A world in a grain of sand

A conversation between Nils Bubandt and Nanna Debois Buhl

Nanna Debois Buhl:

I am interested in how different types of landscapes—and different ideas about landscapes are often related to political ideas; at the same time landscapes have their own inherent agency. Looking at Køge Bay Beach Park near Copenhagen, the landscape we are surrounded by, we see an area established during the 1970s with two main purposes: recreation and coastal protection. The landscape stems from increasing wealth and urbanization on the one hand, and a need for protection against the forces of nature (flooding) on the other. I would like to talk to you about how this landscape is composed of various components and forces.

Nils Bubandt:

I agree with where you are going here. For me, this area, where we are standing, is an incredibly instructive example of an anthropogenic landscape, a biotope remade by human industry, but still exceeding it. Køge Bay Beach Park is a 5-square-kilometer area constructed mainly with sand drained from the sea floor. This constructed landscape was part of a post-war social democratic dream, which aimed at creating recreational and "natural" areas for the growing working class in the Danish capital area. In this one parcel of reclaimed land, one can trace a cultural imaginary of nature, a political project, and a social history.

Nanna:

You have referred to the notion of "the Great Acceleration," a description of the sociopolitical accelerations and accelerations of changes in natural systems beginning in the post-war period. Can we see these movements expressed in the landscape around us?

Nils:

The Great Acceleration is the name of a theory, proposed by climatologist Will Steffen and others, which states that the global impact of humans on the world's systems has grown steadily since the Industrial Revolution and has accelerated dramatically since the end of the Second World War. We can see, for instance, an exponential growth in CO² levels, in pollution, in ocean acidification, in deforestation, in agricultural land use, in urbanization, in energy consumption. There seems to be a direct causal link between these and other parameters of exponential growth of human consumption and production, on the one hand, and dramatic changes to the natural environment, on the other. The landscape that surrounds us here is very much an effect of these accelerations. And while the coastal protection created here around 1980 most likely wasn't done in acknowledgement of global warming and rising sea levels, it has become increasingly relevant since the area was established. I think it is fair to say that Køge Bay Beach Park is a landscape of the Great Acceleration. At the same time, this landscape is also a fairly ordinary, even banal, Danish landscape. But finding these accelerations even in the banal landscapes of the Global North carries an important message. We tend to think that the effects of the Anthropoceneglobal warming, species depletion, environmental destruction-only happen "elsewhere" because they often are more noticeable in other places such as the Global South. We have to learn to see how they also happen here.

Nanna:

The landscape here was planned to resemble the beach landscape of Thy on the West Coast of Denmark. Dunes were established and 2.6 million marram grass plants from Thy were planted here, by hand and by machine. Apart from being a geographical reference, the plants also served to prevent sand drifting due to their long roots. From a historical perspective, it is interesting to think about how in the Baroque garden it was very clear for whom the landscape was established. There was symmetry and axis that led through the garden towards the castle and the equestrian statue. The Romantic garden, by contrast, had curved sequences and



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smaller areas with various types of plants with various geographical references. An interesting aspect of the landscape that surrounds us here is that, while highly planned and regulated, it is based on the Romantic idea of a landscape that looks like wild nature.

Nils:

That is a great point. Might one also think of "Romantic nature" in comparative terms? The notion of "wild nature" has specific histories in specific sites. In Denmark, the idea of the West Danish moor landscape being the guintessence of Danish nature was fostered by the Romantic movement of the 19th century. This was ironic, because the moorland itself was an "anthropogenic landscape" created by deforestation and sheep farming in these regions since the 16th century. But this earlier history did not register: in modern Denmark dunes and moors became the epitome of "wild nature." So Køge Bay Beach Park is modelled around a historically specific notion of "wild nature," one that became a political model. We need to see "nature" comparatively to see how differently "nature" is conceived in different places.

We also need comparison to see how "nature" is implemented in a place like Køge Bay Beach Park. Paradoxically, it took a lot of effort and technological experimentation to implement and maintain this "wild nature." The marram grasses did not grow by themselves, for instance. In the process of establishment, the plants needed watering. For this, methods that had been developed when draining the Dutch diked marshland were used. All this points to why comparisons of nature are important: it took technology from the Netherlands to implement the "wild nature" of the Danish West Coast here on the East Coast of Denmark.

Nanna:

In the middle of this beach landscape, the ARKEN Museum of Modern Art is situated. The museum was established in 1996, and its location was originally meant to be at the coast. But already at that point, the coast was protected area. Therefore, in 2016 a canal was dug around the museum, which

Nils: I think that current ecological thinking to a high degree is driven by the acknowledgement that we are experiencing a decreasing number of species in the world around us. Therefore, biodiversity is a new ideal within urban planning and decisions around preservation. Biodiversity was outside the understanding of what nature was and ought to be in the social democratic vision of creating recreational areas of the 1970s. On the contrary, there was a political dream about creating another world where human wealth and human happiness was in focus, and where "the good life" was connected to recreational possibilities, but in which nature was merely "the backdrop." In recent decades, this has changed dramatically as it has become evident that human welfare and ecosystemic sustainability-what one might call "nonhuman welfare"-are inextricably linked.

then became located on a small island. While Køge Bay Beach Park was established during the late 1970s with the aim of creating an area of recreation and coastal protection, biodiversity was high on the agenda when the landscape on the new museum island was planned some 35 years later. The landscape architects envisioned the museum island as a small kind of botanical garden of different beach landscapes with many species, but due to the regulations of the area at large, in the end primarily species already found in the area were planted. How do you think we can see different political visions expressed in the landscapes of 1980 and of 2016, respectively?

So how are we to understand these changing perspectives? Biologists speak of "a shifting baseline." This refers to the idea that every new generation of biologists tend to forget that they use the nature of their youth as a standard for what "nature" is, and base their decisions for regulations on that standard. We tend to forget that the nature of our youth has its own prehistory. Anthropogenic landscapes like this one encourages us to remember such forgetting. It has taken a fossil fuel production system, a welfare state economy, tractors, and rubber watering tubes to create Køge Bay Beach Park. Indeed, the landscape has been described as a "wild landscape created by humans and machines." This phrase also nicely encapsulates our current moment.

Nanna:

We have previously talked about how climate change on the one hand will cause a decrease in biodiversity, but also how it might cause better life conditions for specific species on the other. That the numbers of medusa jellyfish will increase as the temperatures of the oceans rise. But also, that we in the future might see rats the size of sheep to fill in ecological niches vacated by species driven to extinction. This has some frightening perspectives.

Nils:

Yes, that is true. Entailed by what you say here is the need to break with another conventional idea of "nature" that we have "inherited" from Western philosophy. For we tend to think of nature as somehow vulnerable or fragile. This narrative is based on the idea that humans are active and nature is passive. But in the Anthropocene, the separation of humans from our nonhuman companion species (fungi, bacteria, animals, and plants) is crumbling across all microscopic membranes and all macroscopic borders. We are all-for better or for worseconnected. And nature is not fragile: the storms, jellyfish blooms, and floodings of the Anthropocene are monstrous. The question is: how monstrous do we want the nature of our own making to be? The problems of our age are extremely complex, but they force us to rethink our relationship to the world that surrounds us. Our challenge is to be able to think about differences and similarities in new ways, which not only create good life conditions for people in the Global South and North, but for other species as well.

Nanna:

In the landscape here we also see examples of nature's agency. The landscape has come to house species that weren't expected. At the same time, the high population of wild roses has begun to cause a problem, as the plant tends to get the upper hand over other vegetation in the area.

Nils:

Yes, it is really interesting—and instructive for the

Anthropocene elsewhere, too-how nature "talks back" in various ways even in this extremely managed landscape: a protected species of green toad and five species of bats have been observed in its lake-area, even though biologists maintain that the area is not suitable for any of these species. The area has also, as you mentioned, experienced an unexpected increase in the population of wild roses because these roses cultivate symbiotic relations with the fungi that grow on their roots and help them extract nutrients from the sand. The roses are so successful, in fact, that they threaten to take over. Now city planners have to decide whether to begin removing the roses they themselves planted a few decades ago. This illustrates some of the problems which often occur when we humans try to handle nature. Anthropogenic nature tends to have unforeseen consequences that outgrow our intentions.

Nanna:

At the level of particles, the landscape here is also composed of various elements: Back in the 1970s, when the area at large was established, sand and stone were transported from further out in the bay, but at some point, there was not enough material, and therefore large amounts of stones were brought over from Southern Sweden. In some parts of the area, industrial landfill was used in the foundation of the landscape.

Nils:

One might say that there is both a mental geography and a material history embedded in this landscape. Just as the landscape at the level of the imagination is composed of elements from the Netherlands and the West Coast of Denmark, it is also concretely composed of materials from elsewhere. This is an example of how landscapes not only are places where different species live, they are also the composite results of material histories. It is not only the loss of species that we tend to become too blind to see, but also the way history is materially embedded in a landscape.

Nanna:

Many thinkers have lately been pointing to that, due to the complexities of the problems of our age, it is

necessary to embrace a thinking across disciplines, and thereby across scales. And scale is as well associated with time, the notion of *deep time*, with looking at things from a longer perspective in time. Also in this man-made biotope, connections can be drawn between particles and larger global patterns.

Nils:

Exactly. The waste in the geological sediments of the "natural landscape" of Køge Bay Beach Park is an ironic reminder of a material history of industry and consumption that is both peculiarly Danish, but also part of the global Anthropocene. To fully understand the "naturecultures" of our time, a thinking must be fostered that can handle the near and the distant within the same analytical optic. Our analysis should also be able to understand multiple kinds of temporality. The temporality of a microbe, after all, is different from that of a wild rose. The oil that we can trace in the sandy soils here will remain for a very long time. Its temporality is very different from the temporality of the oil industry that deposited it here. The age of the Anthropocene is usually described as the moment when human history critically engages with geological time. Oil is a material trace of a double temporality: it was created within a very long geological time horizon, but its extraction, which has accelerated over the past 150 years, has shaped the world of today.

Nanna:

In my project, I have worked visually and conceptually across multiple scales. When looking at an insect wing up close, you can imagine a landscape in which the microscopic and the geographic are fractually related. I think it is extremely interesting how this fractal notion, as we have talked about, can also be applied when studying the landscape around us; for every stone you turn, a new biological habitat come into view, a small microcosm that has connections far beyond the horizon of what is immediately visible.

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