PROMOTING ENVIRONMENTAL AWARENESS On Emotions, Story-telling, and Banal Sustainability in a Staged Rainforest

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This article investigates the promotion of environmental awareness in a staged rainforest at a science centre in Sweden. The organizers worked with the agenda to change people's everyday behaviour and consumer routines and especially targeted the use of palm oil. This mundane way of approaching environmental issues is defined by the author as banal sustainability. The exhibited forest was employed for guided walks, stressing the domestication of the environmental challenges into issues of people's everyday life practices. The promotion of an awareness rested on the bodily experience of moving in the staged rainforest, emphazising astonishment, adventure, and empathy. It worked as an attachment site, connecting insight to action. As such, it was practice-oriented, simplifying, and empowering.

Keywords: rainforest display, palm oil, banal sustainability, environmental awareness, domestication

Introducing a Science Centre in Gothenburg, Sweden

Issues of sustainability, biodiversity, and environmental threats have been a paramount feature in public debates during the last few decades. Deforestation, plastic oceans, rising levels of carbon dioxide emissions and the extinction of endangered species are part of global dialogues, based on and originating from scientific research. The environmental challenges are addressed through a variety of international initiatives such as the Rome 2015 regulation of carbon dioxide emissions or the Rainforest Alliance, a "network of farmers, foresters, communities, scientists, governments, environmentalists, and businesses dedicated to conserving biodiversity and ensuring sustainable livelihoods" (www.rainforest-alliance.org/about). The scientific view of the challenges to the global ecosystem filters through political discussions, popular culture, and everyday conversations; all this becomes part of the contemporary zeitgeist. One place where the knowledge of environmental awareness and questions of sustainability are disseminated and filtered into the public domain is at zoological gardens and public aquariums. Looking at this kind of venue in particular, the aim of this article is to explore and to characterize the promotion, staging, and performance of environmental awareness and sustainable practices carried out in an exhibited rainforest at a science centre in the Swedish city of Gothenburg.¹

The science centre – called Universeum – was opened to the public in 2001, created with the intent

of being an engaging natural environment making young people develop skills and interest in science and technology (www.universeum.se/hallbar-varld/ vart-uppdrag).² Among other things, this science centre holds several large aquariums and a rainforest environment. The threats to a prosperous environment produce and nurture very different standpoints, from militant environmentalism to climate-change denial. One recurring opinion - and Universeum is no exception - is that we need to alter our relationship to the planet we inhabit (Steffen et al. 2011). On the occasion of its 15th anniversary, the rainforest exhibit was redeveloped, supplemented with new birds and plants, a new sanctuary for sloths, and a slightly altered route through the rainforest. The main addition, though, was the creation of a huge concrete tree, 25 metres in height (www.universeum.se). The tree represented a kapok, common in the South American rainforest. In concordance with the contemporary zeitgeist, the science centre also updated its mission statement, declaring that it wants to become an "actor that transforms people and challenges them to engage in global work for a sustainable world."3

I followed the rainforest reconstruction process. On the night of the inauguration of the new rainforest, the CEO held a speech to the invited visitors. Standing on a bench in a large room at Universeum, she talked to the gathered visitors, as they tasted the vegetarian buffet. She thanked all the companies who had contributed to the project, and told us of the different conservation projects where Universeum was involved.4 In accordance with the mission of the science centre, she said that they had the privilege of receiving 600,000 visitors every year to discover nature and science, hoping that they might inspire some of the younger visitors one day to become mathematicians, engineers, or maybe teachers. She emphasized that this was the reason for Universeum in the first place: to promote an interest in natural science.

The CEO also more directly addressed the new rainforest. Claiming that there was a lot to explore in the rainforest, and much was yet to be discovered, she invited us to discover its sounds and scents and birds, frogs, and plants – in short, "all the beautiful and nice things to be found in a rainforest." She expressed her hope that a walk through the astonishing environ-

ment would awaken our fascination and curiosity and respect; she wanted us to learn of its importance, how everything we do at home plays a role for the animals and plants in the rainforest. The point of the exhibit, she argued, was to help us to understand how everything is connected; how it was possible to help plants and animals to survive, through small simple changes in our everyday behaviour. By working together, we might get the rainforest to grow again.

This speech by Universeum's CEO contained several themes to be addressed in this article. First, the aim of the exhibit was to make the visitors find out about the rainforest and its importance to human life. Added to this was a wish for the visitors to make changes to their everyday life and thereby contribute to a sustainable future. Finally, and not surprisingly, it presented an understanding of the world, deeply rooted in natural science. I will now discuss how these themes were put into practice.

Targeting Palm Oil in Everyday Consumption

As hinted at in the inauguration speech, the science centre targeted a reduction in the consumption of rainforest products. One item was at the forefront of this work: palm oil. This is a vegetable oil which is easy and cheap to produce. Used in a variety of products, such as detergents and chocolate bars, it is also a substitute for butter and an important ingredient in the production of bio diesel. Palm oil is a symbolic commodity in environmental work. Its growth and production contribute to the deforestation of rainforest areas and to the losses of natural habitats. Universeum has taken an active part in limiting the use of palm oil, and in 2016 a Facebook status claimed that they had phased out its use at the science centre.

The work of promoting sustainability at the science centre can be characterized as *banal sustain-ability*, a concept I propose based on Michael Billig's idea of banal nationalism (1995). Billig described this sort of nationalism performed in everyday activities, in sport, in referring to our nation, and in the use of a flag in official contexts. Translated into issues of sustainability it highlights the every-day routines targeted in promoting environmental awareness. It is a practised sustainability, an example of a mundane stewardship emphasizing a change of

consumer routines, and a way to find a sustainable relation to nature. As such, it reproduces an environmental awareness encouraged at the science centre, being both serious and to an extent platitudinous; it stresses a pedestrian way of entangling with matters of sustainability. Important to remember, though, this does not cover all the activities at the science centre, but it was a key feature of the science centre's outreach programmes.

The articulated standpoint echoes the dominant scientific imperative motivating the work at the science centre and adopted by the organized zoo and aquarium community at large.5 Together they emphasize an understanding of nature, society, and man, building on contemporary scientific research. In a study of the development of wind parks in Oaxaca, Mexico, the social anthropologist Cymene Howe has developed the concept of anthropocenic ecoauthority when discussing the truth claims made about the environment by the participants in this process (2014). The concept aims to explore the variety of viewpoints identified. Anthropocenic ecoauthority is "predicated on a series of experiential, scientific, and managerial truth-claims regarding ecological knowledge and future forecasting in an era of global anthropogenic change. Whether enunciated by resident communities, state officials, corporate representatives, or environmental experts, ecoauthority gains its particular traction by asserting ethical claims on behalf of, and in regards to, the anthropogenically altered future of the biosphere, human and nonhuman" (ibid.). In other words, the concept covers the participant's different approaches to the development of the wind parks, and the way they articulated different kinds of environmental awareness and moral claims. In this article, I adopt the concept of an anthropocenic ecoauthority to cover different truth claims about the rainforest environment and palm oil production that are performed at the science centre.

Howe ties her concept to the notion of the Anthropocene, defined as the era where humankind has an interminable effect on the biosphere, reflecting the contemporary scientific understanding of presentday environmental conditions concerning climate change, biodiversity, and the use of water, land, and natural resources (cf. Ekström & Svensen 2014; Emmet & Nye 2017; Rockström et al. 2009; Sörlin 2017).⁶ The idea of the Anthropocene also captures a zeitgeist typical of the last decade. As such, it contains debates and differences, settlements and disagreements. Contemporary and notable changes occurring in the biosphere were also a vital part of the arguments for reduced palm oil consumption promoted at Universeum. I will return to the concept of the Anthropocene at the end of this article for a further discussion of how to understand the staged rainforest.

This article draws on data gathered during fieldwork conducted at Universeum between November 2015 and January 2017. During this period, among other things, as an observer I took part in the planning of the new rainforest display, the training of guides, and discussions of how to design the information on signs. I also followed the manifest work of reconstructing the rainforest and documented it in photographs as well as field notes. Staging a rainforest is a complex procedure pulling together a diverse set of interests and competencies. Therefore, I continuously conducted interviews with contractors, designers, educators, scientists, animal welfare advocates, and other participants in the process. Later, when the rainforest had opened, I studied the use of the premises. I took a particular interest in the way that guided tours were organized and the verbal performance of the rainforest. My attention was directed by an interest in the dissemination of knowledge of nature and environmental issues, documenting how this was manifested in talks, on signs, and in the construction of the rainforest itself.7

When talking about the purpose of the staged rainforest, one of the scientists told me that they did not harbour the illusion that they could change the whole world, but maybe they could add some pieces to the puzzle of how to do so. He said that the consequences of producing palm oil had to be dealt with in several contexts. In the following, I will investigate some of the ways that this was carried out.

Framing the Rainforest Experience

The paramount feature during the guided tours was the staged rainforest itself. The exhibit encompasses 18,000 cubic metres in space and is six storeys high. It is a sensory vehicle for presenting knowledge, where visitors are supposed to gain insight just by being in the staged environment. The rainforest was designed to provide an emotional and bodily experience. When walking through the forest together with one of the scientists at the science centre he told me of their intentions. Walking and moving through the staged environment was meant to be a startling experience; the visitors were supposed to be surprised and astonished, and, as will be detailed below, animals played an important part.

By mobilizing such emotions, the staged rainforest merged entertainment and science. This is a recurring observation in descriptions of similar institutions such as natural science museums and zoological gardens (Hansson 2004; Samuelsson 2008). They are all part of the so-called "experience industry" that emerged in the second half of the nineteenth century (Urry 1995; Hesmondhalgh 2002; Frost 2011). As well as noted in research, the standpoint of merging entertainment and science is also valued at aquariums, and an important part of their self-presentation (cf. Kaijser 2018). Presenting facts about animals and nature have never seemed to be a sufficient way for zoos and aquariums to survive; they also need to provide the knowledge in an entertaining way (Minteer et al. 2018: 7). In a study of natural history museums, Stephen T. Asma states

that "educational and entertainment institutions meet in the common-ground territory of the spectacular" (Asma 2001: 37). Their challenge is to nurture these spectacular displays in an educationally fruitful way. The rainforest was not only designed to evoke emotions, but also set up to encourage visitors to engage in topics of science, conservation, and issues of sustainability.

The general idea was that experiencing the rainforest, getting facts, and listening to stories would create a fascination with the rainforest and an insight into the consequences of the human impact on nature. Later on, this would generate an empathy encouraging a deeper environmental engagement. In this way, the wish for a changed attitude towards issues of conservation advocated at Universeum implemented an emotional alliance with nature involving environmental challenges, as well as sustainable practices. This is built on a shared direction, an orientation, towards similar expressions - in this case, practices that can be labelled "sustainable" or "eco-friendly" (cf. Ahmed 2010). This emotional orientation is a register that helps people to recognize and identify environmental problems, be they palm oil products, plastic bags, or unsustainable fishing methods, and to manage practices dealing with those problems.



Figure 1: The Kapok tree. The tree made out of concrete was a powerful image, a wowexperience, when it appeared in front of the visitors. Universeum 2016. (Photo: Lars Kaijser)

As mentioned, public aquariums tend to merge science and entertainment. For a start, this convention enables the visitors to enjoy the wonders of nature, tracing this to sizes, shapes and colours, as well as to animals and plants adapting to different and - from a human perspective - odd circumstances.8 A common way to articulate this fascination is to talk about the "wow" or the "wow-moment", an embodied reaction to something surprising and amazing; this was also the case at Universeum. When I talked to one of the scientists, he told me that the "wow" was the first important step to get the visitors engaged. Accordingly, it was likewise important to lead visitors to the next step, and make them experience the insight, the understanding, when the pieces of the environmental puzzle fall into place. This was expressed as the "aha", which is another but likewise important reaction, this time connected to the way that science connects the dots of nature. Watching the kapok tree was a possible "wow-moment", and walking through the forest, sensing the atmosphere, observing the animals, listening to guides, and reading signs would hopefully lead to the "aha". The scientific leader at Universeum explained it like this: "When you get into the rainforest, it's supposed to be the coolest experience; it's going to be warm and damp. You will hear birds, you will see the tree, and meet the piranhas. It will create the desire to explore." He went on to say that "the wow would give place for the aha, when you're familiar with palm oil and know how things go together," finishing with: "You should leave with a desire to tell this to someone else. ... One should have both wow and aha experiences, and they need to go together in some way."

The portrayal of the rainforest followed some of the typical traits of representing animals and plants at public aquariums. For a start, they tend to focus on the more charismatic types of nature, such as the rainforest, the coral reef, or the deep ocean. When visiting rainforest environments at other aquariums I found them to be staged in more or less the same way.⁹ This could be self-exploratory, as they portray the same nature. Nevertheless, different types of nature presented at aquariums blend a scientific understanding of natural settings, with aesthetic conventions, defined as aquatic genres. Used in an exploratory way, *genre* emphasizes the aesthetic conventions for staging nature, focusing on how animals, plants, light- and soundscapes are brought together and organized (Doordan 1995; Karydis 2011). The staged rainforest is rooted in the biological concept of habitat, a place characterized by environmental traits such as a certain biotope with a certain geology, and specific plants and animals.

As a staged habitat, it was set with a soundscape, lighting, and other props, helping to create the sense of the real rainforest. Rainforest exhibits tend to apply the same tactility with wooden floorboards, a smell of soil and damp plants (which occasionally are manufactured), and a set with lights and props, sounds, and atmospheric devices such as mist. To be able to create the sound experience in the Gothenburg rainforest, installed and placed in the environment were 17 speakers with an added giant subwoofer. Through this arrangement, the visitors were not just able to hear the sounds of the rainforest, but also to feel it. When visiting different aquariums, I found a similar sound- and lightscape reappearing on a regular basis, using the same atmospheric devices, with dripping water or rain, thunder with flashes, and sounds of birds chirping, monkeys chattering and maybe the roar of a jaguar.

On the previously mentioned walk through the rainforest, with one of the scientific leaders at Universeum, he told me of the intentions; even though it was make-believe, the rainforest is supposed to be an adventure. Designed in this way, the staged rainforest also encourage an explorative approach to its subject matter. When entering, the visitors should sense the humidity, meet the lush plants, and hear the sounds of the forest. Embraced by a multitude of impressions and unable to grasp all at once, they should walk the winding path, astonished by details, turns, and surprises, guided towards the animals and the different plants.

In a promotional film, released at the time of the opening of the reconstructed rainforest, the scientific leader at Universeum told the viewer of the ambitions.¹⁰ He said that the staged rainforest was modelled on the neo-tropical area that covers everything from above Costa Rica to down below the

Amazon area. To make the concrete tree authentic, the scientists and the designer visited La Selva biological station in Costa Rica, where local scientists helped them to find a tall kapok that served as a role model, from which they made silicon casts of bark structures used when recreating the tree. This also displayed an anthropocenic ecoauthority, based on having been present in the real rainforest, having local experts point out an appropriate tree as a role model, and using props originating from the forest. In the staged rainforest, they also used butterflies supplied by a butterfly farm in Costa Rica – thus supporting the local economy.

The authenticity of the tree was an important part in the rhetoric of the presentation. However, in the building process, occasionally other approaches applied. "You have to make it more than real," the designer told me, for him the point of reference was the theatre, where exaggeration created interest, and according to him, a real tree was boring to look at (cf. Desmond 1999: 178). In spite of this, the staged rainforest carried claims of authenticity, equalling what the anthropologist Jane Desmond called "in fake situ"; you are in nature, but it is a fake nature, a bettered nature, a simulacrum authenticated by living animals and well-hidden design (1999: 166, 186).

With real plants imported from Costa Rica, animals alive in the premises, the rainforest fostered an authentic – though manufactured – experience, where the moisture and the heat triggered the senses, and if you wear glasses, they fog up when entering. Likewise, important for the atmosphere in the exhibit was the interplay between the different species of plants, animals, and created nature. Paradoxically, a more authentic representation demands a more controlled environment. For this reason, nets and fences divided the great hall into isolated areas, keeping some of the animals apart – as they tended to stress and occasionally harm each other. This counted for plants, as well, preventing damage by the birds.

Though described as a place swarming with animals and plants, it could be argued that the rainforest housed a limited number of animals. Three species of monkey, caged sloths, spiders and poison dart frogs and a variety of birds and fishes were the animals at hand. Nevertheless, it was possible to meet living animals that could be called flagship species in the rainforest; the sloth, the piranhas, the toucan, the frogs, and the different monkey species all counted as this. At the same time, other flagship species such as jaguars, tapirs, capybaras, anteaters, anacondas, or bottlenose dolphins materialized themselves in text and as illustrations; present, though not in flesh. Together with other lower-profile animals, they performed biodiversity. Adding to this, animals alive helped to give the rainforest a sense of unpredictability, as they casually roamed their designated area. When walking through the rainforest, visitors had to watch where they put their feet, as butterflies were fluttering about, monkeys and lizards roamed free, and occasionally bird droppings soiled the path. The visitors would not know in advance what animals they would come across, giving the visit a realistic touch, hinting at the envisioned character of a walk in a real rainforest complete with unexpected animal encounters.

The staged rainforest was the first step in establishing an environmental awareness. Animals, plants, light, and sound all have an effect in this process; together they demonstrated an anthropocenic ecoauthority combining a scientific stance with ideas of authenticity, and an emotional connectedness to the rainforest. Also important for this achievement were story-telling activities, acted out during talks and tours. This is the topic of the next section, presenting storytelling as an essential way of contributing to the awareness.

Role Play – Walking and Talking

The staged environment was employed for guided walks and role-plays dramatizing the conditions for life in the rainforest. When asked, one guide told me that they used stories to create wow, empathy, and engagement. Story is understood through the idea of story-telling, that is, communicating ideas and values through stories, and thereby establishing an emotional connection to the topic at hand, a common procedure in the experience industry (cf. Kaijser 2013; Mossberg & Nissen Johansen 2006). At the staged rainforest, the storytelling activities were built around a set of characters, commonly the researcher Paula Plant and the plantation owner Claudia Goldschmitt (there were also a worker and a shaman but they were performed less often). The visitors always met two guides during the walk, starting with one of the characters, and then at half-time, replacing the first one with the other. As part of the educational aim at Universeum, the visitors should encounter different approaches to the use of the rainforest, and at the change, the two guides engaged in a short debate displaying their different approaches to the rainforest. On the way through the rainforest, the guided tour was fuelled by questions raised by the participants, mostly concerning animals; with this, the guided tour was - to a certain extent co-produced by the guide and the visitors together. Depending on the guide and the number of questions, the tour could last from 20 up to 50 minutes.

When following different versions of the tour certain patterns started to emerge; a set of orientations characterizing the stories told were possible to detect. Personalizing the presentation through the way the two guides depicted the forest, conflicts were downplayed and the facts of the rainforest were confined to common denominators addressing scale, and misconceptions about the rainforest animals. Starting with the personalized stories, the guides through their role-play expressed different interests in the rainforest. During one of the tours I followed, the plantation owner, dressed in a dark shirt, straw hat, and sunglasses, greeted the visitors on the platform at the top of the kapok.

Hi everyone and welcome to my amazing rainforest. My name is Claudia Goldschmitt and I own this amazing rainforest. It's so amazing because I get so much out of this. My family and I came from Germany to Brazil to start different plantations. What we grow and what we're known for is this little fruit. Does anyone recognize this?

She showed the group a palm oil fruit and continued:

Palm oil is great for me and my workers. It's present in almost everything. Palm oil is in shampoo, butter, conditioner, yes, in all things. So, I earn a lot of money.

On the tour that followed through the forest the visitors were treated to stories of animals and plants. The plantation owner explored views of palm oil and



Figure 2: The palm oil fruit, as shown by one of the guides. Universeum 2016. (Photo: Lars Kaijser)

deforestation, often colliding with Universeum's own point of view. The presentations were occasionally interrupted or distracted by thunder or birds coming up close, monkeys crossing the way or the sloth moving in its space. Halfway through the tour, the researcher Paula Plant, also in sunglasses, met us wearing a vest and a safari hat. A discussion or exchange of words occurred as the plantation owner and the researcher talked to each other.

Paula Plant: Mm... we talked about palm oil, there are a lot of people who want to make money from this.

Claudia Goldschmitt: Yes, that's great.

Paula Plant: Yes, we also talked about the urge to cut down the rainforest, and in fact, there are a lot of animals living in the rainforest, and if you were to chop down the rainforest, you actually cut down their homes.

Claudia Goldschmitt: But you have to focus on the solutions and not the problems or how ... if I were to cut a tree like this with the red ibis for example [she pointed at a bird sitting on one of the branches of the concrete tree, author's comment], then it only flies to the next tree, you are so negative, you simply have to find the solutions.

Set in playful modus, the simplified discussion personalizes two different positions concerning the importance of the rainforest, deforestation, and the use of palm oil, performing two different kinds of anthropocenic ecoauthority. When knitting science and entertainment together, the element of playfulness and irony is an important feature. It is possible to detect a sense of irony, or maybe an ironic posture in the portrayal of the plant owner. Not that it was all fun, as the plant owner's point of view was continuously entwined with facts about the rainforest; the visitors got to know something about the bird, but told in a flippant way. It is possible to interpret the plant owner as both naive and ignorant, and as a way of performing a competitive stance in relation to the anthropocenic ecoauthority played out by Paula Plant.

The meeting between Paula Plant and Claudia Goldschmitt hints at an ethos characterizing the presentation as a whole. The meeting was staged in a har-

monious way; conflicts were downplayed to friendly banter. This approach opposes the violent nature of the environmental work that has taken place in the South American rainforest, where workers allegedly have been murdered in their pursuit of eco-friendly production, defending natural resources or wildlife.11 Yet there is something gently comforting about the presentations during the walks and talks. As mentioned earlier, the aim of the rainforest is to change people's habits, which is possible to interpret as a claim of power and an expression of mild symbolic violence. This aim was approached in a gentle way, accordingly related to the reaction from the visitors, who acted in a well-behaved manner, listening in an amused way, and occasionally, politely asking questions (there might be more tension during school visits, but this attributed more to youthful engagement than a reaction against the portrayed situation of the rainforest). I will return to this later in the article.

When Paula Plant took the lead, she stated her point of view, telling the audience about the importance of the rainforest, in creating oxygen, and ensuring biodiversity, to this adding the story of deforestation and the problems it creates. The guides used shades to indicate when they were in the role. The tours always ended with the guide taking the sunglasses off; shedding the character they were playing and shifting to a role directly representing Universeum. However, the researcher character's point of view was similar to the one advocated by Universeum, telling visitors how they could change their behaviour as regards the use of palm oil. The educational credo is that the choices we make in everyday life, the groceries we carry home, have an impact on the rainforest and the deforestation. At the aquariums I visited, a recurring pattern on guided tours and in exhibits is the ambition to empower the visitors, in this setting related to providing the visitors with practical know-how to deal with the environmental challenges, as well as ascribing a meaning to those actions carried out through everyday activities. Even though the environmental future is challenging, the constant ambition is to avoid having visitors leaving in a crestfallen mood. "It is not all doom and gloom," I heard repeatedly. Instead the visitors were supposed to leave the aquarium engaged, with the knowledge of how to affect the future. This was articulated through different topics depending on the aquarium's aim and constitution, if not focusing on palm oil, some aquariums put their efforts into avoiding plastic bags and shark fin soup, others on how to make sustainable choices of fish for dinner.

To achieve the wow excitement and as a stepping stone for more nuanced views of nature, the talks were fuelled by the ethos of the Guinness Book of World Records emphasizing scale: the most poisonous, the largest, the smallest. During a walk, Paula Plant stopped in front of a terrarium containing poison dart frogs, stating that the visitors were to meet the world's most poisonous land animal; that they were more poisonous than all the snakes and all the spiders. As the glass was a bit misty and the frogs were small, she asked if anyone was able to spot any of them. When coming up close, it was possible to detect one black and yellow frog, and shortly after, one blue, soon other frogs in other or similar colours became detectable. "Do you see the yellow one; it's the most poisonous of all," pointing at a yellow frog the guide continued, "0.00001 grams is enough to kill an adult person," and then relating the frog's poison to the fact that the frogs, when living in the rainforest, eat poisonous plants and animals. The element of wow - being the most poisonous - worked as a stepping-stone for more facts and an elaborate presentation of the animal. The visitors were told that the bright colour was a way of telling other animals that they were poisonous, adding to her presentation she spoke of how the frog's poison also was part of the Amazonian culture and used to create curare, a very strong poison used for hunting with bow and arrow.

The rainforest presented during the talks is to an extent reduced to "the rainforest" as a singular object. A consequence of this is a homogenization of the rainforest area, portraying the rainforest, or Amazonas as it sometimes was labelled, as one geographical area, although it is possible to divide this vast area into many different regions. The tours through the forest are organized to make room for different voices from the rainforest, but I would not suggest that the voices were equally treated. Instead, and in line with the aim of the rainforest exhibit and its anthropocentric ecoauthority, they strongly supported the scientific voices, while dismantling and sometime ridiculing other perspectives.

Establishing an Interface

The staged environment, together with talks and texts, created an interface with the real neo-tropical rainforest, continuously relating the two spaces to each other. On one hand, the visitors were invited to be part of the rainforest environment, and on the other hand the South American rainforest – in all its various ways – was made present in the everyday life of the visitors.

The rainforest exhibit was possible to enter from several entrances and from six levels. As stated on maps displayed at the science centre, the main entrance was on level four, and this was where an ideal walk through the rainforest would start. An assembly hall, set with a research station organized as a wooden research cabin of the 1940s, worked as a starting point. A notable feature was a red jeep in the corner of the room, hinting at one of the inspirations for this orientation, namely Tintin as the jeep was similar to one featured in the comics. The intention was to evoke an adventurous feeling for exploring nature, similar to the mythologizing of the South American rainforest, and the apprehension of "the Jungle" in popular culture. As part of the experience industry, the aquarium is a field where the boundary between popular culture and reality is blurred. Popular movies are an important ingredient, repeated invocation of a set of globally distributed films with easily recognized images, such as Finding Nemo, Finding Dory, Ice Age, or Happy Feet, used as reference points during guided talks, lectures, or in texts on signs presenting animals. All this helps to unite visitors from different parts of the world. This also touches on the aspect of banal sustainability, as popular culture tends to be a prominent part of people's everyday life. Characters like Sid the Sloth or Nemo and Dory remind the visitors of their acquaintance with the animals, connecting them to the visitors' home environment. Other films, like Jaws or Piranha, are also important, but more as counter-images (cf. Kaijser 2018). The use of film is not so much about giving an account of nature, as finding a common ground for further elaboration, paving the way for environmental awareness.

The interface created between the staged rainforest and the real rainforest was set with popular culture stories, causing acquaintance, familiarity, and friction. Funnelled through the ambition of responding to general misapprehensions about animal behaviour, the presentation during the tours channelled themes based on popular culture. On the way through the forest, Claudia, the plantation owner, stopped by the piranha aquarium. She said:

Here you can see a couple of beautiful fishes, called piranhas. Just like me, these fish are mythical. Do you know anything about them?

A visitor answered: "They can bite." The guide commented on this:

They're known to be quite aggressive, that they bite, but it's actually not true. Here we have the rainforest's coward. These are red-bellied piranhas, the most aggressive of all piranhas. Usually, they don't attack, as long as the prey is not damaged or completely dead. They are not as dangerous as all the movies make them look. In many horror movies, it appears that the piranha is so dangerous, but just like sharks, it's not the case. We think sharks are so dangerous and that the piranhas are so dangerous, wanting to kill us, but that's not right at all.

The more discursive understanding of nature and animals evoked in the visitor encounter – for example dangerous piranhas – infused a slightly reactive story-telling. Popular culture acquainted the visitors with the rainforest and its animals, but not always appropriate to the scientific standpoint, as manifested in the presentation of the piranhas. This way of articulating the animals has recurred in most of the aquariums I have visited, sharks being the obvious reference.

At the research cabin, the visitors were able to sense the rainforest by patting snakes or cockroaches and tasting chocolate, papaya, caterpillars, coconut, or other samples from the rainforest. Set in a nostalgic way, this starting point showed some of the recurring binary positions; the meeting of staff and visitors, human and non-human animals, popular culture and science, the present and a romanticized past, a Swedish everyday life and an afflicted tropical rainforest. The anachronistically designed environment opened up for recognition and engagement, nurturing a European approach to the Amazon in particular and to South America in a more general sense, portraying the rainforest as primarily a production area, and the West as a society of consumers. This might be true, but it also signals a very strong power relation towards the displayed geographic area, and an important factor constituting the relations towards the Amazonian rainforest.

Important in establishing an interface were the stands displaying signs and different kinds of installations telling the visitors of different rainforest topics, arranged along the paths through the rainforest. The communicator responsible for the information presented its organization in the previously mentioned promotion film:

There is so much to tell you about the rainforest, there are so many different parts, its plants and animals and the people in the rainforest. We have divided the information into three major pieces. The first one is about facts and fascination and everything exciting that the rainforest means. The second is about the consequences of human influence on the rainforest. And the third bit is about contributions and responsibilities, that's what we and you can do to save the rainforest.

One of the stands – called the Glade (*Gläntan*) – concentrated on palm oil, displayed information on the production and its link to a disappearing rainforest. On the stand was a poster saying:

As a consumer, you have the power to ask for products and food without palm oil. Today, all products containing palm oil have to be labelled. You can also ask for products and foods made using RSPO-certified palm oil. That sends a clear message to the producers, and you help save our planet's rainforest. Assembled to the stand was a curtain marked with "Pull down the curtain. Do you dare?", making it possible to take a closer look at the effects of palm oil production. When pulled down, a sign told the dark stories of climate change, of the importance of the rainforest CO_2 production, and that an area the size of Denmark was devastated every year, further stressing the importance of taking care of our shared planet. The visitors had a choice, and a possibility to adjust their walk through the rainforest to the amount of distress they wished to endure.

The reconstruction of the rainforest held tension and frictions. Continuously tested in the process, the scientific approach met other ways of apprehending the amount of detailed accuracy necessary for an authoritative staging of a rainforest. For example, the texts on the stand were the result of a negotiation and an ongoing dialogue between the scientific leader and the producer of the stands, the first arguing for more detailed scientific accuracy, the other promoting an educational less-is-more stance.

There were other strains as well connected to the signs in the exhibit. The architect-designed rainforest was made to dissolve the difference between the visitors and the environment in the exhibit. At the same time, there were tensions in the relation to visitors and their anticipated use of the rainforest, a relationship firmly ordered through signs posted along the paths in the forest. The ideal relation was see-but-not-touch, manifested by a fair number of signs telling the visitors not to touch the animals, not to feed the animals and not to use flash photography. By designing the signs in a gentle matter, the science centre wanted them to articulate the prohibitions in a nice way.

Universeum is a meeting place of many sorts, it entertains tourists, and it is where school classes go for lectures and lessons, and a place for locals with an interest in nature and science to hang out. Drawing together different social groups calls for a way to communicate, as tourists, school children, guides, and scientific experts tried to find a common ground. One important theme in the aim of the rainforest relating to palm oil production and deforestation is to convey an understanding of the importance of biodiversity and the threat of species extinction. One guide talked to a group of pupils arriving at the science centre:

Now, I have taken my safari hat off and I will highlight the rainforest in a research perspective. There are amazing animals and plants in the rainforest, and of course, we want to preserve them. And why is biodiversity important? Scientists usually liken biodiversity to an aeroplane. If you think of an aeroplane and what it looks like, in the aeroplane, there are seats and there are all sorts of things. But if we compare biodiversity to this aeroplane ... maybe you don't like mosquitoes, so you destroy all mosquitoes, and then we remove one thing from an aeroplane, we may remove the seats. This still works for the passengers, but then we remove another animal and at the same time we remove another thing from the aeroplane ... so you will remove species from nature and things from the plane... in the end, what happens? Things fall apart. We can remove some things, but not all, because then it will be impossible to fly the plane. This is how many researchers portray biodiversity. We cannot remove species by species from nature because eventually the system collapses.

This exemplifies the presentation of rainforest conditions during walks and talks, and a way of talking, hopefully finding a common ground for disseminating knowledge to an audience expected to have a limited entry-level knowledge. In this case, the target was predominantly a child, even though the approach was supposed to work on grown-ups as well, applying a simplified vocabulary, using no names in Latin, presenting no lineage charts of animal kinships, and showing no exploded view of internal organs or skeletons, otherwise common in scientific presentations of animals. Not that this was absent at the science centre; these kinds of presentations are part of signs and models and found in other areas of the exhibit space. Everyday language was primarily used during the walks, avoiding scientific terms.

Even though they are often debated and contested, anthropomorphic descriptions are a vital part of the way that animals are both portrayed and, as in the case of aquariums, used as narrative vehicles in the presentation of environmental facts and issues (cf. Horak 2006).12 Measuring animals through a human frame brings both similarities and differences to light. It is possible to return to the earlier examples of the sloth and the piranhas, addressing the sloth as sleepy and slow - it "goes to the toilet" only once a week, and the child is born through a bungee jump (born from a tree hanging by the umbilical cord) - and the piranhas are called both aggressive and cowardly. Using the human reference as a normative frame creates a difference, distancing humans and animals, while at the same time putting humans and non-human animals in the same setting, inviting the visitors to relate to the animals in the rainforest.

Adding the use of familiarity, such as employing popular-culture references, translates the conditions in the rainforest into local references. Applying measures of scale and size to local fixation points, the height of the kapok was identified through references to a Ferris wheel situated on a hill just above the entrance to Universeum (the sheer size of the Ferris wheel is also an example of a wow-fact). In this spirit, several other facts about the rainforest were localized in a Gothenburg context, when the amount of rain falling in the rainforest was compared to the rain levels in Gothenburg, and the Amazon River was compared to the nearby river Göta Älv. This way of presenting facts characterizes most of the other aquariums I visited; especially the comparison of different rain levels keeps returning. Gothenburg has a reputation for being - by Swedish standards - a rainy city, making the amount of rain that falls in the rainforest even more dramatic.

Domesticating the Environmental Challenges

Even though an interface was established, the rainforest was in a way portrayed as something else, the other nature. From a Scandinavian point of view, the heat, the humidity, the annual amount of rain, the diversity of animals and plants made it different. At the same time, the staged rainforest established an interface with the tropical rainforest. When geographically separated regions were drawn together into an interactive zone, the condition of the rainforest was brought into the visitors' everyday life. This featured ambitions and understandings of how to handle, and up to a point solve, environmental challenges. As mentioned, one ambition was to change the visitors' habits, and the emphasis in this process was on how ordinary activities – such as queuing in the supermarket, choosing a piece of chocolate, or picking a detergent without palm oil – affect environmental conditions in other parts of the world, hence, what in this article is called banal sustainability.

The process of translating scientific insights into people's habits of everyday life, labelled domestication, covers the procedure of new commodities and practices being adapted into everyday routines, a process merging new practices with local conditions.13 The use of coffee or chocolate are examples of how rainforest products were once domesticated, having acquired their rituals and their special attention within different cultural frames, and in some way detached from their origin. In this article, domestication covers the process of reformulating scientific facts-and-figures into an everyday setting. Transferring knowledge from the public to the private, from expert systems to common sense, the domestication of a scientific understanding also means implementing a certain orientation, a way of adapting environmental awareness into everyday life. The pivotal example is linking the use of palm oil in household items, as detergents and food preparation, to the deforestation of the rainforest.

The degree of complexity that distinguishes present-day discussions of environmental challenges and conservation issues is to some extent de-emphasized and individualized as consumer practices, narrowing the anthropocenic ecoauthority to be predominantly discussed in terms of consumer routines. Approached from the viewpoint of human needs, the general understanding of the rainforest is that it creates work, provides medicine, goods, and commodities taken for granted in everyday Western life. During one of the walks I followed through the rainforest, the group had stopped in front of the poison dart frogs and the guide said: The rainforest is called the rainforest's pharmacy since it is possible to use the frog poison in surgery and such, as it is a muscle relaxant. That's why it's so stupid if you remove the rainforest, as Claudia is doing with her plantation. Then it can affect the species very much, for example, if the dart frogs disappear they disappear forever, and then the medications we found may also disappear forever and then drugs that we have not yet found will not be discovered, but we do not know because we have not found them yet.

Presented from a Western human perspective, the articulated purpose emphasized a continuous sustainable consumption of rainforest products, not the animals or people living there. This is not to say that this is the overall ambition of the science centre. On the contrary, during discussions with the scientific staff, I found a great concern with a Eurocentric viewpoint and anthropomorphism and a wish to explain the rainforest from a biological point of view. Nevertheless, the walks and presentations emphasized the rainforest as a resource for food and medicine, and to a certain limit as an unexplored resource. This hints at an unintended drawback when trying to domesticate the scientific insights, narrowing them down to consumer practices; making the rainforest part of everyday routines, slightly alters the engagement in the rainforest from an environmental concern into a question of sustainable consumption. This is also a feature of banal sustainability, emphasizing the banal character of consumption and more so when downplaying the conflicts of interests that encompass world trade consumption.

The way of approaching the rainforest from a people's consumer perspective shifts the focus to who is responsible for the future of the rainforest. As a school class withdrew to the research cabin at the entrance of the rainforest, it was time to close the talk. The guide said that she had some signs that she wanted to discuss. The signs represented different actors identified in the discussion of palm oil production. The school class sat in a crescent around the guide who showed the signs one by one: the worker, the scientist, the politician and a business executive. The guide wanted the pupils to discuss who



Figure 3: Coasters used when discussing the responsibility of the palm oil use. Universeum 2017. (Photo: Lars Kaijser)

was responsible for the conservation of the rainforest. When asked, "Should the researcher be more or less responsible in relation to the worker?", the pupils argued for the worker's need to work, to be able to provide for his family, and that he might not have a choice. At the same time, if the worker had not chopped down the trees, the devastation of the rainforest would not have occurred. The scientists, for their part, thought it up in the beginning, so they were responsible too. The discussion became heated, as two of the pupils championed different opinions. The guide from the science centre let the debate continue for a short while, not taking sides; instead, she introduced the politician and the business executive. Deeming politicians as responsible for rules regulating palm oil consumption, the pupils choose the business executive as the most responsible, as she was the one who sold commodities containing palm oil. The guide introduced a fifth and last set of characters, the consumers, starting a passionate debate, ending with the consumers ranked as the most responsible for the conservation of the rainforest.

The discussion of palm oil also launched a dialogue on how to know whether an item contained palm oil and if so, why. The guide told the visitors about the pros and cons of palm oil, emphasizing the value of locally produced and consumed palm oil, and the problem of a global market in need of the same product. She also told the class of the simple actions they could take for conservation: "If you turn the packaging upside down and read 'oh, this chocolate bar actually contains palm oil,' 'but not this,' then you can actually make a choice, 'no, I won't take this one,' then you will all play a part." The guide confirmed this, stating, "the consumers have a very great power ... that's what I want you to take home with you from today, from this lesson, this hour with me... Our wish, from Universeum, is that you will become an active consumer, active, as you are when you're turning the package upside down, reading the list of contents, you have to be a little careful, but vou can make a choice." From this, the presentation evolved into a discussion of what labels were trustworthy when choosing chocolate, highlighting corporate initiatives like the Rainforest Alliance with its frog label and *Fairtrade*. They also discussed the importance of spreading this knowledge to family and friends, using the consumption of eco-friendly bananas as a good example of how consumer demands have changed the supply of retail goods.

Studies of nature films have shown how environmental issues become individualized to stories of isolated animals, thus shunning debates about economic and political conditions (Ganetz 2012: 112; Horak 2006: 473). The animals are not in focus in this article, but there is a similarity in how the complexities of the rainforest and palm oil use were individualized and tied to the consumer and singled out as individual items, making the consumer's choices the imperative for a changed future. This is an important character of banal sustainability, tied to the ambition presented earlier, in empowering the visitors with a hope that their everyday activities will better the future. The emphasis on the visitors' possibility to act upon deforestation through their consumer habits is an important feature, containing an open-ended and comforting narrative. The future might look dark, but through changed consumer habits, a promising future is possible. How this will end is up to the consumers.

The choices, though, seem to be between equally interchangeable products. It is not about avoiding chocolate, but making environmentally-friendly choices. The purpose is to carry on your life as before but in a sustainable way. This echoes the more consensus-oriented narrative employed through the guided tours, where conflict was downplayed, advocating a more superficial change of consumer habits, not a fundamental change of lifestyle (which is the solution some environmentalists would like to see). The aim to empower the visitors strengthens solutions in everyday settings; it does not address structural and political issues, even though it was possible to trigger this through the exercise and discussion of the responsibility of workers, politicians, plantation owners, consumers, and researchers, it is a banal sustainability stressing continuity, not abrupt change. From the reactions I saw during tours, this approach resonates with the visitors' dual ambition to continue their lives and at the same time be environmentally responsible. Hopefully, the staged rainforest will contribute to change and to environmental responsibility, but to some extent it could also be interpreted as a help to recognize and support the maintenance of present lifestyles. It is a future-oriented approach, rooted in a (wish for) cultural durability.

Concluding Remarks

Banal sustainability is the domestication of a scientific perspective on how to handle environmental challenges; it is a readiness to accept views of sustainable practices contested in other contexts, it is the way that issues of deforestation and climate change become part of people's everyday routines. In this, the science centre performed an orientation, a cultural narrative addressing the relationship between human and nature. The promotion of an awareness of the rainforest rested on the bodily experience of moving in a rainforest, with an educational modus leaning on astonishment, adventure, and empathy. Several traits intertwined: living plants and animals, heat and moisture, and a certain light- and soundscape cooperated with ideas of biodiversity, scale, and size, a will to correct misunderstandings of nature, the idea of a harmonious dialogue, and stories from popular culture.

The science centre aimed to make people change their behaviour. A recurring sentence, almost like a catchphrase, was "By making small adjustments in our lifestyle, we can help save the rainforests, and maybe even make it grow." The staged rainforest worked as an attachment site, a place where you go from wonder to insight to action, from feeling to knowing to doing, from wow to aha. As such, it was practice-oriented, simplifying, and empowering. The science centre targeted the use of palm oil, as the production causes deforestation and threats to the rainforest's wildlife. To avoid products containing palm oil, the science centre encouraged the visitors to read the declaration of contents for foodstuffs, hygiene products, and detergents. Their presentations hold frictions; Universeum should not be treated as one representation of the rainforest, but as several representations, oriented in more or less the same way, where the short, often reduced presentation of nature's complexity interferes, chafes against, and sometimes contradicts the more elaborate knowledge carried by the scientific expertise.

The staged rainforest raises questions about the portrayed relation between human and nature. The concept of the Anthropocene was cited earlier in this article, not used at the science centre (though familiar to the scientists when asked), and it resonated with the way that everyday activities relate to the Amazonian deforestation. In this way, the concept frames a cultural comprehension covering worldviews, images of reality, and practices related to this. It conceptualizes a way of thinking and interpreting relations to nature; it interprets and guides the understanding of human global relations, geographies, and the activities in-between. It covers a standpoint rooted in a contemporary scientific view of the world, situating human activity within ecosystems (cf. Ekström & Svensen 2014; Lorimer 2015: 2). In this, the rainforest works as a dramatic story, placing present everyday life – such as buying a piece of chocolate – in the midst of a new dramatic time: the human age. Helping to reorganize the relationship between human and nature, it also works as an arena making sense of human actions and their consequences, holding ideas of how time, space, and social acts are related.

The Anthropocene is a planetary concept drawing together worlds geographically apart, to a degree erasing the distance between Gothenburg and the South American rainforest. In other words, the Anthropocene extends the scope of human activities, paving the way for an orientation where human acts relate to outcomes in other locations. The staged rainforest holds relations and connections that cut through both geographical and social distances. It emphasizes a space and time where subjects previously separated by geography and history now are co-present, where their trajectories now intersect. In the case of this study, it would be possible to argue that the walks and talks stress the relationship between human and nature, when emphasizing the human impact on the biosphere. Not dissolved from nature, humans are actively present, given the dual position of both hero and villain. Even after having created the present troublesome situation, humans will also provide the solutions, and it all starts in the queue to the shopping market.

Notes

- 1 The article is part of the research project Staged Nature, Public Aquariums as Institutions of Knowledge, financed by Riksbankens Jubileumsfond. I am grateful to Anna Storm and Kyrre Kverndokk who both read and gave important input on earlier drafts of this article. I am also in debt to the two anonymous readers who directed me to its final form, and Alan Crozier who proofread the article. I am especially grateful to Jan Westin who initially made me aware of the construction project and invited me to follow the construction process. I also want to thank the staff at Universeum who took time to answer my questions and let me share their daily routines.
- 2 Chalmers, a technological university, and Gothenburg University, together with the Chamber of Commerce and the Gothenburg Region Association of Local Authorities (GR), a cooperative organization uniting the local municipalities, founded Universeum. Universeum consists of two parts, one part paying attention to nature with aquariums and a rainforest, while the other is dedicated to science and equipped with laboratories emphasizing space and health issues. The name Universeum is a wordplay, but it is a proper name and should be without a "the".
- 3 www.universeum.se/hallbar-varld/vart-uppdrag/. Last visited March 6, 2018.
- 4 For example, they were engaged in a protection project trying to save the pied tamarin, for which they supported research and raised funds.
- 5 Organized through global organization as WAZA and The International Aquarium Congress, or in a Swedish context Svenska Djurparksföreningen (Swedish Association of Zoos).
- 6 The use of the concept of the Anthropocene is tied to comments made by the Noble Laureate Paul Crutzen at a conference held in 2000 (2002). The Anthropocene is a period designating a geological era, supplementing the Holocene, established after the last Ice Age and characterized by environmental stability (cf. Ekström & Svensen 2014; Sörlin 2017). Characterized by human activities, the Anthropocene is an era interfering with and changing the global ecosystem. Challenged and contested from different angles, for example concerning the starting point of the Anthropocene, different starting points have been put forward: 1492 (when Columbus reached America), 1784 (when James Watt invented the steam engine) or 1945 (the first atomic bomb). There is also debate about the reason for the environmental changes, and a vital part of these discussions consists of suggestions for other terms, framing another understanding of the global changes (for example Thermoscene or Capitaloscene). However, this article will not dwell on these discussions. For now, the con-

cept both articulates and affects the understanding of humans' place in the ecosystem and its relation to the global constitution.

- 7 Universeum has several departments, partly dedicated to science in a playful way, partly categorized as an aquarium. The aquarium caught my attention, as this is part of a study of public aquariums. When speaking of my findings in more general terms, the references for this are other public aquariums.
- 8 Lorraine Daston and Katherine Park have written about the relation between wonder and science, showing that the idea of the wonder was part of the elite's understanding of nature from the thirteenth to the eighteenth century, when enlightenment started to pave the way for another understanding of nature, thus viewing wonders as something vulgar (1998). Having said that, wonders are still part of our world, for example displayed at science museums (ibid.: 365). The authors distinguish a respectable wonder (to be found at a science museum), characterized as something real, possible to explain, though scientists still have to find a possible solution, confirmed through nature's laws.
- 9 This is compared to rainforest habitats staged at the Blue Planet in Copenhagen, Vancouver Aquarium, and Sea-Life Aquariums in London, Brighton, Minneapolis, Minnesota, and Orlando, Florida, and Los Angeles Natural History Museum.
- 10 https://www.youtube.com/watch?v=W-3OM_JcWT0& t=0s&index=3&list=PLTb-KZszv5LYw4bIl-kKHDg5w V9ouad1b.
- 11 See for example https://www.theguardian.com/environment/2017/jul/13/environmental-defenders-beingkilled-in-record-numbers-globally-new-research-reveals.
- 12 Common in guided tours is the procedure of creating a bond between participants in the tour and the object of display. For example, in popular music tours, links between the social situations of the artists' childhood sometimes create a familiarity; in tours of aquariums the trick is to find familiarities between humans and other animals (cf. Kaijser 2013).
- 13 The concept of domestication stems from consumption studies (Silverstone 1993: 227), but has also been applied in technological studies illustrating the ways that new technological devices have found a home in everyday life (Alasuutari 2009: 67), and by Roland Barthes when describing the domestication of photography (Barthes 1986).

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