

# Cultural performances of cod – at Tromsø University Museum

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## Abstract

Whereas museums traditionally present the nature of the natural sciences or the culture of the cultural sciences, Tromsø University Museum has recently presented an exhibition of the cultural performances of nature. The cod, the exhibition says – an important fish in many of the western coastal societies – is assigned various societal and cultural missions and its nature depends on who speaks for it. This article addresses the process of building the exhibition. A team of researchers and designers played supplementary roles in answering the challenge of communicating performative and constructivist perspectives on knowledge production within the frames of the museum institution, an institution traditionally known for displaying knowledge on nature as facts, not as enacted and negotiated products.

## Keywords:

*Science exhibition,  
performing nature,  
enacting cod,  
museum studies*

## Introduction

Cod has many faces, or so it is claimed in a travelling exhibition recently produced and displayed at a university museum in Norway.<sup>1</sup> The exhibition depicts perspectives on cod as they are expressed in science, by environmentalists, in coastal culture and other areas of society. Communicating performative and constructivist perspectives on knowledge production, the exhibition demonstrates that nature is enacted, given life and characteristics through how it is dealt with in society, science and culture.

In recent decades, there has been growing academic interest in the theme in focus,

where we see that nature is socially made, not ontologically given. Bakker and Bridge (2006:6) even argue that such theoretical devices as “production of nature” or “social construction of nature” have actually been “yielding diminishing returns for some time.” The production-of-nature perspective is, however, not common knowledge outside of academic texts, and within academia, its supporters and benefactors are first and foremost found in the social and cultural disciplines and their texts. Mediating the perspective through other channels than texts and to new audiences could give new “returns”. The museum institution and its audiences know con-

constructivist perspectives on knowledge production through debates on culture and representation. At the same time that we find growth in academic texts on how knowledge is politically and historically situated, we also find controversies over how to perform the mandate that museums have to represent culture and truth and act as repositories of collective treasures for the future (Macdonald 2006:4). Questions on how decisions are made, what should end up being put on public display and who should be involved in making such displays have turned museums into important arenas where cultural and epistemological questions are negotiated (Macdonald *ibid.*). However, the fact that natural science is also constructivist knowledge is a theme less focused on by museums. Science museums still have the widespread authoritative role assigned and accepted in the museum institutions' initial phases (Conn 2006). Crucial to the building and empowerment phases of museum development was the creation of a visual grammar of nature through the collection and display of tangible objects that could be measured. Many museums still perform these tasks and are and have been a technological device, a means by which to install modernity (Fyfe 1996, Macdonald 1998). They have a long history in validating science for the public as their origin and growth are closely linked to the growth of the scientific way of seeing the world.

This is also the history and background of Tromsø University Museum, the museum that hosted the production of the exhibition on enacting cod. The museum has a culture and a science department with researchers from a number of disciplines, as well as administrative staff with relevant museum expertise. It was established in the late 1800s and has played the role of medi-

ating representative and emblematic virtues of cultures and nature in the north of Norway. The museum history and technology, qualities shared with other museum institutions, provide challenging frames for the construction of narratives that convey a performative perspective on production of knowledge on nature. The narratives have been vividly expressed in texts. Two classics in the theoretical field, Latour (1987) and Callon (1986), both describe nature as socially constituted, performed and constructed through the acts of networks where humans and non-humans play various roles. Constructing visual narratives in museum exhibitions, however, is something different. This entails the challenge of mediating research, transforming text into visual expressions and using an institution, its people and technology, long known to display facts, for a different purpose; putting a critical focus on how facts about nature are enacted, produced in society, in science and in culture, implying, in fact, also in the museums themselves. Taking on such a task, one should expect institutional resistance – from museum employees, from museum technology and even from visitors. Given the museum reputation as an institution serving the truth – will visitors be willing to believe what they see when viewing a museum exhibition that invokes discourses questioning scientific authorities? Will visitors believe that also knowledge on nature is enacted?

In building the exhibition on cod we welcomed these challenges. We produced an exhibition that has been displayed in four locations in Norway a year after it first opened, and more museums want to present it. This article is about the process; developing the production-of-nature/production-of-cod exhibition took time. A team of researchers and designers, some

museum employees and others from various academic institutions played different parts in creating the final result. Interestingly, quite a great deal of power and persuasion had to be exercised at various crossroads to preserve the exhibition idea, i.e. to maintain the focus of exhibiting perspectives on cod, not the physical cod. The exhibition ideas encountered resistance from several parties. Colleagues, the museum technology and perhaps even the cod itself objected to the idea that nature is enacted in culture. In the following I will reveal aspects of the process of building the exhibition, its inspirations and challenges, as well as how the obstacles were dealt with it. I will point to factors that in retrospect can be seen as key success factors in creating the exhibition on enacting cod.

Before I start, however, it should be noted that I had some stakes in making the exhibition come true. As the project manager, with interdisciplinary training in fishery science, born in the land of cod and with a strong affinity to the fisheries, I wanted the audience to believe the message: Knowledge on cod is performed. Scientific descriptions of cod should be contextualized as historically and socially situated practices. Just as the cultural sciences have led to disputes in museums over issues of representation and their impact on identity construction, the natural sciences have also introduced issues. The target group for the cod exhibition was the adult population interested and involved in the fisheries, as well as people involved in the management of nature and the environment. The idea was to empower people who depend on cod for a living by presenting new knowledge on how definitions of cod are cultural. Thus, people should not be satisfied with a cod they do not enjoy, but interact in political arenas where cod is

defined and definitions can be changed. Furthermore, if people enjoy a particular cod, they should be aware of the fact that it could be in need of protection. As the types of cod are created, they can also be changed. By involving the public and questioning scientific authority on nature, we should make it possible for more people to partake in the discourse on what types of cod society should keep. As such, the exhibition idea plays into an important issue raised by Conn (2006:507), who addresses the fact that many science museums have given up on attracting the adult population as visitors, seeing their task as rather to inspire and recruit young people to the study of science. Conn advocates that science museums should take on the more challenging task of winning back a broad adult audience. Moving science into the public realm will enable us to make political decisions as better-informed participants, he maintains.

### **Stumbling first steps**

The idea for the exhibition grew out of a traditional research project on the politicized cod.<sup>2</sup> This project was situated outside the museum, but I was project manager, and my colleagues at the museum were enthusiastic about the idea of exhibiting the politicized cod. A science exhibition of this type would imply the mediation of contemporary research on and contemporary policies relating to fish. It could fulfil many goals relating to which directions the museum wanted to take in the future. Four researchers at the museum worked on developing the project ideas. Coming from such traditional museum disciplines as ethnography and folklore, with well-established experience of displaying coastal culture at the museum, this was a challenge.

Cod is important in the Norwegian coastal culture, especially in the north where the museum is located. Cod has been and still is a mainstay for fishermen, it is seen as a founder of the fishing culture, of coastal culture, and has been promoted as such in former displays of coastal culture. As I was the only person in this initial project group with the acquired taste for relational materiality and performativity (Law 1999:4), and its production-of-nature perspective, it was hard work to try to join efforts in seeing cod not only as naturally given but also as enacted in cultural and societal rules and regulations. One of the initial jobs for our team was to mobilize the same academic perspectives on the production of nature. This became especially clear in our first application for funding. It was addressed to the Cultural Research programme under the Norwegian Research Council, and we laid out sections from where we were to find examples of performative cod definitions. Four pages of the eight-page application were dedicated to science and management and their relations to cod. Three other fields of study were the cod and the fisheries, the cod in symbolism, and the cod and the small-scale fishing vessel. The research council was enthusiastic about the science section but they were more reluctant when it came to some of the other themes, and their approval for funding came with a warning: The application seemed to promise a “somewhat ordinary exhibition on coastal culture and management,” they said. They underlined the importance of having a focus on science’s contribution to definitions of cod.

The danger of being led by our museum expertise and technology to produce an exhibition on cod in culture instead of the other way around was going to be a constant concern throughout the project phas-

es. We had to constantly remind ourselves not to focus on what cod means in culture, its contribution to culture, but almost the contrary; what culture means to cod; how cultural perceptions influence matter, nature.

There were other challenges as well. In addition to focusing on how culture creates cod, we had to carve out ways of displaying that particular focus. Museum exhibitions have traditionally displayed objects as having inherent stories that are revealed in the display. Later critiques of these procedures have contended that very few, if any, objects fit this perception of displaying descriptive knowledge. Rather, objects contain meaning, and the displays are more inventions of knowledge than they are descriptive stories of inherent qualities of the objects (Lidchi 1997). For the story we wanted to tell about cod, there were clearly no ready-made objects that could reveal the story of perceptions of cod. The story had to be invented and objects gathered to produce it. The story, more than the objects, was to be in focus.

Adding to this challenge of finding the objects that we could imprint with meaning was the fact that the museum collections contain many objects that can tell stories related to cod. The fishermen culture, especially of the early 1900s, is richly represented in our magazines. But these artefacts could not describe the definitions of cod and the perspectives we wanted to display. These artefacts are loaded with other meaning. The long line made from the old material hemp and the torn woollen mittens made by fishermen’s wives for fishing cod in winter, relate the story of one particular cod – they tell about yesterday’s culture and where we originate from. Our exhibition was to tell more cod stories.

Struggling with these challenges we continued our efforts, which to a large

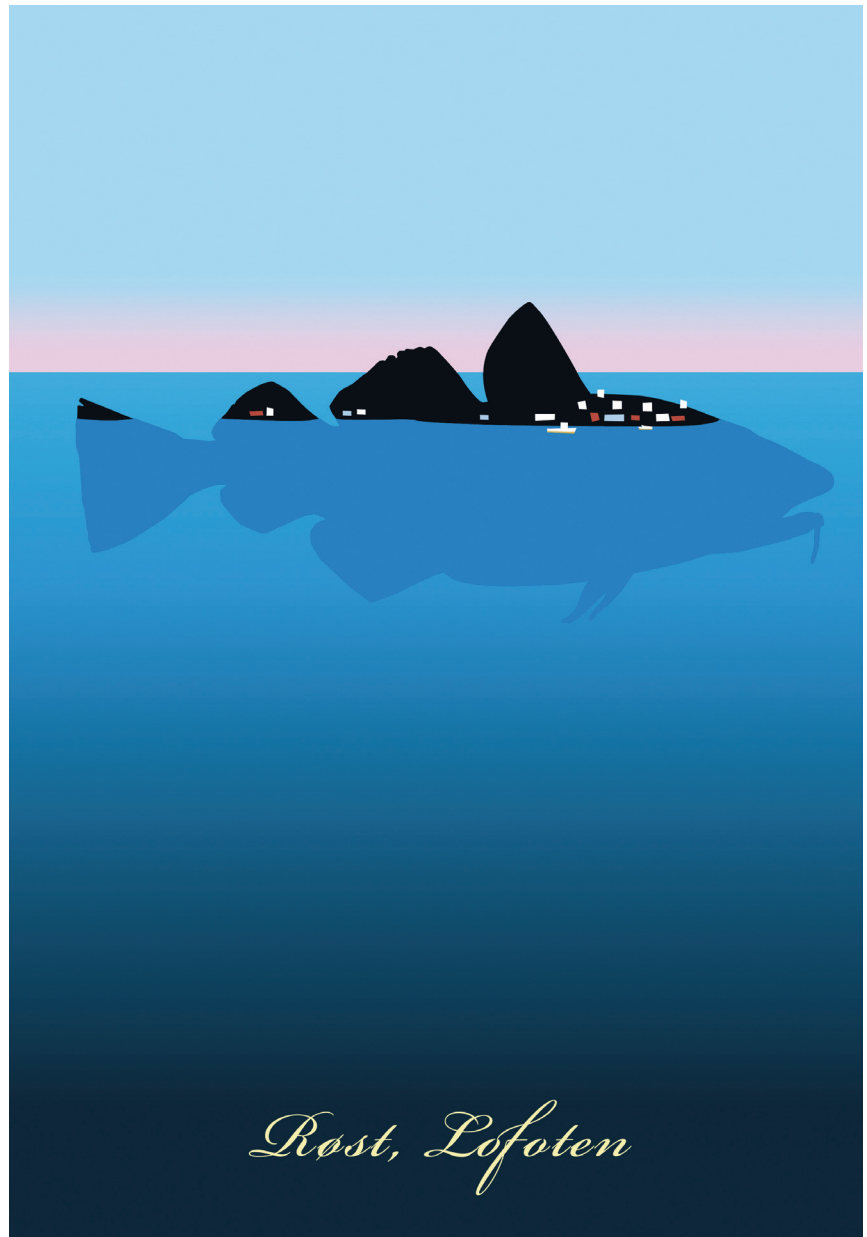
degree were about seeing the cod as created in culture. We held seminars with experts from outside the museum; expert researchers devoted to the theoretical perspectives of our project, and brought in expert designers to commence the process of planning the display. We moved in the right directions, but very slowly. Working on and off for a year we produced a re-written ten-page manuscript. We re-organized the cod stories into three sectors; society, politics and science. Science had a major part in this. We wrote about how scientific truths are established in networks where politics is in play, and the readers we contacted were enthusiastic: Networks or webs of power create cod – this would be something to talk about.

But we only had text. A good text, apparently, as the cultural research programme, this national institution of funding cultural research, supported the idea that the nature of cod had a place in a museum exhibition. They understood where we wanted to go by reading our text. They approved of the idea and relied on us, museum experts, to develop it.

As time went by, however, we discovered traitors in our midst. Museum colleagues expressed scepticism and voiced that as the museum is an arena for communication through artefacts, this manuscript and its theoretical perspective really should be a book! In other words, they posited, perhaps we should rather be writing a book on the subject. Others even found cod boring! We were not bored, however, and welcomed these suggestions as inspirational. Should we accept that the museum was unable to deal with the production-of-nature perspective? Should we accept that our university museum was incapable of creating a display highlighting these aspects of science? We approached a

local professional designer with extensive experience, also as a front cover illustrator for a trade magazine in this field, and this brought us further. His designs were very much to the point. **Plate A** illustrates an island community that relies totally on cod. As an image of coastal culture, the drawing is powerful. It is associative to a small fishing community's identity and the locals'

*Plate A. Røst, Lofoten  
Islands, dependent on cod.  
Graphic Design by Reibo  
AS.*



dependence on cod. It reinforces well-known stories in the Norwegian fisheries sector. Small communities consist of cod heroes! In one community called Røst, the locals produce NOK 300 000 worth of cod per capita – or NOK 800 000 – the figures used by writers on the subject vary.

The illustration is also useful as an image displaying the production-of-nature perspective. Along with the story about dependence comes a particular nature. The cod produced by people in small communities is healthy and has led a good life up to its capture, caught as it is under the picturesque mountains of the Lofoten Islands. Furthermore, this one image of nature is not only the property of Røst. It is how Norwegian cod is pictured in general. It is a Norwegian definition of cod, used in sales promotions, and to promote identities. Even if it is fished by trawlers in the Barents Sea or farmed in cages, as long as it is cod, it can be advertised in markets as a nature that has founded coastal culture, and its health and wildness have even marked the people involved.

Displaying this one image as in Plate A could invoke questions about the nature of cod, we thought. And together with other illustrations from the designer's hand the perspectives of the text started to acquire a life outside the text. The ideas in the exhibition were still close to a book, but this time a book with illustrations, and now, at least, there was definitely an opening for the possibility of an exhibition displaying text and pictures.

Museum colleagues were still critical and one comment was: "Is illustrating this little manuscript the right priority under a tight budget? Rather save the money for a real exhibition." This critique was also helpful. Searching for arguments, we realized that not only did the illustrations con-

vey that the text could be understood and mediated in other shapes than text, the ten-page manuscript, now with illustrations, also meant that potential financial contributors could also envision that this project might be fun to be a part of. The illustrations caught your attention, suggested humorous, interesting and important ideas, and brought the project closer to its goal. One of the reasons why the illustrations caught the attention of viewers was their ability to invoke the senses. I will have more to say about this below.

### **Taking control**

The initial muddling through phase lasted about two years during which we worked on and off for short intervals. The first project seminar was held in 2005. The cod was put on ice more or less through 2006, but in 2007 we started moving again and applied successfully for funding. Being supported by such institutions as the Research Council's programme for cultural research and the Ministry of Fisheries and Coastal Affairs was a real feather in the project's hat. Moving along enthusiastically, we made a few important organizational changes.

Having first tried to recruit more museum staff, it became clear that the project did not need more but rather less people involved. This was rather obvious in light of the cumbersome enrolment phase we had just experienced. On several occasions museum experts were invited to think tanks, but they were not easily motivated. We realized that the developers of the exhibition idea had to be keen believers in the production-of-nature perspective. Placing myself in a position of real power and as an "obligatory passage point" (Callon 1986), and recruiting only believers, was the next move, and this was a success. The new core



project group consisted of a professional Swedish designer, a well-informed assistant and very dedicated believer in the perspectives we were to use and develop, the folklorist from the original project group and the author of this text. The folklorist had in the meantime become a museum director, so she had less time to participate in the project, but her enthusiasm was not diminished. The extended project group included two university scholars dedicated to actor-network theory and one natural scientist, with extensive experience in developing and consulting on fisheries management. He was not an actor-network analyst, but was highly devoted to the exhibition ideas and perspectives.

With this re-organization, several controls were introduced. The majority of the group had similar professional backgrounds. We avoided being trapped in “competing epistemic cultures”, as Gieryn (1998) discusses with reference to the cumbersome building of the Enola Gay exhibition at The National Air and Space Museum in Washington in the 1990s. Ideas were basically developed by the designer, the assistant and I, then presented to the extended group for comments and further refinement. The fact that the assistant and I both had the same education background and were good friends allowed us to work very closely together, literally sitting in long working sessions around the computer considering formulations that we accepted or rejected. The blindness that might result from being two minds thinking alike was avoided to some extent by having the extended project group. The pragmatics of working in this smaller group is another important aspect. It was easier to keep the focus on track when there were fewer opinions to deal with and therefore decisions were made more quickly. In this

last and more intense phase of building the exhibition, decisions had to be made more or less on the spot. We set short timelines and were able to keep to them. Finally, we were determined that making the exhibition should be fun and that an important ingredient should be humour. Only those who thought the exhibition would be fun were allowed on to the team.

Having completed our reorganization, we picked up our pencils again, this time choosing the coloured pencils, together with paper, tape and scissors, as well as postcards, pictures and small pieces of wood. We worked with these tools on the advice of the designer. He stressed that there were many ways of building the exhibition, but the scientists had to be clearer as to what they wanted to say! Initially I did not understand this – we were clear, were we not? We had condensed a long story about cod history, cod management, cod in culture, cod in science – COD – to a ten-page manuscript. Could it be any clearer?

Well it could, and working with models, we realized this quite quickly. Now the scientists were challenged to speak a different language, that of design. In doing so, we invoked our senses. Together with the designer, we made little models from wood and paper, to scale, and as the miniature exhibition grew in front of us, on our small office desk, so grew also the understanding of what content the display should contain, and in what form. Sensing the feel of the visual outcome made an impact on what content we wanted to focus on and how.

Invoking our senses in this way was interesting. The common mediation instrument of scientists is the text. An exhibition is a visual display and appeals to the senses. The scientific message must appeal to the visitors’ senses and although designers are the expert performers in creating

this link, scientists should also take part in this work, employing their own senses. Acquiring a good feel for the visual display when it is being put together can be a powerful tool for scientific mediation. According to Farquhar (2002), bodies are more than slaves to the intentions of the mind. They have language and history and are responsive to specific built environments. Scientists have sensual experiences and expressions, and although they are as unevenly distributed among scientists as other people, there is much to be gained from triggering and using these aspects of mediation when working with the exhibition content. When I suggest a greater use of the more sensory encoded knowledge in mediation, I do not mean to say that this should supplant textuality. I see it more as Csordas (1994) does, who sees sensory encoded knowledge as a dialectical partner of texts. By invoking our senses, we could become dialectical partners with our own texts, and this, combined with the scientists' new way of approaching the exhibition, expanded the dialogue between research and design even further.

### Controlling the text

When it came to texts, we had decided to use large photos and illustrations that would pinpoint and frame sections where we could use themes to convey the production-of-nature perspective. If the text covered a large area, this would draw attention away from these panels and more or less ruin their aesthetic ability to carry the message. We decided to use small panels for text, below eye level, and on the advice of the designer, we calculated the number of characters that would fit the space we allowed for text. We more or less decided on a fixed number of characters for our text

on the production-of-nature. Our task was then to fit what we wanted to say into this limited frame. The work was both tedious and interesting, as we aimed to tell everything about the Norwegian cod fisheries and the accompanying science within a set number of words. At the same time, the things we said should have a production-of-nature perspective. The texts had to be painstakingly worked on, not only so they could convey meaning in a few words, but more so because according to our production-of-nature perspective, realities are also enacted in words, and texts are important authorizers of reality (Law 2004:88, Callon 2002). One proofreading comment we received can illustrate this. We had written: "The cod lives in tribal societies with different histories." The suggested change was "The cod has different histories in different areas". At first glance, the two sentences may seem similar in meaning. But their productive power varies a great deal. The first formulation suggests a reality that is unfamiliar – the cod has a life of its own, living out there and having arranged tribal societies. Of course, we do not know this for sure, but as we do not know, and as our point is to state how our knowledge of cod comes true because of various work performed on it, various direct or indirect enactments, including formulations in texts, we were reluctant to state that it has different histories. This would undermine the fact that there is much work behind the histories. The histories would become naturalized. By instead insisting on cod as a creature with its own agency we hoped to keep our visitors curious to knowledge about cod and why there are different cod histories. We thought our formulation could emphasize the cultural and scientific contributions to cod history.

Now, as stated above, we are not sure



about a reality consisting of cod with agencies and histories resulting from these agencies. What we do, however, is open the door to this possibility, and by doing so, we connect this with debates in the literature on production-of-nature. As Dam Christensen (2005) discusses, a science exhibition claiming to mediate research should relate, draw from and refer to debates in the field of research. It should be aware of the use of theoretical terms and the implications of using such terms. Concerning the implications, we are very well aware that our formulations have clear intentions. We intentionally try to create the illusion of other realities by insisting on cod agency, for instance. When we do this, we deliberately use our power as builders of a museum exhibition and as scientists familiar with certain analytical and theoretical terms in order to capture the visitor's attention and make her or him see that there are many types of cod. Had we not chosen to operate this way in text, and in pictures, we feared the visitor would see the cod differently, as nature. The hegemony of the nature perception of cod is so strong that we saw it necessary to use strong means to convey our message. As such, the texts on perspectives, or rather the words in the texts, almost obtained the status of artefacts themselves.

Another proofreading example can illustrate the need for our insistence on using a language familiar to the scholars of the disciplines we represent, even though this might be awkward in a popularized setting. In a passage where we stated that we assign many roles to the cod, we ended the passage with: "Laws and institutions define and lock perceptions of cod. As time goes by, the perceptions become naturalized and are impediments to other ways of seeing." The suggested change was to delete the sen-

tence on laws and institutions and only say: "As time goes by, we get used to our own image of the cod, and forget other ways of seeing it." The two statements relate to different realities. The first refers to a non-naturalized process of defining cod. Much work has gone into making the definitions; laws and institutions have been established, and these protect and give the definitions further life. The suggested change would only reveal the naturalized cod, disclosing and making invisible all the societal and cultural work that accompanies the production-of-nature perspective. The suggested change provides no explanation as to why we have a naturalized perception of cod.

### The result

Out of our work with models, words, messages, pencils, tape and scissors grew the form and content. The exhibition is organized into themes that I will say more about below. Large pictures 1.5 x 1.5 metres dis-

*Plate B. Section from the exhibition; the science. Photo by Bjørn Ed.*



play each theme. Small panels, 1.5 x 0.3 metres below the pictures provide the texts (Plate B).

The graphic designer provided more help with the text mediation. Small fonts on the text panels mean that the text does not impose itself on the visitor. She or he is free to read it in bits and pieces. The feedback on the texts has been interesting. People say that it is liberating to have so little text here. It is possible to read, they say. They are both right and wrong. The careful design of the text frames made the text readable, but it also allowed us to use words. The overall manuscript consists of 14 000 characters, i.e. four pages. The ten-page manuscript was now considerably pared down. However, it was still saturated with meaning and direction. For instance, while short, the introductory passage to the exhibition gives a definitive direction:

The cod is a globetrotter swimming in the northern seas. It travels by car, boat and plane to kitchens in distant continents. It has travelled for thousands of years. At home it has provided coastal people with food, economy, culture and physical and mental health.

The cod has many faces. Some see its societal value. Some see its economic value. Some see its ecosystem value. By choosing various places to see from, you may see cod you have not seen before.

So there you are – invited to see *the* cod and *many* types of cod. The text has resonance in the artefacts and pictures in the near vicinity to the text. The little text panel is sitting on a table of news articles on cod, revealing a politicized status. Next is a globe showing how cod has travelled, or rather conquered the world, as the little creature from Norway has visited almost

every corner of the world. On the same table is a large model cod on a pedestal. The panel that frames the section pictures various people holding giant cods. Fishermen, tourists, champions and chefs – they show us a big cod and they are all happy about it. The title of the panel is: “Super cod makes people super happy.” Nearby is also a display case with a short text stating that cod is involved in many coalitions, coexisting, but also in conflict from time to time. The display case has a cannonball, referring to the cod wars, a purse for a national costume, designed as a fishing net with trapped silver cod, referring to the symbolic use of cod, and a bottle of cod-liver oil representing its nutritional and traditional status.

From the choice of artefacts and the texts that accompany them we hope to set the scene very quickly: cod is many things, and very different things. It has different types of human supporters and different use. We can imagine that although the people holding the big cod all agree it is wonderful, they will talk differently about it. This is also shown in a short film, where eight people are interviewed, expressing different views on cod. The many different statements come more to the fore, however, in a section entitled “The many faces of cod”. The big panel pictures a giant cod face with the heading:

The cod has various societal missions. Dependent on perspective, we enact it as domesticated, as an environmental symbol, as a founder of society and much more. Laws and institutions define and determine perceptions of cod. As time goes by, the perceptions become naturalized and are impediments to other ways of seeing.

Below this panel is a table illustrating nine varieties of cod, as seen in culture. We wrote subtexts for the nine types of cod and these are rich in meaning. One example is the text for the face we call “The Culture Cod”. The illustrations were also used as an exhibition poster and the culture cod is situated at the top right corner of the poster (Plate C). It is dressed in an archetypical Norwegian icon, that of *rosemaling*. The subtext reads:

Journeys along the coast in search of cod have developed hospitality, openness and understanding for fellowship and differences. The cod has created coastal culture featuring Danish pastry and silk scarves for stalwart women who deserve it. It has given furniture factories and industry development. The kids cut cod tongues and buy computer games. The cod creates Norwegian, Nordic and European fishing champions – and has its own world championship in Svolvær each year. It is celebrated in stockfish festivals in Bodø and Bergen, Anacona and Sandrigo. It provides recreation to more than 224 000 foreign tourists in Norway. The traditional subsistence fishery is challenged by sea-fishing rods and ‘catch-and-release’.

The text is poetic, and plays with known discourses in Norwegian society. Some see the northerners as hospitable, open and friendly. That is their true identity. Others disagree and call this a myth. By focusing on these known debates and statements, resonating with and appealing to the visitor’s own knowledge and identity, our intention was to place people centre-stage, instructing them in their own contributions to the creations of cod (Bouquet

1998:167). In doing so, we hoped to initiate the idea that people can partake more consciously in the constructions of cod. Facing cod-stories that they enjoy or disagree with, they should be able to see their future role as cod creators.

The human efforts behind the Røst-cod image, for instance, should be clearer now. As pointed out above, successful sales of cod have used the image of Røst cod. There are of course also actual sales of cod caught on Røst, but Røst perceptions of cod have value that goes beyond their actual catch. And it is important to see this. If people in Røst, and similar places, want this part of nature to continue to exist, they must raise their awareness and make use of the fact that they are dealing with more than a natural cod. They are also dealing with a societal cod that has to be defended in political arenas.

The fact that cod has roles that can be politically fought for because they are subject to change is further illustrated by another face; that of the domestic cod. The contribution of science and politics to the domestic cod is quite visible, as we also state in the text:

10 million cod live in sea cages along the coast. 40 million coastal cod have obtained new neighbours. The next decade will be the era of the cod, states the seafood analyst. Sales of farmed cod can be close to unlimited. The cod is difficult to keep in the cage. It is the Houdini of fish, a breakout king on an eternal hunt for openings. Scientists have found the cod to be a wizard. It can be trained with light and sound, its memory lasts for three months, maybe it will learn to live the good life in the cages.



Plate C. *Nine faces of cod.*  
Graphic Design by Reibo AS.

Many of the mentioned sections of the exhibitions visualize that cultural production of cod takes place, and as just indicated, that science may assist this production. Developing the science section was, however, the greater challenge. Inspired as we were from the studies of laboratory work and science-in-action (Latour 1987), from

an early stage we had thought of presenting science in a network approach, focusing on how it is embedded in history, politics and culture. But how to do that was another matter and a complex issue. We concentrated on focusing on the close link science has to management, and how political and historical relationships between science and politics influence science. One of these displays was a “table of management”. The table was shaped like a cod and had 12 chairs around it to represent the various parties interested in cod. The table is a real institution in the definition of cod, as important negotiations on cod take place around tables. The texts supplied information on such negotiations. We focused on how cod quotas arise. First scientists calculate the fish in something they call stocks and stock sizes. They suggest a number to the politicians, and the number is negotiated with the Russians, as the ownership of cod is bilateral. The fact that the advice of scientists is very seldom followed, implying that political enactments of cod stock size are important, was illustrated in a figure comparing advice and actual quotas from 1975 and onwards. In most years, the political quotas exceeded the scientific advice. And by presenting the small number of chairs, we hoped to show that there are far too few participants in the creation of fisheries policies. Representatives from the general Norwegian public are not sitting around the “table of management”. Again, our intention was to place people centre-stage, appealing to an understanding of the production-of-nature perspective through their recognition of how they participate, or in this case, do not participate, but let other people do so for them, in political and cultural channels.

Finding a more profound way of displaying how the scientific cod has a histori-



cal and political past, present and future, perspectives that the project participants had written articles on (Maurstad 2008, Johnsen 2004, Holm et al. 1998), was more problematic. But we made an effort. Under the heading “The scientists see the cod” we placed a large panel-size picture of an early Norwegian cod scientist, Johan Hjort (See **Plate B**). The intention was threefold. First, we wanted to point directly to the importance of man in the definition of cod. Second, we addressed how man’s work on cod creates path-dependent routes for knowledge development. And third, the section illustrated the growing complexity in science, implying its diminishing accessibility to non-experts. To stress these messages we focused on work on year-class strength. Following in the footsteps of the scientist Georg Ossian Sars, Johan Hjort stated that the cod catch variations, a case long voiced as problematic by fishermen, was dependent on and due to yearly variations in year-class strength. The phenomenon year-class strength was further presented on another panel with the heading “Cod as year-classes and as stock”. We provided animation based on scientific input, presenting cod history in year-classes from 1946 and onwards. Such a story is impressive. Scientists can present the cod as five-year-olds in 1947, and four-year-olds in 1952! The model represents powerful enactments of cod back in time. The growth in complexity was further illustrated on a panel modelling the complex scaling of fisheries. The model included the new research vessel “G. O. Sars”, where the heading read: “From Georg Ossian Sars to ‘G. O. Sars’” implying, evidently, the transition from the simple to the complicated, from man to technology.

The importance of man was emphasized more in the text panel below the large picture of Johan Hjort. Here we presented

small pictures of the six researchers involved in the exhibition’s final phases, that is the assistant, the above-mentioned experts and me. The subtext read: “Johan Hjort saw the cod differently than Georg Ossian Sars. The researchers behind this exhibition see it in their ways.” Having situated ourselves, we hoped to draw attention to the fact that we were not dealing with truths. We were also scientists viewing cod – our way.

The exhibition did, however, tell some truths. We had other, more informative sections. One was on food. We presented traditional dishes and modern dishes – maintaining that although cod can be transformed into wonderful meat analogies; chops, medallions, loins and so on, it also still functions as traditional food. Another section provided statistical and historical information on cod. The statistics we focused on were numbers for catches, structure of the fleet catching cod and geographical distribution of landings. The statistics were carefully chosen to give an overall impression of the fisheries, but also to present images that we thought people were unaware of. For instance, cod is important in Norway, but four of Norway’s 19 counties stand out in this connection: 96% of the 200 000 tons of cod are landed here on a yearly basis. And 200 000 tons of cod is a huge amount. If all the cod were to be eaten domestically, the Norwegian catch could in fact feed every Norwegian inhabitant 111 dinners a year. Fishermen work on both small and large vessels, but there is a majority of smaller vessels. More than 6000 of Norway’s 7000 vessels are under 15 metres long. The average catch for the smaller vessels is 10 tons, while vessels exceeding 28 metres have an average that is 37 times that amount.

When it came to the history section, there were many events we wanted to point

out as being important for the status of cod today: The fishermen's union, the sales and export organization, the establishment of the 200 mile Exclusive Economic Zones, the development of a scientific-bureaucratic fisheries management, the negotiations and cooperation with the Soviets on quotas, the change in everyday life of the commoner, rural depopulation and so on. Creative expert filmmakers assisted us. In ten short film clips, all together four minutes long, we were able to tell the story of these "central events in the cod's life", as we put it literally. The clips were also told with a great sense of humour, making this history section quite a success.

### Discussion

The exhibition was enthusiastically received. "Fantastic display!" has been a common response from visitors. People seem to enjoy seeing the cod on display. The question is what cod they see. The exhibition says different things to different audiences. Some satisfied visitors see an attempt to question relevant discourses in science and politics today – how are some truths about the world made? Others are visitors who are happy to enjoy the cod, and find it to the point that it has (finally) been put on a pedestal, important as it is to our culture. We are happy to please both groups. We can add, however, that our initial ideas about the exhibition had less of a focus on cod the hero. But to our surprise, the cod somehow claimed its place in the limelight as the exhibition ideas developed, and this insistence of the cod itself was what we surrendered to. We gave it a place on the pedestal where it could sit and look at us and our efforts to understand it.

According to Topham (2004: 437), we could discuss how we were enrolled by our

own messages: "When the members of an audience accept the appeal of the scientists, the scientists also to some extent take on board the interests of the audiences they have enrolled." Having worked in, with and for our coastal audience for a long time, we have some knowledge about these visitors. Acknowledging the cod in this way was really a method of showing respect to the cod, a respect that we saw as not only ours, but as also coming from the coastal people.

Sitting there on its pedestal, however, it may appear as a traitor to the production-of-nature perspective. It is so real – it is very well modelled. Girls even kiss it, and have their photo taken with it. Ironically, the plastic modelled cod enforces its nature and may deflect attention away from questions on how it is constructed. We accept that. We never meant to question if there is nature – surely there is – our questions concerned what we could say about nature. The cod on the pedestal expresses this double meaning.

The fact that there are many ways of understanding our displays does not present a problem. On the contrary, our target groups are quite varied. Talking to a multitude of visitors informs the exhibition perspective in other ways than academic texts do. And although we present a production-of-nature perspective, we also take on a humble attitude. We have no correct answers as to what production is truer than the other. Our aim is to inspire visitors to ask questions about scientific truths and their construction and we hope to have put enough ingredients and directions in the display for people to do this themselves. Although we insisted that the texts about the cod should be seen as performed, we do not insist that certain conclusions should be drawn. Nature is produced, we say, but



how and with what consequences is not for us to decide, nor for anyone else at the moment, but “what kinds of ‘nature’ are subject to what kinds of ‘constructions’ and with what consequences” is a rich and interesting question for further research (Castree 2003:205). For now it is important to see that there are these processes. One hope is that the exhibition encounters critical reflection as it travels, and contributes, not only to education, but also to debates and dialogues where scientists and other people can discuss what cod society wants, or in a more moral sense, should have.

#### **Communicationg cultural performances of nature at the museum**

In my introduction I stated that I was interested in the challenge of mediating science’s performative role in the construction of nature in a museum exhibition. I saw the problem as one of technique and perception – how should one translate the text into the three-dimensional museum medium, and how could one gain acceptance for a perspective questioning scientific authority, told by an institution that for a long time had been occupied with validating science for the public. Having analyzed and described the process of building the exhibition, I find some key success factors that worked: *First*: it was necessary to put into practical use the insight we gained from network theory on centres of calculation and their powers. The first attempts to enrol a large group of museum experts as project participants failed. The exclusion of the disinterested and the inclusion of the interested put more control into the project manager’s hands, and it guided the project in the right direction. It also narrowed down the number of epistemes that had to

be enrolled and controlled for the project to be a success. *Second*, participating as a scientist in the entire process, not only as the informed scholar, with respect to what textual messages we were to convey, but also to let oneself be immersed in the actual design and building process engaging the senses was another key factor in increasing the communication between research and design. Related to this is a *third* success factor – to activate point two, the designers have to be good, in fact very good to inspire and invite researchers to enter a new field, that of using the senses as a tool in conveying scientific messages. *Fourth*, it was important to discuss the professional qualities of the multidisciplinary training of many of the participants of the enrolled project team. In the extended project group of six members, four had the same interdisciplinary background, master and doctoral degrees in fishery science. The fifth, the folklorist, was married to a biologist who again was a colleague and friend of the biologist in the project group. Our joint and individual knowledge of the natural, social and cultural disciplines was fruitful and enhanced our capacity to talk of scientific knowledge production and the display of it. Finally, a *fifth* success factor for enabling an exhibition on performative aspects of knowledge production was focusing on a known and dear figure, the cod. The cod kept the procedure somewhat simple: We had a lot to say, but we concentrated on one species in nature. Our examples all related to cod, instead of relating to more diverse situations of creating nature. By focusing on a known creature, the exhibition messages could play with and activate reflections relating to the visitors’ own knowledge and experience. Bringing this known figure and perspectives on the knowledge about it into the museum also

set the scene for new understandings. Cod has rarely been talked about in museums, particularly not as having many faces, all dependent on who is voicing its case. In conclusion, and following up on my earlier point of how cod has partaken in and commented on the exhibition ideas, I think it is fair to say that the cod itself was very helpful in laying out perspectives on how society produces knowledge on nature.

## Notes

1. Tromsø University Museum, Department of Cultural Sciences, in cooperation with the Norwegian College of Fishery Science, and the Institute of Marine Research. See [http://www2.uit.no/www/ansatte/organisasjon/hjem/artikkel?p\\_document\\_id=105410&p\\_dimension\\_id=88178](http://www2.uit.no/www/ansatte/organisasjon/hjem/artikkel?p_document_id=105410&p_dimension_id=88178) or <http://uit.no/11/5052/26> for further information, in Norwegian. A catalogue, in Norwegian, can be ordered at the museum. Maurstad and Braathen (2009): *Se Torsken. En utstilling om torskens mange ansikt*. Tromsø Museum Universitetsmuseum.
2. "The politicized cod – contested knowledge in troubled waters", Northern Research Institute, Tromsø.

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