The Anthropocene Review
http://anr.sagepub.com/

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The Anthropocene Review 2014 1: 207 originally published online 16 September 2014
DOI: 10.1177/2053019614550533

The online version of this article can be found at:
http://anr.sagepub.com/content/1/3/207

Published by:
SAGE
http://www.sagepublications.com

Research article

THE ANTHROPOCENE REVIEW

The Anthropocene Review
2014, Vol. 1(3) 207–224

DOI: 10.1177/2053019614550533
anr.sagepub.com
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Three galleries of the Anthropocene

Libby Robin,[1] Dag Avango,[2] Luke Keogh,[3] Nina Möllers,[3] Bernd Scherer[4] and Helmuth Trischler[3]

Abstract

This paper considers three 'galleries' that explore the Anthropocene in cultural ways, and the implications of the Anthropocene idea for cultural institutions and heritage. The first gallery is the 2014–2016 exhibition *Welcome to the Anthropocene: The Earth in Our Hands*, [*Willkommen im Anthropozän: Unsere Verantwortung für die Zukunft der Erde*] at the Deutsches Museum in Munich. The second 'gallery' of Anthropocene Posters sponsored by the Art Museum, Haus der Kulturen der Welt (HKW), placed the Anthropocene in a 'museum without walls' in the streets of Berlin in 2013. The third 'gallery of the Anthropocene', was not a museum, but rather a landscape gallery (or 'spectacle') of in situ industrial heritage in Svalbard. Pyramiden, a town established to mine coal well north of the Arctic Circle in the early 20th century, has been recently transformed as an attraction for climate change science and heritage tourism. Here the hybridized local landscape creates a snapshot of the Anthropocene, bringing together industrial coal-mining heritage buildings, polar tourism and science forged in the geopolitics of the changing Arctic environment.

Keywords

Anthropocene, community participation, Deutsches Museum, environmental crisis, environmental humanities, global change science, Haus der Kulturen der Welt, museum exhibitions, Pyramiden, Rachel Carson Center

As global warming and climate change begin to affect different local communities in very different ways, museums become places for personal reflection on the future of the planet. The public is thirsty for clear information and nuanced discussions on environmental change at both local and global scales, but there are few opportunities for serious conversations about these issues that are inclusive of diverse audiences, and people of all ages. Museums focus on the material world: objects, artworks and historical collections. Such materiality can be helpful in environmental

[1]National Museum of Australia, Australia
[2]Royal Institute of Technology, Sweden
[3]Deutsches Museum, Germany
[4]Haus der Kulturen der Welt, Germany

Corresponding author:
Libby Robin, National Museum of Australia, GPO Box 1901, Canberra, Australian Capital Territory 2601, Australia.
Email: libby.robin@anu.edu.au

discussions, which are often abstract and filled with modelling that is beyond the mathematical literacy of the general public. Objects reach beyond the limitations of words, speaking directly to people without the limitations of language (Bennett, 2001, 2010).

This paper explores three real and very different 'galleries' of the Anthropocene. It considers how the material display of objects can foster conversations about living in times of rapid environmental change. Global knowledge is most commonly either narrowly scientific or packaged simplistically by the 'fast and furious' commercial media (Christensen, 2013). In museums, there is a space to sponsor a 'third way'. The exhibition is an example of *slow media*, a forum for thoughtful reflection. By analogy with the slow food movement, the slow medium of a museum gallery offers room to explore the complexities of a rapidly changing world on a personal scale. The very pace of a museum visit and the process of engaging with physical objects and artwork is itself helpful for enabling participation and discussion about the factors driving accelerating change in the 21st century, a time where change has become so widespread that a new geological epoch, the Anthropocene, has been proposed (Crutzen, 2002; Crutzen and Stoermer, 2000). Time spent with well-chosen displays, perhaps enhanced by casual companionship with other visitors in that gallery space, can give individuals and communities the chance to respond to a spectacle where they can 'reshape media content as they personalize it for their own use' (Ekström et al., 2011: 1).

The big narrative of the Anthropocene is that human activities are shaping the way the planet works. While it was atmospheric chemists who proposed the new geological epoch of the Anthropocene in 2000, the concept held immediate appeal for global change scientists more broadly: oceanographers, glaciologists, environmental physicists, soil scientists and geologists were all discovering patterns of unprecedented change in their respective long-term data sets (Zalasiewicz et al., 2008, 2011). The *metaphor* of the Anthropocene (Larson, 2011) has also proved attractive to artists and humanists, who are exploring the implication of geological 'deep time' changes on how people respond emotionally to our changing Earth (Autin and Holbrook, 2012). The concept gained sufficient traction by 2014 to justify the creation of this new interdisciplinary journal, *The Anthropocene Review* (Oldfield et al., 2014). The journal showcases much truly interdisciplinary scholarship and scholarly debate about how to conceptualize the Anthropocene, as well as offering commentary on what should be its starting point and critiques of the profound moral issues raised by imagining humanity as a singular geological driving force (Malm and Hornborg, 2014).

The concept of humans 'changing the face of the Earth', to use a phrase from the famous Princeton conference of 1955 (Thomas, 1956), has a longer history than the Anthropocene (Warde, 2013: 98–100). There are debates about when the Anthropocene began: was it the agricultural revolution (Kaplan et al., 2011), the industrial revolution (Crutzen, 2002), the atomic bomb (Masco, 2010) or even the Stone Age (Doughty, 2013) that triggered the human signature in the planet's system? Whichever origin story they prefer, most proponents agree that there has been an acceleration of change from the 1950s onwards, the 'Great Acceleration', called by some the 'second stage' of the Anthropocene (Robin, 2013; Steffen et al., 2011). The 1950s may even become the 'first stage' for the stratigraphers, as they need to identify material change in the lithosphere to mark and adopt formally a new stratigraphic epoch (Zalasiewicz and Williams, 2013). Such change is provided by the nuclear signatures in soils and sediments from the 1950s (Masco, 2010). Museums are also concerned with the material world: they have collections and galleries that explore the meaning of objects. This chapter explores some possibilities for using a museum context to help understand the Anthropocene. A museum gallery offers audiences concrete ways to think about this concept, which is abstract in both space and time. In each of the galleries documented here, the Anthropocene idea has moved beyond stratigraphy and natural science, and expands the humanities to engage with the moral and ethical context of global dynamic change.

We first consider the 2014–2016 exhibition *Welcome to the Anthropocene: The Earth in Our Hands* [Willkommen im Anthropozän: Unsere Verantwortung für die Zukunft der Erde] hosted by the Deutsches Museum in Munich, a traditional science and technology museum. Our second 'gallery', is the outreach Anthropocene poster project of the Art Museum, Haus der Kulturen der Welt (HKW) in the streets of Berlin, as a 'museum without walls' (Friman, 2006; Malraux, 1965; Meades, 2012). The third 'gallery of the Anthropocene', was a whole landscape spectacle (Ekström et al., 2011), of in situ industrial heritage in Svalbard. Pyramiden, a town established to mine coal well north of the Arctic Circle, has been transformed as an attraction for climate change science and heritage tourism. Here the hybridized local landscape creates a snapshot of the Anthropocene, bringing together industrial coal-mining heritage buildings, polar tourism and science forged in the geopolitics of the changing Arctic environment.

The Anthropocene at the Deutsches Museum, Munich

Background

Why is it that the Deutsches Museum in Munich has become the home for the first large-scale special exhibition solely dedicated to the Anthropocene in the world? Of primary importance, it can draw on the objects and collections of the world's largest Science and Technology museum. It also has the expertise and networks of the Rachel Carson Center for Environment and Society (RCC), an international research center in Munich supported since 2009 by the German Ministry for Education and Research (Keogh and Möllers, in press). The RCC is dedicated to furthering research and discussion in the field of international environmental studies and to strengthen the role of the humanities and cultural institutions in current discussions about environmental policy. Alongside its academic activities and a strong international fellowship program, the Center's mission includes an obligation to public outreach. Working in partnership with the Deutsches Museum has proved a powerful way for research to influence big, diverse public audiences (Mauch and Trischler, 2013: 6).

The Deutsches Museum was founded to promote the principles of science and engineering in the early 20th century. German engineers sought social acknowledgment for their creativity and innovation, reinforcing their role in steering and planning a new modern society. Led by advocate, electrical engineer Oskar von Miller, professional engineers sought a space where technological achievements and inventions could be presented as cultural and artistic masterworks. The prominent engineer Rudolph Diesel and many other influential supporters swung in behind the idea of a museum that communicated the importance of engineering achievements to the general public, and asserted their cultural value to the nation (Füssl, 2010: xv). In 1925, the Deutsches Museum finally opened permanent galleries on 'Museum Island' (formerly known as 'Coal Island') in the Iser River in central Munich. The museum's initial focus was on 'masterpieces', galleries assembled as progressive histories of scientific and technological development. Rows of objects were arrayed, starting with older, simpler versions and, often supported by gifts from industry, ending with the newest and most 'advanced' technology. The successive lines of objects in the exhibitions reinforced a message about the linear advancement of technology, the progressive view typical of engineering at that time. The museum drew on traditional basic sciences and applied technologies from physics, geology, astronomy and chemistry to energy and mining technologies. Its industry support drove exhibitions of transportation and household appliances. Neither the environment nor the social context of the new technologies was included in such exhibits. Nature was not a subject of inquiry or display.

Over the century, the scope of the Deutsches Museum has broadened to include a range of exhibitions and collections including those that engage with environmental issues and other aspects of technology in society. In 1992, the year of the United Nations conference on the Environment at Rio, the Deutsches Museum opened a gallery *Environment* [*Umwelt*]. Following the museum's original mission to trace 'development', the new notion of 'sustainable development' (Brundtland, 1987) inspired a gallery that took in very different ideas, including population growth, fossil-fuel use, the hole in the ozone layer, recycling, and water and air pollution. In general, this exhibition relied not so much on the objects of the collections, but on models, texts and images for its storylines; one installation, however, displayed tools used for scientific environmental analysis, including an ozone-measuring cell and a soil moisture sensor. Overall, the environment was framed as a story of decline with technical innovations offering alternative pathways towards a more sustainable future.

Each of the themes in *Environment* was presented through images, text and media installations which focused on causation as a premise. The message was that through harnessing technology humans have caused problems but that new technologies might offer solutions to these issues. By making *causation* the focus, instruments used to analyse and measure the environment could became its objects. The exhibition was otherwise carried by images and text, which was reworked in 1998 and moved to a different place within the museum, but the basic storyline reflected the museum's approach to the environment, and *Environment* still stands at the time of writing. The gallery has helped to raise awareness of environmental problems arising from technological advancements, but it did not attempt an integrated view of nature and culture.

Triggered by scientific findings and public discussion on climate change resulting particularly from the IPCC reports, the Deutsches Museum presented a special exhibition on *Climate: The Experiment with the Planet Earth* in 2002. This dealt mostly with the scientific background on climate change. Subthemes included worldwide networks for measuring and gathering data, meteorology, historical technological ideas for influencing climate and natural catastrophes resulting from climate change. The exhibition also included a historical review of human reactions to climate variability in the past and present. The underlying idea that nature and technology could no longer be viewed separately, but needed to regarded as interdependent was very poignantly expressed in the catalog:

> Weather and climate, one might think, are not suitable topics for a museum of technology, as they concern nature. […] Nature and culture, however, may no longer to be neatly separated from each other which is why the prominent symbol of technological culture, the steam engine, is chosen as the opening of this climate exhibition in the museum of technology. (Hauser, 2002: 9 trs.)

The philosophy of 'Welcome to the Anthropocene'

Focusing on climate as a global and interdisciplinary topic had historically been the Deutsches Museum's first step towards a more integrative view on environment, and it was this thinking that created the opportunity for the new Anthropocene exhibition in 2014. In this 'age of humans' we must think, reflect and discuss; as curators we cannot just exhibit, we must create platforms of discussion.

Climate change, more than any other issue before it, has brought into sharp focus the ability of the human species to influence planetary systems as a whole, but this is only one of many anthropogenic changes affecting the Earth's systems in the twenty-first century. As well as the carbon cycle, humans are significantly altering the nitrogen, phosphorous and sulphur cycles, changing sediment movement and water vapor flow from land to atmosphere (through land-cover change).

There has been a Great Acceleration of global changes since around 1950 (Steffen et al., 2011: 742). For example, population, wealth and human consumption and usage of things (ranging widely from paper to water) have all risen exponentially in this period. Financial and business institutions have become 'globalized' (and this phenomenon has been measured using the proxy of the expanding number of McDonald's restaurants). People are moving ever faster around the world with growing international tourism. Some say that humanity is driving the sixth major extinction event in Earth's history (Barnosky et al., 2011).

Humanities scholars have cautioned that an overarching concept such as Anthropocene, with its scientific basis, lacks cultural diversity and might even reinforce regimes of power and capital that have brought us to this point (Clark, 2011; Malm and Hornborg, 2014; Wilke, 2013). Cultural diversity provides an important 'creative friction' in a globalized world, something which museums are well-positioned to support (Tsing, 2005: x; Witcomb, 2009). A critical approach to the 'we' that is presented in a museum is essential: might a species-level understanding of humanity downplay the challenges of environmental justice, where the fossil-fuel-prints of the few drive adverse changes for the many (Nixon, 2011)? Finding a material representation for unequal consumption patterns and the distribution of resources and wealth is by no means easy, but is critical to any museum display on this subject (Davis, 2002; Gordillo, 2011).

Accepting that humans have fundamentally altered the way natural systems work and have shaped global climate change, closes the bifurcation between the natural and the cultural: in the Anthropocene natural and cultural systems are interdependent. We now have integrated systems that embrace cultural and biophysical dimensions, and we need scholars who can work with our hybridized Earth. As chemists Will Steffen and Paul Crutzen and historian John McNeill have noted: 'Humanity is, in one way or another, becoming a self-conscious, active agent in the operation of its own life support system' (Steffen et al., 2007: 619). This new period also reshapes our understanding of humanity, as postcolonial theorist and historian Dipesh Chakrabarty notes: 'To call human beings geological agents is to scale up our imagination of the human' (Chakrabarty, 2009: 206).

Drawing on insights from a wide range of scholarly disciplines, the members of the Deutsches Museum exhibition team decided to use the concept of an 'usworld' (translated from the German *Unswelt*) advocated by the geologist Reinhold Leinfelder (Leinfelder, 2012, 2013; Leinfelder et al., 2012: 12–17). Such a notion of 'us' makes it difficult to separate nature and culture, and forces thinking with a hybrid nature-culture world. An *usworld* challenges how we know ourselves. Although as a species we have become a geological force, as individuals we are pro-active actors on this stage. The Anthropocene is not just about irreversible environmental changes, it is also a historical phenomenon. Anthropocene-changes have accelerated over a period that showcases many of the great innovations and thinking about human freedom. An usworld approach blends nature, culture, technology and society into single hybridized perspective, an Anthropocene imaginary, that is compatible both with the original mission of the Deutsches Museum and with the expectations of its 21st century visitors.

As literary theorist Sabine Wilke has written, the humanities: 'concern themselves with the study of intellectual creation and the critique of dominant narratives, myths, and ideologies, and the critical engagement with fundamental questions of meaning, value, responsibility, and purpose in a period of escalating crisis' (Wilke, 2013: 67–74). For Wilke, a critical Anthropocene approach must engage with frameworks and insights from postcolonial theory and environmental justice and continuously expose the ideological underpinnings of a developing Anthropocene narrative. The geological time depth of the Anthropocene can provoke new scales for imagining the material conditions of human life: it brings Big History (Christian, 2011) to this history museum. In their

recent book *Making the Geologic Now*, Elizabeth Ellsworth and Jamie Kruse explore the notion that the geologic has become a condition of contemporary life with a group of artists and scholars. Their approach is not so much a direct critique but rather to discuss and unpack the 'geological turn' and human responses to it. They 'direct sensory, linguistic, and imaginative attention toward the material vitality of the Earth itself' (Ellsworth and Kruse, 2013: 25). Their primary focus, inspired by the work of Jane Bennett, is materiality – shifting us away from pictorial images and views of landscape toward the Earth's surface itself: 'Making a geologic turn, we create an opportunity to recalibrate infrastructures, communities, and imaginations to a new scale – the scale of deep time, force, and materiality'. Ellsworth and Kruse continue: 'we are not simply "surrounded" by the geologic. We do not simply observe it as a landscape or panorama. We inhabit the geologic' (Ellsworth and Kruse, 2013: 25).

If we inhabit the geologic (Szerszynski, 2012), then an exhibition or gallery of the Anthropocene might aspire to place people in their own strata?

Practicalities

In this section we discuss the conception and goals of *Welcome to the Anthropocene: The Earth in Our Hands* [*Willkommen im Anthropozän: Unsere Verantwortung für die Zukunft der Erde*], which opened to the public on 5 December 2014. The exhibition's main goal is to inform visitors about the Anthropocene as a current concept that considers humanity as a driver of physical change on Earth. It shows the effects of humanity as a biological and geological actor and the extent of these changes. By translating the concept into a three-dimensional space, the exhibition offers the general audience a unique opportunity to *experience* the Anthropocene and learn about the current state of scientific knowledge and debate. It does not conceptualize the Anthropocene as a narrative of decline, but rather as a complex and often ambivalent story of destruction, re-shaping and feedback loops between these processes. Nature and culture are taken together as an integrated and hybrid system. This thread is explored throughout the exhibition, for example, through as an installation about invasive species and in an experiential section that sets out to disrupt preconceived ideas of 'nature'.

The curators instigated an internal survey to find out what their audience already knew about the Anthropocene, and to get a sense of how to 'pitch' the text-based panels. They drew on the views of over 100 patrons in a two month period in late 2012 (Bäuerlein and Förg, 2012). While 80% of those interviewed supported the idea that the museum should engage with 'controversial topics', an even greater number (86%) had not previously heard of the Anthropocene. Many were interested in the environment, and saw the impacts of industry as bad for the environment: almost half of the patrons said that industry could not solve environmental problems.

In the light of this survey, the curators 'pitched' the Anthropocene as a holistic, systemic, and reflective concept, enabling the inclusion of a range of global-scale environmental problems. *Welcome to the Anthropocene* was created in an open-ended format that enabled visitors to engage actively with it, including responding with solutions. The idea of the Anthropocene itself introduces and brands the exhibition, and also frames the responses of the visitors.

The exhibition covers 1450 m^2 (c. 15,600 square feet) and is structured in three parts. The first section provides a comprehensive introduction into the Anthropocene both as a geological hypothesis and new conceptual framework. The introduction includes a range of technological objects that highlight the eras of industrialization (from the late 1800s, building on Paul Crutzen's narrative of the origins of the Anthropocene) and the Great Acceleration from the 1950s. The second part of the exhibition consists of six thematic areas that present selected phenomena of the

Figure 1. Plan for field of paper daisies, *Welcome to the Anthropocene* 2014. Design: Klaus Hollenbeck Architekten.

Anthropocene, looking particularly at systemic connections, global and local interdependencies, and temporal dimensions. The themes covered are urbanization, mobility, nutrition, evolution, human–machine interaction and 'nature'. Given the challenges of nature-culture hybrid in the Anthropocene, 'nature' is a significant area that has been understood differently before the Anthropocene era (van Mensvoort and Grievink, 2011). Connecting these themes is a geological layer of materiality that embeds visitors in the *strata* of their creation. This draws on the theoretical ideas of Ellsworth and Kruse (2013). The third and final part of the exhibition discusses the future in the Anthropocene. It looks at past visions of the future, emphasizing their transformative potential while simultaneously highlighting their fragility and ambivalence. It then discusses possible scenarios of the future for people to consider in a more relaxing space; the final installation invites people to listen to possible scenarios and to plant their own possible scenario in an evolving field of paper daisies (Figure 1). Thus each individual visitor has the opportunity to offer a personal reflection on their aspirations for the Anthropocene.

As an epoch, the Anthropocene encompasses the entire globe throughout Earth history. As a new epoch and a philosophical framework, it weaves connections between a very large number of phenomena, many previously unconnected. The challenge for a museum is to define, research, shape and represent the Anthropocene epoch even as it unfolds. While exhibitions are always selective representations of specific interpretations of our world, the uncertainty that surrounds the Anthropocene challenges traditional perceptions of museums as authorities and mediators of knowledge, and demands space for raising questions and reflecting on uncertainty. Museums of science and technology, such as the Deutsches Museum, can no longer represent themselves as mere purveyors of authentic knowledge, even where visitor research suggests that a large part of the public continues to expect to receive authoritative information from museum exhibitions. *Welcome to the Anthropocene* created a space – literally and figuratively – for free thinking, discussion and imagining a new concept, drawing on abstract and academic ideas and creating ways for the public to participate.

Traditional museum objects were not easy to incorporate into such an exhibition. When it came to pinpointing the stories and finding an 'Anthropocene moment' (or even origin story), it became messy. In the end, the curators elected to live with the complex messiness and concentrate rather on the networks, systems of interconnections and chaos. Since the world in the Anthropocene is no longer ordered, the exhibition explores the navigation of chaos. In translating the Anthropocene into a three-dimensional gallery, the exhibition explores the systems of the Anthropocene and their interrelationships and feedbacks. An exhibition space affords visitors multi-perspective and non-linear opportunities: they make their own paths, touring where they want to, forming their own experiences, and coming up with different interpretations. Part of the idea of the landscape of paper flowers folded by individuals was to capture the diversity of visitor experience.

Figure 2. Comic image of the Twittering Machine, an automated singing bird made by Blaise Bontemps in Paris around 1875. Artist: Marcus Gruber.

The conceptual approach of reflexivity and engagement with the public also manifests in the curators' idea to integrate the museum's permanent galleries into the Anthropocene exhibition by way of a graphic novel, *Auf dem Weg ins Anthropozän – ein Crashkurs.* [*Anthropocene Milestones: Illustrating the Path to the Age of Humans*] (Hamann et al., 2014). A international class of design students at the Berlin-based University of Fine Arts has used a carefully chosen set of objects ranging from mining to nanotechnology, from textile industry to remote sensing, to visualize stories that narrated the past, present, and the future of the Anthropocene (Figure 2). The students' visual trace of object-based stories also represented humanity's own trace in the geological strata of planet Earth. Moreover, the students' views on the Anthropocene complement and challenge those of the curators: the graphics further blur boundaries between nature and culture, sciences and humanities, technology and arts.

The Anthropocene Project of the Haus der Kulturen der Welt

Background and philosophy

The Haus der Kulturen der Welt (HKW) stands in the heart of Berlin, surrounded by the Federal Chancellery, parliament buildings, and office of the Federal President. It is a place for art and cultural productions in a globalized world. HKW develops new forms of knowledge production at the intersection of art and academic research. In positing new subjects, it seeks to open new perspectives on, and points of access to, an increasingly interconnected and interactive world. The Anthropocene idea was an attractive challenge, sympathetic with the central mission of HKW: but as an art museum the concept needed to get beyond a definition based on physical science or technology. HKW has developed a major set of Anthropocene projects to speak to the discourse of daily life and society. The idea of the Anthropocene had low recognition in Berlin at the time the project was launched in 2013, as HKW established using a survey similar to the one undertaken by the Deutsches Museum with similar results (Bäuerlein and Förg, 2012). Nevertheless, HKW sought to make it accessible and relevant for a general audience, and to elicit participatory responses.

The gallery of Anthropocene Posters, which we focus on here, was complemented by two other initiatives: an exhibition in the museum in spring 2013, the *Whole Earth Project* and a major educational intervention, the Anthropocene curriculum (in progress as we write).

Figure 3. Is the Anthropocene beautiful?
Source: HKW.

The *Whole Earth Project* used the Californian 1960s idea of the *Whole Earth Catalog* (Brand, 1968–1971) this art exhibition that explored three key iconic images in global thinking – the mushroom cloud of atomic energy, the 'blue marble' view of Earth and the Marshall McLuhan media metaphor of 'the global village' (McLuhan and Fiore, 1968). The exhibition showed how, in California in the 1960s and 1970s, a technological-economic force arose that stormed Western thinking. On the one side was a hippie movement, inspired by romantic and Far Eastern holistic teachings, that was protesting America's involvement in the Vietnam War. On the other was its avowed adversary, the military-technological complex, including the atom bomb and the view of the Earth from the NASA space voyages. The idea that 1960s 'people power' was just as global in its reach and influence as the technological achievements of the era was a way to highlight the personal response to the complexity of life in the Anthropocene now, the planetary inheritance of these years (Turner, 2013). The Whole Earth 'moment' was not about any particular political stance, but rather about a new vision of the fragile and lonely planet, the only one that has a biosphere to support life (Robin, 1997: 149–151). The exhibition received excellent reviews (Baumgärtel, 2013; Häntzschel, 2013; Quack, 2013).

Much of the effort in the HKW Anthropocene project has been directed towards education. The focus of the *Anthropocene Campus* initiative is a nine-day intensive course for 100 international doctoral and post-doctoral scholars (14–22 November 2014). Materials for this course are available online, and will become the backbone for a multifaceted, multi-author text book developed through the event with the participants as co-authors. Encouraging positive participation rather than despair about the Anthropocene moment is an important mission in all these initiatives. The humanities and arts bring different tools and styles from traditional natural sciences, which can stimulate curiosity and invite different people to engage with the concept.

The Anthropocene Posters

HKW and the Deutsches Museum both expended considerable effort on encouraging public response, rather than 'telling' the viewer what they should see. The two institutions collaborated in some parts of their respective Anthropocene projects. Both were concerned to build a

Figure 4. Is the Anthropocene just?
Source: HKW.

new hybridity between science, technology, and the arts. The HKW gallery, however looked rather different from *Welcome to the Anthropocene*. Its gallery of *Anthropocene Posters* ran on the principle of inclusive reflexivity and sought to overcome the anomie and sense of alienation in busy public areas through presenting its gallery to the streets of Berlin.

If the Anthropocene thesis is an heuristic means of achieving a new understanding of thought and action in an interconnected world, then the aesthetic chosen is important. Some people see spatially or holistically, others read the captions or cues, then look at images or objects separately. The idea of text-as-art, as practiced by conceptual artist Barbara Kruger in the USA, for example, has appeal to a wide range of viewers. Kruger uses strongly textual art to disrupt social norms and stir moral responses (Miller, 2012; Smith, 1991). The *Anthropocene Posters* gallery sought those strong responses to text, but added masks, beautiful composite faces, to the questions that reinforced the hybridity of nature and culture in the concept of the Anthropocene. The mask is beautiful and it is also challenging: it is a space for arresting questions in the everyday world of the streets. The aesthetic is the combination of the text, the image and the context of ordinary life.

Thus in this 'gallery', situated in public urban space, the human being stands front and center of the intervention (Lassiwe, 2012). Who is this *anthropos*? We think we know ourselves, but perhaps we are someone else? Passing observers encountered three masks, each bearing a question. Three seemingly simple, yet fundamental questions speak to the big idea of the Anthropocene, a world formed by people, a world where culture and nature are entwined.

(1) *Is the Anthropocene beautiful?* (Figure 3). HKW is an art museum and it explores experience as aesthetics. How does the new nature inscribe itself into our bodies? How do we experience a world whose urban centers no longer know true darkness? How do we experience a world whose creatures and things are increasingly produced either chemically or biogenetically? Conceptually, the point is that the things humans create are never purely objects that stand opposite us as *Welt* ('world'), but always also possess subjective aspects which, in turn, relate back to humanity. That is, people and things are situated in a constant state of interaction, co-constructing each other (Bennett, 2010).

Figure 5. Is the Anthropocene human?
Source: HKW.

(2) *Is the Anthropocene just?* (Figure 4). Although the human species has produced the nature that is the subject of the Anthropocene, the specific, concrete actions have been, and are, carried out by individuals, groups, companies, and societies. The moral implications and responsibility are often set aside if the Anthropocene is only defined by natural sciences. Most often the instigators of the action are not the ones who grapple with the impacts of the action. For a long time, the main instigators, the people who benefited most from the spoils of the industrial revolution and the fossil-fuel economy lived in the West. Those bearing the brunt of these actions were geographically dispersed around the world, and economically more likely to come from the Global South. As industrial activities and increasing fossil-fuel use expand in the non-West, the relationship has become more opaque. In any case, the sociopolitical process of exchange affects people and institutions at the local, regional, and global level all over the world.

(3) *Is the Anthropocene human?* (Figure 5). Humans are simultaneously beings of nature and culture. No longer can either sphere be regarded as a discrete area unto itself. Things from the world of objects, whether found or self-produced, repeatedly gain importance, become part of culture, then lose significance again and become 're-naturalized'. Continual cycling takes place. Since the 17th century, the division between the two spheres, the dualism of nature and culture, has seemingly driven development. The realm of nature has been conceptualized as an inert resource to service human needs. The nature that was produced through economic and cultural processes – the polluted air, the gyre of plastic in the Pacific ocean – did not register in the cultural self-conception of man. They were neither nature nor culture. They fell through a black hole in conceptualizing. Now, through the Anthropocene thesis, the full significance of these new natures is brought to human consciousness: is there culture without nature? Is the new stuff human?, asks the poster.

The Anthropocene in situ: Pyramiden, industrial heritage and the new tourism of climate change

In the third 'gallery of the Anthropocene', we consider another place beyond museum walls, the in situ industrial heritage of Pyramiden, a coal-mining town in the Arctic Circle, refashioned for

climate change science and polar tourism. Human design and global environmental changes here have made a whole landscape a 'spectacle' of the Anthropocene (Ekström et al., 2011). This is a museum without walls, a landscape-scale gallery that provokes thought about the Anthropocene at the extremes of the inhabited world.

Historical background

In the high latitudes of the Arctic, 1°C of global warming makes for greater and faster changes than at temperate latitudes. The 'polar effect' has fuelled a climate change tourism, with people anxious to see glaciers 'before they melt' and extreme environments remote from people, yet disproportionately affected by their activities. The Ilulissat Glacier in Greenland, for example, has become an iconic place for visiting American politicians, a place that signifies 'climate change' as surely as an image of a polar bear on a sea-ice floe. The USA and other states of the Arctic council wish to mitigate the consequences of climate change in the Arctic, protect the environment and support climate science. At the same time, however, they want to protect their traditional interests in resources and sovereignty there (Norwegian Ministry of Foreign Affairs, 2011; Norwegian Ministry of Justice, 2009; Putin, 2013). At Svalbard, Russian and Norwegian actors combine these seemingly contradicting policy goals, by transforming coal mines into industrial heritage sites. Could an Arctic coal mine such as Pyramiden become a touchstone place for climate change tourists as Ilulissat is?

Norwegian and Russian companies started coal-mining at Svalbard (also called Spitsbergen) in the early 20th century. At this time the energy extraction boom drove international debate about the legal status of Svalbard itself. The archipelago had been recognized as an international space – an unoccupied 'no-man's land' – until it emerged as potentially profitable. Promised wealth from coal increased interest (particularly among northern states) in staking a nationalist claim for influence in this windy, cold and remote territory. Norway first demanded sovereignty, but was opposed by Sweden and Russia because of their respective economic and political interests. The coal mines became part of this conflict, not just because of the resources, but also because these nations could use their existing mines as 'effective occupation', a precursor to claiming sovereignty (Avango, 2005; Avango et al., 2010; Berg, 1995).

Pyramiden became a material representation of intersecting interests and future visions. It was established initially by a Swedish company, which built a few huts there in 1910. The original plan was to create a mining town to supply coal to the Swedish steel industry. The company also developed a nationalist interest in strengthening Sweden's influence in negotiations on the legal status of Spitsbergen, particularly in blocking Norway's claim to sovereignty. In the end, the mining town was not built and in 1920, Norway was granted sovereignty over Svalbard (the Norwegian name for the place) through a treaty. In the following years, the world economy slumped, and the depression forced most companies to leave Svalbard, including the Swedish group that had started Pyramiden. The huts were abandoned (Avango, 2005).

In the years that followed, the situation changed and energy extraction became a nationalist project. From the late 1920s, state-supported companies from Norway and the Soviet Union began to mine coal at Svalbard. The Norwegians wanted to maintain their case for sovereignty by effective occupation, and the Norwegian economy could use the energy. The Soviet Union was first and foremost in it because the rapidly industrializing Murmansk region needed coal. However, the strategic importance of this part of the Arctic was also a key factor (Avango et al., 2014).

Norway and the Soviet Union each operated several mining towns on Svalbard at this time. One of these was Pyramiden, which the Soviet Union bought from its Swedish owners in 1927. Starting

in the mid-1930s, the Soviet company Trust Arktikugol developed an elaborate mining settlement there, which soon became the most splendid on Svalbard. The new owners brought their settlement housing and services of a remarkably high standard, along with elegant and ambitious architectural designs. There was nothing on a comparable scale among Norwegian mining settlements in Svalbard until the 1980s. The 1930s settlement at Pyramiden was more than a stake in the geopolitical discourse: it was a signal of strong Soviet intentions for Svalbard (Norwegian Commissioner of Mines, unpublished reports, 1934–1966).

When the Soviet Union fell, the new Russian government had a different vision, which excluded Pyramiden. With the emphasis elsewhere, Trust Arktikugol closed down the town in 1998. Over the following years, the settlement infrastructure slowly deteriorated, becoming a victim of meltwater rivers and looters (Eggestad et al., n.d.; Umbreit, 2006).

At the same time, an increasing number of Norwegians came to question the Svalbard coal-mining industry, because the mines were unprofitable and hard to rationalize with Norway's own policy for protecting the environment at Svalbard or its international status as a leader in environmental thinking (Brundtland, 1987; Naess, 1973). In 2001, the Norwegian government passed a new environmental law, which limited the possibilities for mining in Svalbard. By this time the last Russian mine operating in Svalbard, Barentsburg, was running out of coal. The Trust Arktikugol began to cast around for alternative uses for its settlements at Svalbard. The company envisioned two main options: first, to open another coal-mining town where it might be profitable to mine coal, and second, to re-purpose the existing mining towns. Any plan for a new coal venture would contravene the new Norwegian environmental regulations and so it was abandoned (Åtland and Pedersen, 2008). Instead the Russians moved to their second option, to re-develop their coal-mining settlements into hubs for Arctic tourism, conservation and science.

The Russian state restarted its activities at Pyramiden around 2010. In cooperation with the governor of Svalbard, The Trust Arktikugol carefully renovated parts of the settlement and in the spring of 2013, it reopened the hotel. The company sought to re-create Pyramiden as a tourist attraction and a base for international Arctic climate science, promoting it as an industrial heritage site with a unique Soviet character (Sergey Tzikoleuko, technical director of Trust Arktikugol (Moscow office) and Peter Goroshinskiy, head land surveyor of the Trust Arktikugol at Barentsburg, personal communication, 2013) To use Pyramiden as a platform for science stations provided grounds to compete with the Norwegian hub for Arctic climate science at the former mining settlement Ny Ålesund, an important anchoring point for Norway's sovereignty at Svalbard.

Pyramiden's facelift also opened a window of opportunity to the Norwegian authorities. During the Cold War years, the Norwegian governors of Svalbard, as far as possible, had refrained from intervening in Russian activities on Svalbard, in order to maintain peaceful relations with their neighbor. After the end of the Cold War, Norway asserted its legal authority, requiring the Trust Arktikugol to abide by Norwegian laws in Svalbard (Jörgensen, 2010). Norwegian regulations, which required companies to make area plans for their settlements and to protect buildings and material remains that are older than 1946 as 'cultural heritage', became an important dimension of diplomatic relations.

The Norwegian governor responded to Russia's new concept for Pyramiden by calling on the Trust Arktikugol to make an area plan. The company contracted a Norwegian firm for the purpose, while the governor enrolled heritage professionals to identify structures that should be protected as heritage. Based on the consultants' report from November 2013, the governor declared parts of Pyramiden as 'cultural heritage'. This effectively turned these identified parts of the Soviet town into an industrial heritage site protected under Norwegian law (Avango and Solnes, 2013; Sandodden, 2013).

Figure 6. Central Pyramiden, showing Soviet architecture.
Source: Dag Avango.

Pyramiden is a gallery of international industrial heritage (Soviet style) evocative of the former era of Arctic extraction, a fossil-fuel landscape refashioned to serve new futures in the Arctic, including tourism (Figure 6). Re-using the settlement suits both Norwegian and Russian Arctic policy makers. The interested parties can both see how this place enables them to continue to control resource use, to maintain influence or sovereignty and to protect the environment. Supporting science, particularly climate science, in this far northerly place is itself a sustainable development for both nations.

By defining Pyramiden as an industrial heritage site, and a site for climate change science and polar tourism, both Norway and Russia can showcase their global environmental and cultural credentials, while keeping a close eye on a region that is increasingly strategically important as the climate warms and the Arctic sea ice melts . Visitors coming to this spectacle can see the hybridity of the worlds of nature and culture, of energy landscapes and their post-fossil-fuel uses (Figure 7). They stay in a comfortably refurbished Soviet hotel, refashioned after the Cold War to suit the needs of climate change scientists.

Reflections: The implications of the Anthropocene for cultural institutions

The Anthropocene poses a challenge to humanity and to planet Earth. It is also a challenge for the museum world to engage with this on a human scale and within the space of a gallery, even one beyond a museum building. All these galleries in different ways acknowledge the new perspective on the relationship between nature and culture brought by the Anthropocene. Traditional (and often cherished) museum frameworks that compartmentalize knowledge into disciplines, cultures and periods of time are no longer useful. Nonetheless, because they are collecting institutions, museums are in a position to connect the deep past through the Anthropocene present to the deep future through objects and collections.

The original idea of a museum was that it was a house for collections. The nature of collections have changed over time, and so has the idea of the ‘house’. In the rapidly changing times of the Anthropocene world, the museum gallery is taking new forms. We see gardens that are set out like museum cabinets, and built museums that include indoor forests (Robin, 2007). Communities demand spaces that work for their traditional needs, leading to different sorts of museums, and sometimes to significant new sorts of spaces within them, for example, the living Marae (meeting house) in Te Papa, the National Museum of New Zealand in Wellington, used for museum, community and religious purposes.

Figure 7. Aerial view Pyramiden, Svalbard.
Source: Dag Avango.

Museums that seek to explore big abstract ideas such as the Anthropocene find themselves pushing the edges of the classic museum form, which is a gallery or room that places objects and visitors in conversation with each other. *Welcome to the Anthropocene* at the Deutsches Museum is the most traditional of the three galleries discussed. A Science and Technology Museum is also the most appropriate *museum form* to house discussions of the unintended and far reaching consequences of the industrial revolution (Robin et al., 2013). The Art Museum, Haus der Kulteren der Welt, has taken the Anthropocene to the community beyond its museum walls, using text-as-art in the streets of Berlin. Both of the German gallery forms strive to inform the public, to offer viable and accessible representations of big ideas in ways that encourage public participation in the Anthropocene.

The third 'gallery' takes the idea of the museum form itself to another level again: Pyramiden is a global museum of a local place, a place where ideas of change, of fossil fuels in the environment and where international debates have focused on the local and specific circumstances, yet they also resound with issues affecting other polar places and regions (including in Antarctica). Pyramiden is only accidentally a 'gallery of the Anthropocene', and its hybrid nature/culture is historical rather than artful. In Pyramiden, the actors have all come from somewhere else and re-made the place according to different nationalist visions. Now it is a place where new visitors and scientists come to explore ideas about climate change at the far northern edge of the inhabitable world.

These are not the only places holding conversations about global environmental change, but the Europeans perhaps provide stronger support to cultural institutions to intervene in public and global policy issues. For museum and heritage professionals the three galleries taken together showcase very different ways for how a museum might 'house' Big Ideas. For those already engaged with the Anthropocene concept, the examples demonstrate how the cultural sector might further enliven public discussions about the future of the planet.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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