourism governance concerns were raised by participants from the government and come up repeatedly in our field notes from research in Lofoten.

Once again, these findings are confirmed by our computational text analysis of news stories from Norway. In this case, our topic model reveals that the dominant topic is economic (the most associated words being: economy economic price financial sector growth bank currency market spending). This was followed by: government (the most associated words being government national election decision future policy risk party campaign source), climate change and the Arctic (the most associated words being arctic ice melt polar sea ice greenland north pole russia alaska canada), and a variety of coherent topics related to offshore drilling, renewable energies, climate change and climate science, international markets, tourism, restaurants, hotels and hospitality, travel, and extreme weather.

Our hierarchical topic model analysis, the results of which are shown in Fig. 3.2, again reflect the findings from the qualitative analysis. We
Fig. 3.2 Macro-level discourse network for Norway
see clusters related to science and technology (e.g. cluster 3); climate change, the Arctic, and marine ecologies (e.g. cluster 4); energy, oil, and gas (e.g. cluster 1); hotels, restaurants, hospitality, and mobilities (e.g. cluster 0). Among other things, this analysis shows that talk of oil in Norway is more tightly connected to talk of energy, renewables, scientific and technological innovation than in Scotland, and that it tends not to intersect with tourism-related topics. We see some nature-oriented topics (e.g. topic 27 in cluster 0) that get clustered with tourism topics, but none that are clearly clustered with oil or energy. Instead, we see a concern with environmental sustainability and renewable energies clustered with talk of oil. Otherwise, most of the topics focused on the environment are grouped into a discourse cluster on climate change and the Arctic.

Overall, oil is unambiguously the dominant development pathway in Norway and the industrial and market orders of worth dominate. However, there is also a strong focus on environmental sustainability, technological innovation, climate science, and the notion of transitioning from an “oil” industry to an “energy” industry where “cleaner” oil and renewables coexist. As in Scotland, this represents a blended industrial-ecological order of worth in which technological innovations (industrial worth) are offered as solutions to problems framed in terms of the ecological order of worth.

Tourism is clearly secondary to oil in Norway, as a mode of development, but is viewed in generally positive terms. However, we do see more extensive criticism of tourism development than in other cases, in part because it is also carbon-intensive and poses additional environmental risks. For these and other reasons, there is a focus on the importance of managing tourism properly. The Norwegian Arctic is one of the key places where these two ways of conceptualizing coastal environments as sites of development intersect. This reveals tensions related to the impacts of climate change and the role that tourism can play in environmental education.
**Newfoundland & Labrador**

The second case that is dominated by oil development + industrial worth is Newfoundland and Labrador. However, as we see in other cases, the most common ways of conceptualizing coastal environments and communities unambiguously invoke inspirational worth; they focus on seascapes, coastlines, whales, puffins, seabirds, icebergs, Gros Morne national park, Fogo Island Inn, food, drink, the authenticity of rural communities, and local arts, crafts, and culture. The concept of “being close to nature” is frequently invoked by participants who define nature-oriented tourism in the province as peaceful and “off the beaten track.”

For example, when asked about what draws visitors to the region, an ENGO participant notes:

Probably the beauty of the landscape… Gros Morne obviously is a huge hub in this particular area. And then a lot of the other tourism operators have sort have tagged onto the image that Gros Morne is portraying on the west coast. And when you look at the messages that are being sent out by the government, Newfoundland and Labrador, as far away from Disneyland as you ever want to be, I think that sort of hits the nail on the head. People are trying to get away. (NL_NGO_16)

This tourism-centred depiction of the coastal environment is closely connected to talk of hiking, boat tours and whale watching, and environmental education. Environmental sustainability concepts are also frequently invoked, especially as they relate to the negative environmental impacts of snowmobiling, off-highway vehicles, or fracking. Together, then, discussions of nature-oriented tourism are characterized by an orientation towards inspiration and ecological orders of worth. However, participants across all sectors also invoked market and civic orders of worth by emphasizing the positive economic impacts of tourism and social benefits for rural communities. For example, a government participant notes, “I think among some of the benefits are that tourism can not only survive but maybe even thrive in some of our rural settings and for the most part western Newfoundland is a rural setting. It’s got tremendous appeal as is. We don’t need to be something we’re not. It’s a
unique place and a special place in the world” (NL_GOV_07). Similarly, a tourism sector participant says:

I don’t see very many drawbacks; I do see a lot of advantages. You know? As an industry, it can be long term. It’s renewable. It’s pretty well non-damaging environmentally. Certainly, those are all advantages that [you don’t] see with oil, you know? The product is long term. It’s low impact. It’s actually supporting nature and species in their habitat, you know, whales, seabirds. And raising community awareness, world awareness of species of wildlife. (NL_TOU_12)

As illustrated by this interview excerpt, environmental sustainability and education was also a dominant theme in our interview data. This comes up in reference to places like Gros Morne national park, Petty Harbour mini-aquarium, and the Johnson Geocentre. The emphasis tends to be on coastal ecologies and geology. There is also a recurrent emphasis on sustainability, though this tends to focus on local environmental impacts more than larger problems such as global climate change. As we have seen in some other cases, our participants shared a general sense that tourism affords opportunities to legitimate nature preservation initiatives and to benefit communities beyond increased revenue and employment, for example by supporting local art and crafts.

There are fewer critiques of tourism development than we see in some other cases, such as Norway and Iceland. However, our participants raise concerns about the threat of overtourism, the integrity of local environments, and the importance of building appropriate infrastructure. For example, a tourism participant points to the localized environmental impacts as follows: “Particularly in this region when you have that much tourism coming within a span of three to four months and growing from the first of mid-May to beginning of June until September, it has an impact on the infrastructure of the local community, which is really small. Garbage, water that kind of stuff” (NL_TOU_18). An ENGO participant similarly points to the localized environmental impacts, as well as the challenges of seasonality and labour to doing sustainable tourism development as follows:
And of course, a downside, overuse is an issue. Too much use of trails, too much driving, too many campers, can actually diminish whatever conservation we’re trying to achieve in these regions. I guess the seasonal nature in northern climates is an issue. So, what do you do the next rest of the year if you’re reliant on working in a restaurant or working in the park in the summer, what do you do the rest of the time? (NL_NGO_03)

Turning to oil development, the dominant theme is positive economic benefits and employment opportunities, illustrating a focus on market worth. Indeed, oil has been a major economic driver for the province over the past 20 years, allowing the recovery from the collapse of the cod fishery and the transition from a “have not” to a “have” province within Canada.

Once again, we see concerns rooted in notions of ecological worth being addressed by shifts to solutions that have industrial worth. For example, oil is commonly seen as a source of environmental risk, but usually as a prelude to, or in conjunction with, framing oil risk mitigation and governance in the province as sustainable and well-done (the kind of engineering and technical competence that defines the industrial order of worth). For example, when asked about oil and sustainability, an oil sector participant replies:

I think that's a sustainable industry in that way and you can never have an industry like the oil industry without having some impact on the environment. But it’s how you manage it that’s the important thing. I think a great deal of effort goes into [it] and oil operators are very conscious of the negative impacts if they don’t do their jobs responsibly. (NL_OIL_04)

The dominant narrative is of oil as positive, economically significant, and sustainable.

The main critical counter-discourse we see is that oil development poses significant environmental risks for whales and seabirds and is in direct conflict with the ecological values promoted in touristic and educational spaces like Gros Morne National Park. This critique is anchored in notions of ecological worth. Despite a generally positive view of the oil sector, a government participant notes that there need to be boundaries around appropriate oil exploration:
The exploratory areas that need to come off the list first are all of those that pose a significant risk to the environment and other relatively more sustainable economies. So, the Gulf of St. Lawrence should be right off the list. It’s a semi-enclosed sea, it’s got counterclockwise circulation, it’s got ice covering the winter … It touches five provinces. Oil platforms are a continuous source of small spills and they pose an unacceptable threat. … And do you think tourists will really want to come and enjoy that? (laughs) I don’t think so! (NL_GOV_31)

As this excerpt illustrates, there are conflicts over oil development impinging on valued and established tourism and fisheries economies, with Gros Morne and the Gulf of St. Lawrence being the most contested spaces. An ENGO participant sets up this juxtaposition by saying, “I feel oil is a short-term boom and bust industry that is endangering the survival of our sustainable, long-term, unique, coastal sustainable inshore fisheries and tourism industries” (NL_NGO_09). However, these criticisms of oil development tend to focus on specific projects rather than the oil sector overall. More generally, some participants—all external to the oil sector—shared concerns about fossil fuel contributions to climate change, fracking proposals for the west coast of Newfoundland, seismic impacts from exploration activity, and the risk of oil spills, which is often envisioned in reference to the 2010 Gulf of Mexico spill. In addition to these more environmental concerns, some participants raise concerns about price declines, volatility, and the need to consider restructuring the global industry.

As in our other cases, there is talk in Newfoundland and Labrador of renewable energy transitions. At oil sector events, for example, speakers from Statoil (now Equinor) and BP support renewable energy development as part of a suite of responses to climate change that also includes technological innovation, carbon capture and storage, and shaping consumer behaviour (fieldnotes, June 21, 2016; June 22, 2017). Government websites and documents also point to renewable energy development, sometimes mixing talk about mega-hydro (i.e. the Muskrat Falls project in Labrador) and other forms of renewables (i.e. wind) with the idea that oil revenues can support the development of renewables.
Wildlife and icebergs are, in a sense, boundary objects between these two development models. On the one hand, whales, seabirds (e.g. puffins), fish, and other wildlife are portrayed as key tourism attractors vulnerable to the risks posed by oil development, disasters, and exploratory seismic activity. Whereas icebergs appear as key tourism attractors in the tourism imaginary, in the oil imaginary they are defined as sources of risk to be navigated.

Many of these findings are reinforced in our analysis of the news story data. The two most dominant themes are economic: food, restaurants, and accommodations; and mobilities (cars, planes, boats, trains, etc.). In addition to these, we see several topics related to oil (mainly offshore drilling and fracking); climate change and the environment; government, politics, and elections; work and employment; the Arctic; and the fishery.

Figure 3.3 shows the results of the hierarchical topic model, which shows—in stark terms—the separation of the oil and tourism development discourses. Cluster 0 encompasses the primary tourism topics, including food and restaurants, history, camping, and the cod fishery. Not all of these topics are coherent or easily interpretable, however, which suggests that some of the focal concepts used to seed the topic model across all five cases apply less to the case of Newfoundland and Labrador than they do in other cases. Discourse cluster 1 contains the oil development discourses, including topics related to economics, corporate social responsibility and environmental sustainability, and politics and elections. The one oil topic that is not part of this discourse cluster (id 3) is focused on fracking, drilling, and offshore oil. Again, this discourse cluster contains some junk topics, suggesting the general lack of relevance for some focal concepts in the Newfoundland and Labrador case. It is important to note, however, that this cluster also includes a topic related to Gros Morne National Park, which is a focal point for controversies over oil development. Finally, we note that talk of climate change is confined to discourse cluster 2, which also covers the Arctic.

Overall, the dominant pattern we see here is that oil and tourism are conceptualized as parallel and often completely separate development pathways, both of which have positive economic benefits and both of which have played important roles in the Newfoundland and Labrador economy—not to mention culture and identity—following the
Fig. 3.3 Macro-level discourse network for Newfoundland and Labrador
collapse of the cod fishery. Beyond the inspirational worth of beautiful nature, we see a strong emphasis on industrial and market worth when discussing oil, and a strong focus on market worth and ecological worth when discussing tourism. Antagonism and the notion of tourism and oil as incompatible come up less often and is limited to specific episodes of contention where proposed oil development impinges on existing tourism landscapes and economies, particularly around Gros Morne in western Newfoundland.

The Dominance of Ecological Worth in Denmark and Iceland

Denmark

In the case of Denmark, talk of coastal environments and communities focuses predominantly on nature, coastlines and seascapes, wildlife such as shorebirds and seals, and an emphasis on cycling, hiking, swimming, and beach walking. All of this is anchored in inspirational worth. For example, when asked what draws tourists to the region, a tourism sector participant replies:

Wide beaches. I have absolutely no doubt in my mind. ... So that’s why people come here. And if they come here, oh there’s a nice museum, oh there’s a nice town or whatever, it’s good but they come here for the beaches. (DEN_TOU_06)

There is a strong orientation towards sustainability and a pervasive emphasis on ecological worth, with a central argument that Danish coastal environments need to be protected from overdevelopment and from mass tourism. This is particularly important as access to an undeveloped seascape is a major attractor for the core tourism market, which results in blending ecological and market orders of worth.

There is an urban/rural divide in the case of Denmark, with Copenhagen more focused on urban amenities (arts, local culture, history, cycling, food, and drink) and urban-coastal environments, while rural
communities are focused on experiencing nature outside of the city. However, ecological worth applies to both urban and rural contexts. A tourism sector participant explains this by saying, “You go either to Copenhagen or you go to coastal Denmark, the rest of Denmark. There’s been work put into this, using Copenhagen as a hub for getting tourists out in the countryside and it works better in some places. … But for the rest of Denmark, it’s still not very developed” (DEN_TOU_17). However, despite its urban setting, Copenhagen can also be viewed as an urban eco-tourism destination. As Nilsson (2019) argues, much of Copenhagen’s tourism image relies on bicycling, the clean city harbour environment, and a self-image of the city as a leader in sustainability and green innovation.

The Danish tourism sector is growing and is generally framed as providing social and economic benefits (market worth), enhancing the liveability of communities, increasing migration to host communities, increasing international visibility, and as providing opportunities to promote ecological literacy and environmental education. For example, a tourism participant notes, “The tourism industry is growing very fast and is very important for this part of Denmark. Because the people coming here, many of them are of good money. And stay here for several days. And that’s very important” (DEN_TOU_03). Another tourism sector participant similarly argues for the importance of tourism for rural communities, saying, “But as long as the tourists are still coming here, there’s a basis for having shops in obscure places” (DEN_TOU_06). The notion that tourism is a source of pride for host communities also comes up for several of our participants, linked specifically to Wadden Sea National park, which receives international media visibility. There is also a sense that tourism helps make Copenhagen a more cosmopolitan and vibrant urban space.

Relative to other cases, our participants express minimal criticism of tourism development in Denmark. Where evident, criticism tends to focus on potential overdevelopment of coastal areas, negative impacts on wildlife, and the carbon intensity of travel, reinforcing the notion that ecological worth is dominant in Denmark. For example, a government participant notes the localized environmental impacts as follows:
People say they’re small things but maybe people go too close to the seals or they go to areas where the breeding birds are. … The normal behaviour of forgetting their own garbage and litter and I think those are the main aspects … I won’t say the problems are big. But I definitely see problems there in the future. (DEN_GOV_12)

Whereas broadly positive views of tourism are prevalent, views of oil are more heterogeneous. Overall, there is a sense that the oil sector makes significant economic and employment contributions, especially in Esbjerg, which like Aberdeen was transformed from a fishery-based economy to an oil-based economy. An oil sector participant describes the process of Danish oil development as follows:

So, the main impact of the oil and gas industry is that we, over the years, have secured welfare in Denmark. … And every one out of ten workplaces as Esbjerg as a city is linked to the oil and gas industry directly or indirectly. So obviously, it has a huge impact in that region. (DEN_OIL_08)

This transformation is heavily promoted by the municipality of Esbjerg, which self-identifies as Denmark’s energy city, and the Esbjerg maritime museum, where oil and tourism appear as parallel development paths that need not conflict (fieldnotes, April 19, 2017).

These defences of oil invoke market worth, but again oil development in Denmark tends to clash with more salient conceptions of ecological worth, such as the widely shared notion that Denmark is a “green” country that is well into a renewable energy transition. For example, an oil sector participant describes this tension as follows:

What we are about as an organization is that we get the most out of the Danish sector of the North Sea. But we realize as an organization that this has to be done in a way such that it creates maximum value for the Danish state and we have to take into consideration the societal impact, including CO2 emissions. (DEN_OIL_08)
Similarly, a government participant draws a comparison between Stavanger, Norway and Esbjerg, Denmark to illustrate the cultural differences in how oil is viewed in the two societies, reflecting the centrality of industrial and market worth in Norway and ecological worth in Denmark:

The way people see Esbjerg in Denmark and the way people see Stavanger, for example, in Norway, are quite different. In Norway… people are very proud of the oil business. And so are we in Esbjerg, but if you look all across the Danish country, people are not so proud. They’re not thinking so much that there’s an oil and gas industry. They like that there is a lot of tax income and the government gets a lot of money. But in the end, they would like to reduce CO2 emissions and so on. (DEN_GOV_09)

While oil may coexist with renewables for the time being, the Danish continental shelf is in decline (i.e. post-peak) and is perceived by many in the public sphere as a sunset industry.

For the most part, Danish oil extraction is not seen as posing significant social or environmental risks, but is seen as responsibly managed, with no major episodes of catastrophe. The ecological risks of oil are rarely invoked by our participants. When they are, they focus on the possibility for catastrophic events, often invoking the 2010 BP Gulf of Mexico spill. Such catastrophic events are viewed as very unlikely in the Danish context. Where concerns are raised, they are specific and localized or are directed more at concern over the expansion of Arctic oil frontiers. For example, environmental organization concerns about ecological risks are more oriented towards Arctic oil exploration and Greenlandic oil development (field notes, May 9, 2017). These controversies are examined in greater depth in Chapter 5. As with other cases, we see a strong emphasis here on sustainability and a seemingly shared perception that risk mitigation is done well. However, the familiar tendency to respond to concerns grounded in ecological worth with appeals to solutions that have industrial worth is much less common in Denmark than in the other cases we have discussed so far.
Despite the marginalization of oil overall, there is a common understanding among many of our participants that tourism and oil development are in fact complementary, and this is often achieved by emphasizing market worth, and in some cases specific even specific mechanisms, such as spillover processes. For example, a tourism participant describes the coexistence of oil and tourism around Esbjerg and Wadden Sea National Park as follows:

I think it’s fantastic to be a part of Esbjerg municipalities [Wadden Sea National Park]. Because we are here, and we get money from Esbjerg municipalities to build the Wadden Sea Centre. Because they have money. And they have money from the oil industry. The oil industry is the biggest source of income in Esbjerg, that’s without question. (DEN_TOU_05)

The oil sector drives regional migration, provides well-paying jobs, and contributes to affluence in a region, which spills over to the tourism sector. Conversely, the tourism sector prioritizes art, culture, food, and other things that make for more interesting and liveable places to settle, including for oil sector employees. Another government participant describes this dynamic by saying:

In that way, indirectly, when you build up recreation infrastructure, outdoor facilities, you need money. And this is where the tax income from the oil sector can benefit the local area. … I know some green [environmental] organizations would say, ‘oh, you’re talking with the devil, you’re playing with the devil, because they’re polluting and doing everything.’ But you say, okay, on the other hand, if nobody’s paying for anything, how can we conserve nature. (DEN_GOV_12)

Denmark is already moving along the path to renewable energy transitions. There is a general sense that this is compatible with tourism development, in part because of the tight connections between tourism and ecological worth. For similar reasons, there is less of a sense that renewables are compatible with oil development, although some of our participants emphasized the possibility of coexistence.

Our Danish news story data is less informative than our news story data for other cases, which is likely due in part to the fact that our
news corpus is smaller. The topic model contains a higher number of junk topics relative to other cases, which in this case could simply be an artefact of working with a smaller corpus. Still, we cautiously interpret the results as aligned with our findings from the qualitative analysis. The most dominant themes concern the Arctic and international relationships. We also see coherent themes forming around offshore oil extraction; marine transport; climate change; the economy and employment; and food, restaurants, and hotels. The hierarchical model, shown in Fig. 3.4, suggests that talk of oil intersects with environmental science, as well talk of a global Arctic, or representations of the Arctic as a space of global scientific, ecological, and political concern. The results also suggest that talk of climate change and the Arctic influences many other topics, including tourism development. The lower quality of these models, however, means that our interpretations should be viewed with measured scepticism.

In short, Denmark embraces tourism development more strongly than oil development, apart from the oil-dependent region of Esbjerg, which sits alongside Wadden Sea National Park. Ecological worth is unambiguously dominant, but both development models are seen as having positive social and economic impacts on host communities, and as we have now seen across nearly all cases, many participants draw on notions of market worth to cast them as complementary development paths.

Denmark closely resembles Iceland, discussed below, in that ecological worth is central and industrial worth is less common; both are also advanced in the transition to renewable energies and oil development is relatively marginalized.

Iceland

Like Denmark, Iceland differs markedly from the other cases insofar as ecological worth dominates, oil development is barely a consideration, and industrial worth is less visible. Coastal communities and environments are predominantly portrayed in ways that are favourable to nature-oriented tourism, and which frame Iceland as a “green” country. For example, when asked what draws people to the region, a tourism
Fig. 3.4 Macro-level discourse network for Denmark
sector participant replies, “I think it’s just the wild nature, the untouched nature that we have here, whether it’s the wildlife around the country or just, you know, going to national parks or something like that” (ICE_TOU_23). Similarly, another tourism participant sketches out the range of natural, geological, and historic attractors as follows:

If you go to a waterfall, if you can find that same waterfall with only ten people instead of five hundred it adds to the experience of nature without people. … I mean it kind of sells itself, you know. We have the glaciers—this is a whole set of things that are quite unique. And also, the historical aspect of the Vikings and all that. (ICE_TOU_18)

There is a strong emphasis on geysers, geothermal pools, the Northern Lights, volcanic landscapes, waterfalls, glaciers, and wildlife (especially whales and puffins), all of which can be experienced through activities like hiking and boat tours, and are framed in ways that are oriented towards inspirational worth.

Tourism is often framed through sustainability discourse and as a tool for environmental education, especially on marine ecologies. A tourism participant describes their practice as follows: “We received the Blue Flag this spring under new criteria, sustainable boating tourism. … It involves telling our customers about how we approach the animals, how we behave in the nature that we’re going through” (ICE_TOU_23). The environmental costs of tourism, discussed below, are viewed as manageable. Rather, there is a common understanding that the benefits that environmental experiences and education tourism provide outweigh the ecological costs. Another tourism participant, for example, talks about using glacier tours as a forum for climate change awareness, saying:

If you do a glacier walk with us, you’re likely to have a guide speak about global warming. One of the interesting things is how the glaciers are changing with global warming. … We educate people, we make them interested in nature, we make them interested in preserving nature. (ICE_TOU_28)
Like the case of Scotland, talk about coastal environments and tourism is coupled with an emphasis on history (particularly Vikings), arts, food, and local culture as a repertoire of tourism attractors.

In addition to being positioned as environmentally sustainable, tourism development is seen as a mechanism for preserving history, providing social and economic benefits to host communities, and providing employment in rural communities. This blends ecological worth with market worth. For example, an ENGO participant states, “If we look at tourism and what it has brought to us after the financial crisis, it’s basically helped us survive” (ICE_NGO_07). The same participant notes that tourism helps preserve history: “You have the national history museum here in Iceland, I think the main guests there are tourists” (ICE_NGO_07).

Despite being mostly positive, our participants also discuss the drawbacks and challenges associated with tourism development. Negative impacts include governing short-term rentals like AirBnB, dealing with rapid increases and decreases in the number of tourists, managing overcrowded tourist spaces, and the challenges of ensuring that the benefits of tourism spread across the whole country, not only in Reykjavik and the capital region where most tourism is concentrated. A government participant describes the trade-offs between positive and negative impacts as follows:

The negative externality? We see warning signs of overcrowding in certain areas, where the percentage of tourists versus locals is getting a bit high … And it’s this worrying sign that in the downtown area, as the same time as we’re trying to get more buildings built there, more apartments are going to only AirBnB. (ICE_GOV_21)

There is reflexivity about both the local and extra-local environmental impacts of tourism, with a focus on ecological worth. At the local level, we see an emphasis on the negative environmental impacts of increased demands on infrastructure, overuse, and waste management. A tourism participant evokes the busy Golden Circle travel route to give a sense of environmental challenges:
Take an area like the Golden Circle. We’re not going to turn things around. You’re never going to go into the glacier area and have the same experience that I had as a kid with my parents. What we have to do there is make sure it doesn’t get damaged to the point where it’s uninteresting. … But it comes down to the experience, protecting the nature and spreading out the traffic. (ICE_TOU_28)

Here, as in Norway and Scotland, there is an interest in mitigating these negative impacts with tourism governance and codes of conduct for tourists.

By contrast, there is limited talk of coastal environments as sites of oil prospectivity. Looking back at the earlier wave of exploration, an oil sector participant notes:

There was this chance that there might be oil in a certain area in the north of Iceland, especially. The government decided to open up the continental shelf. And it has been a bit disappointing for the government and the people working on this. (ICE_OIL_07)

There are plans for a new shipping port at Finnafjord, which itself is premised on the notion of a changing Arctic and the increased openness and importance of Arctic shipping routes (Dodds 2010). As such, oil prospectivity is part of a nascent vision for extractive and shipping-oriented development in the northeast region of the country, which is outside the core tourist regions. Icelandic oil, however, requires a significant rebound of global oil prices that makes Arctic frontiers (i.e. northeast Iceland) more appealing, which seems increasingly unlikely. That said, some of our project data continues to convey optimism about a rebounding price cycle that will re-energize interest in Arctic oil prospectivity and bring potential revenues and employment to the northeast regions of the country, which are at the periphery of tourism development.

While energy sector data frames coastal prospectivity and extraction as having positive impacts for host communities, participants from the government, ENGO, and tourism sectors emphasize Iceland’s wealth of renewable resources that make oil development unnecessary, and
cite environment risks to wilderness values and ecological worth. For example, a government participant states:

And it just goes without saying that if you’re trying build upon, for example, this whale watching business here, how long could you fit with the impact of the industrial development here? And then the oil business? How can you manage that and make that harmony occur here in the harbour? It’s a challenge. (ICE_GOV_22)

Another government participant notes similar tensions that make oil and tourism incompatible development paths: “If we become an oil nation it most likely won’t benefit tourism. And it can be damaging to our image. Because we are selling Iceland as an environmentally clean country” (ICE_GOV_14). A few participants—all from government—argue that oil development can coexist with renewable energies, but in general this position reflects the dominance of renewable energy in Iceland more than the importance of oil development.

The promise of Icelandic oil has fallen out of the political/public imaginary and many see the pursuit of oil development as unnecessary given Iceland’s wealth of renewable energy sources, mostly via hydropower plants and geothermal energy. More generally, oil development is seen as conflicting with Iceland’s identity as a “green” society oriented towards ecological worth, with the Paris COP agreements and other responses to climate change, and with notions of a global Arctic. There is also a shared concern that oil development could harm Iceland’s tourism image, furthering the sentiment that oil development and tourism development are incompatible.

Once again, these findings are reinforced by our semi-supervised topic models of Icelandic news stories. The news data is dominated by four themes focused on travel and mobilities, the Arctic and Icelandic nature, restaurants, history tourism, all of which are clustered together into one macro-level discourse, represented as cluster 1 in Fig. 3.5. Most of the focal concepts we used to seed this topic model do not produce coherent topics in Iceland, whereas they do in other cases. What is most notable, however, is that the only references to oil are future-oriented and are
Fig. 3.5 Macro-level discourse network for Iceland
embedded in a discourse cluster (cluster 2) alongside topics related to climate change, climate science, and energy more broadly.

In sum, the cultural dimensions of oil-tourism interface in Iceland are heavily weighted in favour of nature-oriented tourism and, like Denmark, are anchored in the ecological order of worth. The challenges here involve managing the inevitable local environmental impacts of high volumes of tourism, but also the larger environmental costs of carbon-intensive travel. Oil development is hypothetical and future-oriented. Given recent declines in oil prices, conflicts over Arctic oil exploration, and Iceland’s wealth of renewable energy sources, oil development is largely out of the public and political sphere. Unlike our other cases, oil and tourism are more often interpreted as incompatible development paths.

Conclusion

The goal of this chapter was to identify cultural variation in the oil-tourism interface across our five cases. To do so, we focused on how each development model is described and evaluated within and across cases. These cultural evaluations and concomitant boundary processes are embedded in institutionalized “orders of worth” that, by determining what is valuable and why, have real consequences for environmental governance and socio-ecological well-being. Across all cases, we see that nature-oriented inspirational worth is strongly present when it comes to general discussions of the environment. When it comes to oil and tourism development models, industrial, ecological, and market worth dominate, but the relative importance of each varies across cases.

We found that the criteria used in evaluations are generally homologous with the political economy framework introduced in Chapter 2. This suggests that cultural visibility, as an aspect of power, is broadly aligned with the relative political economic importance of the oil and tourism sectors in our case study regions. For example, Norway and Newfoundland and Labrador are both strongly oil oriented and, relative to our other cases, rely less on tourism development. Industrial and market orders of worth dominate; while ecological orders of worth
are present, they tend to be folded into more general industrial worth, for example by emphasizing the role that scientific and technological innovation play in responses to climate change. To link this back to marine sociology, here we see how oceans are valued primarily as a natural resource pool (Hannigan 2016). Conversely, in the cases that are more tourism oriented and have less oil development—Iceland and Denmark—we find that ecological worth dominates, where oceans are valued as pathways of tourism and leisure travel (Urry 2014). Given that industrial worth tends to be more strongly associated with oil, it is perhaps unsurprising to see that market worth (e.g. the economic value of tourism) plays a more central role in these cases. Scotland differs from these other four cases, which reflects other differences that are grounded in the Scotland’s political economy, bound up as it is in struggles around Brexit and independence, as well as issues of decommissioning old wells in a post-peak oil context.

We started this chapter by noting that these types of evaluations and boundary work have real consequences; evaluations are political and have power effects. As we have seen here, even when there are clear patterns within and across cases, there are inevitably going to be political clashes over what really matters, what is valued and why. In the coming chapters, we will see how evaluations like these, and the broader orders of worth they are embedded in, play out in arenas of environmental governance and collective action.

References

Blei, D. M. (2012). Probabilistic topic models. *Communications of the ACM*, 55(4), 77–84.

Boltanski, L., & Thévenot, L. (1999). The sociology of critical capacity. *European Journal of Social Theory, 2*(3), 359–377.

Boltanski, L., & Thévenot, L. (2006). *On justification: Economies of worth* (C. Porter, Trans.). Princeton, NJ: Princeton University Press.

Burkhus, W., & Ignatow, G. (2019). Cognitive sociology and the cultural mind: Debates, directions, and challenges. In W. Burkhus & G. Ignatow
(Eds.), *The Oxford handbook of cognitive sociology* (pp. 1–30). Oxford, UK: Oxford University Press.

DiMaggio, P., Nag, M., & Blei, D. (2013). Exploiting affinities between topic modeling and the sociological perspective on culture: Application to newspaper coverage of US government arts funding. *Poetics, 41*(6), 570–606.

Dodds, K. (2010). A polar Mediterranean? Accessibility, resources and sovereignty in the Arctic Ocean. *Global Policy, 1*(3), 303–311.

Emirbayer, M. (1997). Manifesto for a relational sociology. *American Journal of Sociology, 103*(2), 281–317.

Friedman, A. (2019). Cultural blind spots and blind fields: Collective forms of unawareness. In W. Burkhus & G. Ignatow (Eds.), *The Oxford handbook of cognitive sociology* (pp. 467–484). Oxford, UK: Oxford University Press.

Gallagher, R. J., Reing, K., Kale, D., & Ver Steeg, G. (2017). Anchored correlation explanation: Topic modeling with minimal domain knowledge. *Transactions of the Association for Computational Linguistics, 5*, 529–542.

Hannigan, J. (2016). *The geopolitics of deep oceans*. Cambridge, UK: Polity Press.

Kukkonen, A., Stoddart, M. C., & Ylä-Anttila, T. (2020). Actors and justifications in media debates on Arctic climate change in Finland and Canada: A network approach. *Acta Sociologica*. https://doi.org/10.1177/0001699319890902.

Lafaye, C., & Thévenot, L. (1993). Une justification écologique? Conflits dans l’aménagement de la nature. *Review Français de Sociologie, 34*(4), 495–524.

Lamont, M. (1992). *Money, morals, and manners: The culture of the French and the American upper-middle class*. Chicago: University of Chicago Press.

Lamont, M. (2012). Toward a comparative sociology of valuation and evaluation. *Annual Review of Sociology, 38*, 201–221.

Lamont, M., & Molnár, V. (2002). The study of boundaries in the social sciences. *Annual Review of Sociology, 28*(1), 167–195.

Lamont, M., Silva, G. M., Welburn, J., Guetzkow, J., Mizrachi, N., Herzog, H., et al. (2016). *Getting respect: Responding to stigma and discrimination in the United States, Brazil, and Israel*. Princeton, NJ: Princeton University Press.

Lamont, M., & Thévenot, L. (2000). *Rethinking comparative cultural sociology: Repertoires of evaluation in France and the United States*. Cambridge, UK: Cambridge University Press.
Leschziner, V. (2019). Dual process models in sociology. In W. Burkhus & G. Ignatow (Eds.), The Oxford handbook of cognitive sociology (pp. 169–191). Oxford, UK: Oxford University Press.

Light, R., & Cunningham, J. (2016). Oracles of peace: Topic modeling, cultural opportunity, and the nobel peace prize, 1902–2012. Mobilization: An International Quarterly, 21(1), 43–64.

McLevey, J. (2021). Doing computational social science. London: Sage.

Mohr, J. W., Bogdanov, P., DiMaggio, P., Nag, M., Blei, D., McFarland, D. A., et al. (2013). Topic models and the cultural sciences. Poetics, 41(6), 545–770.

Nelson, L. K. (2020). Computational grounded theory: A methodological framework. Sociological Methods & Research, 49(1), 3–42.

Nilsson, J. H. (2019). Urban bicycle tourism: Path dependencies and innovation in Greater Copenhagen. Journal of Sustainable Tourism, 27(11), 1648–1662.

Norgaard, K. M. (2011). Living in denial: Climate change, emotions, and everyday life. Cambridge, MA: MIT Press.

Roose, H., Roose, W., & Daenekindt, S. (2018). Trends in contemporary art discourse: Using topic models to analyze 25 years of professional art criticism. Cultural Sociology, 12(3), 303–324.

Scott, N. A. (2020). Assembling moral mobilities: Cycling, cities, and the common good. Lincoln: University of Nebraska Press.

Swidler, A. (1986). Culture in action: Symbols and strategies. American Sociological Review, 51(2), 273–286.

Swidler, A. (2013). Talk of love: How culture matters. Chicago: University of Chicago Press.

Thévenot, L., Moody, M., & Lafaye, C. (2000). Forms of valuing nature: Arguments and modes of justification in French and American environmental disputes. In M. Lamont & L. Thevenot (Eds.), Rethinking comparative cultural sociology: Repertoires of evaluation in France and the United States (pp. 229–272). Cambridge, UK: Cambridge University Press.

Thornton, P. H., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), The Sage handbook of organizational institutionalism (pp. 99–129). London: Sage.

Tilly, C. (2006). Why? What happens when people give reasons … and why. Princeton, NJ: Princeton University Press.

Urry, J. (2014). Offshoring. Cambridge, UK: Polity Press.

Vaisey, S. (2009). Motivation and justification: A dual-process model of culture in action. American Journal of Sociology, 114(6), 1675–1715.
Ylä-Anttila, T., & Kukkonen, A. (2014). How arguments are justified in the media debate on climate change in the USA and France. *International Journal of Innovation and Sustainable Development, 8*(4), 394–408.

Ylä-Anttila, T., & Luhtakallio, E. (2016). Justifications analysis: Understanding moral evaluations in public debates. *Sociological Research Online, 21*(4), 1–14.