Moving Plants

Moving Plants

Edited by Line Marie Thorsen

RØNNEBÆKSHOLM

CONTENTS

THOUGHT PIECES: THINKING WITH COMMON CONCERNS

ESSAYS

INTERVIEW

Director's foreword

Plants are everywhere around us. They are the bouquet we give to a loved one and they are the grass we lie on in the summer. They are the salad we eat and they are the old trees making room for childhood's treehouses. However, as *Moving Plants* shows us, plants are also much more than what we can comprehend from everyday activities: plants are a central part of the debate around a climate in crisis, they have a huge impact on the human demography and they have a tremendous aesthetic potential – as food, as images and not least as something to *think with*. Because, as *Moving Plants* makes clear, people are not only moving plants around – plants are also moving *us*.

It is a great honour to house a project at Rønnebæksholm that so unexpectedly and comprehensively deals with plants and nature. Today Rønnebæksholm houses the kunsthalle for modern and contemporary art, but the old manor dates back to the fourteenth century. With regards to historic manors, it is first and foremost the nature and landscape that have defined their position, their production and their strategic political role throughout the centuries. At the same time, manors like Rønnebæksholm have undoubtedly also had an impact and made changes on the surrounding nature.

Rønnebæksholm is now surrounded by parks, meadows and a lime tree avenue – and this environment is part of the core identity of Rønnebæksholm. Here, we are constantly working with art as something that has an impact. Art is never mere "dead images" that we tell stories about. *Moving Plants* is a brilliant example of how art can actually *do* something: cast something so seemingly ordinary as plants in a completely new light.

We thank the authors of the catalogue for sharing their expertise and for presenting new and thought-provoking insights. We also want to thank the exhibiting artists for their extraordinarily generous sharing of thoughts, works and time. Coming from Sweden, Denmark, Australia, Hong Kong and Japan, many of the artists travelled halfway around the globe to work with the local plants and to stay with us for longer and shorter residencies

None of this would have been possible without Line Marie Thorsen, who initially presented us with the exhibition concept. The overall curatorial and research responsibility for the project has resided with her, and she has created an outstanding exhibition and book. At Rønnebæksholm, curator Anna Vestergaard Jørgensen went above and beyond in the coordination of both exhibition and book. We also want to extend our thanks to Aarhus University Research on the Anthropocene (AURA) and Changing Disasters UCPH Excellence Programme for Interdisciplinary Research at Copenhagen University for supporting *Moving Plants* as a part of Line Marie Thorsen's doctoral research. For valuable insights and comments during the editorial process, we thank Casper Bruun Jensen. Jeanne Betak is the graphic designer who made all the thoughts and art pieces into this beautiful book that you are holding now. The exhibition and the book would not have been possible without the commitment and goodwill of all of the above mentioned, nor without the substantial support of the Danish Arts Foundation, the Toyota Foundation and the Beckett Foundation.

We are grateful for the opportunity to let *Moving Plants* and everyone involved make a lasting impression on our way of thinking about our local nature, and we are delighted and excited to welcome visitors and readers to be moved with us.

Dina Vester Feilberg
Director
Rønnebæksholm

Rønnebæksholm, garden view. Photo: Léa Nielsen.

Introduction: Moving Plants[1]

Line Marie Thorsen

Plants move, they move other things, they move people, and they are themselves being moved around. As nature writer Richard Mabey traces in his book *The Cabaret of Plants*, we often treat plants as a mere backdrop for human activity and existence: "as the furniture of the planet, necessary, useful, attractive, but 'just there', passively vegetating." (Mabey, 2016, 4). Yet, as we become still more acutely aware of the dire ecological state of our planet, artists and scholars across the world are increasingly insisting that plants are amongst our most important earthly co-inhabitants if we are to thrive and survive in a climatically changing world (see for example "Photosynthetic mattering: rooting into the Planthroposcene", p. 123). As an exhibition, *Moving Plants* showcases art practices from across the world regions of East Asia and Europe that all centre, one way or another, on plants as a focal point for making local and global connections between aesthetic engagements with contemporary ecological issues and practices of concern.

The book you are holding is a companion piece to the namesake art exhibition, bringing together the exhibited artists with scholars centrally invested in similar plant-related matters. As such, it is not exactly an exhibition catalogue in the conventional notion of the genre, but rather a reflection book in which scholars from various disciplines think with and through core themes and issues resonating with the matters put forth and explored by the artists in the exhibition. We should start, then, by sorting out these central matters of concern. Why are plants so important when talking about and engaging the current ecological and climatic turmoil of our planet?

Noticing plants: staging a common ground for ecological concern

As philosopher and anthropologist Bruno Latour suggests, the collective and collected efforts of all earthly beings will be needed if we are to survive the deepening climate and ecological crises (see "Can we land on earth? — an interview with Bruno Latour", p. 143). Yet, climatic changes are not one thing: Scandinavia is affected differently than East Asia, and notions of *the* climate and *the* natural environment are misleading, since nature-culture relations are differently configured across places. For the same reason, artists also approach these phenomena on variable terms.

For some time now, in what we might call Euro-America, a specific set of concepts has come to guide and frame the way discourses and research, as well as artistic practices, are

1. I have gratefully borrowed the expression from Koichi Watanabe's work and art project *Moving Plants* (2000–15).

categorised and become recognisable as environmentally and ecologically engaged. These include "climate change", "global warming", and more recently and predominantly, "the Anthropocene" – a term potentially designating a new epoch of our earth, where human activity is a force of planet-transforming scale on par with nature's geophysical powers. But while such general concepts are clearly doing important work in some contexts, and are no doubt immensely important for understanding the planetary times we are entering, they also tend to elide differences and travel outside of Euro-America only with difficulty.

Moving Plants inquires into the way contemporary artists are variously navigating and articulating global climatic issues into their (other) local – or rather, situated – environmental and ecological concerns. In the first instance, this exploration is part of and emerges from fieldwork, carried out by the present author, across East Asian and European spaces of contemporary art, starting from Hong Kong and Japan in particular. Whereas Europe has seen many climate change and "Anthropocene projects",[2] actively bringing together the arts and other invested disciplines via such "globalised" frames and headings, in Hong Kong and Japan, situated ecological discourses – and thus also the spaces for socially and ecologically engaged art – are configured quite differently. Thus, artists will often *not* talk about climate change or the Anthropocene when they talk about climatic changes, their anthropogenic origins and the issues that follow. Instead, as I have found, they more often and more engagingly talk about care and concern for plants.

Taking East Asian engagements as a starting point for researching ecological and climatically concerned art practices, this casts new light on art practices in Europe as well. Despite the limited travelling capacities of certain presumably "global" concepts, artists across both regions *are* in fact attentive to the shared "things" which mediate ecological concerns in powerful ways and which seem to travel much better. Plants are central amongst these things, worldly and engaging as they are. By *noticing* plants, and by putting them *centre stage* as in the exhibition and this book, one stands to learn more deeply – so we venture – about contemporary eco- and climatically-concerned practices of art and beyond, including the kinds of imaginative world-making at work.

Making spaces for the gathering force of plants

In Hong Kong, the notion of a *global* climate is far removed, indeed, from everyday horizons of concern. In an ever-expanding city-scape, with widening inequalities and growing socio-political tensions, global systems of climate and melting icecaps simply seem too far away for most. Yet plants are immediately important: they provide healthy foods and spaces for bottom-up forms of community building, and the demand for more plants – for more green living spaces – has shaped into a common platform for movements calling for more responsible climate and environmental politics. For these reasons, artists like Wai-Yi Monti Lai are turning their practices towards the making of public common spaces for growing and discussing the importance of plants, gardens and farming, in an attempt to foster and create better living conditions for all.

In Japan, long-held traditions of seeing landscapes as woven from *both* nature *and* culture generate a different starting point for contemplating human impacts on the planet, when compared to Europe or indeed Hong Kong. Here, a notion like *satoyama* is key: the nowadays much-flaunted Japanese word for those ecologically rich areas in-between "the wild" and "the cultivated", where mountains deliver nutritious soils, waters and *plants* for farmers who in turn cultivate the hillsides carefully. As an almost mythical nature-culture landscape, the *satoyama* of Niigata Prefecture has in recent years come to host the large-scale art triennale Echigo Tsumari; and here, too, concern for ecological entanglements is manifested through attention to plants, as the works exhibited in 2015 by Yukiko Iwatani and Janet Laurence testified. As Iwatani has put it, you can only show concern towards the rich ecology of the planet if you notice how it is already integral to your everyday life. Using Japanese techniques for plant manipulation, Iwatani creates beautiful sculptural works from weeds, seeds and utility plants present at the locations where she is invited to exhibit: plants already part of vernacular worlds, but often overlooked. Through her sculptures, she makes their vitality available to us anew, so that we may start noticing their presence and begin to care for them.

In the story of the modernised Western world, however fanciful it now seems, human culture was ascribed the role of domination over passive nature. As we realise just how catastrophic this division of roles has turned out to be, we relearn the extent to which humans remain fundamentally intertwined with and part of the planetary ecology. Recognising a much-needed break with the culture-versus-nature story, artists in Europe, much like their East Asian counterparts, also seek to question our relations to "the natural" and the earth via engagements with plants. As seen in the work of artists Camilla Berner, Karin Lorentzen and Åsa Sonjasdotter, they do this not least by interrogating the ordinary and everyday aesthetics of nature-culture entanglements in the cities, gardens, kitchens, farmlands and ruined post-industrial landscapes of Europe and beyond (see e.g. "Plants and everyday aesthetics", p. 35 and "Deep in the maze – urban nature and repetitions of the not-quite-similar", p. 105).

In contrast to the disembodied language of *the* global climate crisis, plants gather multiple ecological concerns, public engagements and artistic imaginations across world regions, nation states and cultures on a vernacular, embodied, sensuous and vitally material level. All over the world, artists play central roles in giving shape to this aesthetic and political gathering force of plants, and to the opening of those shared and common spaces where

2. This wording refers specifically to Berlin's Haus der Kulturen Der Welt's (HKW) *The Anthropocene Project*, which has been on-going in various forms since 2013. However, a rather long list of other Anthropocene-related exhibitions, events and project could well be added. This includes Aarhus University's Research on the Anthropocene (AURA) project, in association with which the *Moving Plants* exhibition and book have been developed.

diverse worlds of more-than-human co-habitation may be explored, nurtured and reflected upon. *Moving Plants,* both the exhibition and this book, similarly aspires to be such a gathering space.

Moving plants and thinking arts

When experiencing, curating or indeed researching contemporary art, we tend to begin from what we already *know* – from what seems solid, well-established or plainly recognisable. Strangely enough, perhaps, this process has tended to turn philosophical and socio-cultural *theory* and *theorists*, as conventionally accepted producers of knowledge, into favourite starting points for knowing art. Art festivals all over the world, from Documenta in Kassel to Echigo Tsumari Art Triennale in Niigata, never fail to be accompanied by a host of theoretical books, promising to contain all the intellectual frameworks we need to "make sense" of the artworks.

This procedure is no doubt relevant in many cases; yet, what would happen if we tried a symmetrically opposite manoeuvre for once? If starting from East Asia and the "other worlds" of world art leads to plants, rather than climate change, as a central "thing" for environmentally concerned artists in Europe as well, then, maybe, starting from art itself and its central engagements can likewise spur other modes of thought. What if we do not think art through theory, but engage theoretical questions by thinking with and through art? Such is the principal question for this book of reflections – and, as such, it takes on the contours of an experiment in art as a knowledge-producing and -generating practice. In order to let the art practices involved set the premises for the subsequent thinking, what are here called "thought pieces" have all been written by important and acclaimed scholars, none of whom have art as their main professional research focus. Coming from various disciplines, the contributors have been paired and invited to think along with the practice of one of the artists with whom they share a thematic concern.

For example, in the case of Koichi Watanabe's ongoing artwork *Moving Plants* – a title we have gratefully borrowed for both the exhibition and book – he tracks and documents, through a series of photographs, the historical, contemporary, global and local movements of Japanese knotweed. In his photographic work, we see how this invasive but also very ordinary plant species made its way from Japan to Europe and America in the 1840s via the trade routes of global capitalism-in-the-making. In her accompanying text, or rather, her thought piece, cultural anthropologist Anna Tsing uses Watanabe's proposition to think further about her own research on weedy interactions between human and non-human worlds. Following and appreciating the moving plants, Tsing is thinking with and through Watanabe's aesthetic proposal on what it means when plants move and what moves along with them (see "Moving Plants: appreciating Koichi Watanabe", p. 21).

In these ways, and acting as a gathering place, *Moving Plants* focuses on and helps stage the potential of plants for eliciting an art of noticing and for gathering threads of shared concerns and care for a common world. It does so by showing works by artists from Hong Kong, Japan, Denmark, Sweden and Australia; and by engaging these works into conversations with scholars from equally varied positions, who explore and think *with* artists and their work on the manifold ways in which plants *and* art intervene and take part in our everyday lives. What kind of thinking does art prompt? How can and should artists, scholars and publics explore their shared ecological concerns, together and apart? Such questions animate this reflection book.

The showcased artists work in primarily site-specific ways, in close relation to and via examinations of everyday ecologies. In the *Moving Plants* exhibition, several works will be unfolded in accordance with the specificities of the place and the local embeddedness of the artistic venue. Yet, as you will find throughout the texts to follow, this artistic approach in no way impairs their potential for addressing a much broader set of issues – quite to the contrary, we might say, judging from the engagements of the thought pieces. While I argue that all the artists in the exhibition address plants as a nexus for heightened sensibilities towards fragile planetary ecologies, each work and each piece also grapples with its own specific thematic concerns, eliciting new ways of seeing and thinking across the manifold phenomena entangled in our ecological and climatic crises. Allowing us to hold such differences in common view, and to explore what is shared across divergent contexts, provides one of the important ways in which plants may move contemporary art, scholarly thinking, public sensibilities and political engagements in new directions.

Bibliography

Mabey, Richard: *The Cabaret of Plants – Botany and the Imagination*, Profile Books, 2016.

Thought pieces: thinking with common concerns

Koichi Watanabe

Anna Tsing

In his ongoing project *Moving Plants*, Japanese artist and photographer Koichi Watanabe has been researching, tracking and documenting the intricate life and movements of itadori from Japan across the world. Itadori, or *Fallopia japonica*, is a tall, vigorous plant known to English-speakers as Japanese knotweed. The plant was brought to Europe by the German physician Philipp Franz von Siebold in the mid-nineteenth century. Because of the plant's delicate look and heart-shaped leaves, it was used as an ornamental plant in gardens throughout Europe; but in new cultural landscapes it quickly turned invasive. Koichi Watanabe follows this history of human and plant-interaction in his work, from Deshima to Leiden, Swansea, Katowice, New York, London and Nagasaki, with photographs from botanical gardens, housing areas, industrial landscapes and parks. We see the plant's distribution of today, its problematic beauty and its invasive presence.

—

In her ethnographic work, anthropologist Anna Tsing has long followed and inquired into global connections of humans and non-humans, as they form and come to life in friction-filled encounters. In her recent book *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (2015), Tsing follows the coveted and highly aromatic matsutake mushroom, a luxury produce connecting Japanese culture with migrant workers in America, nature preservation, industrial ruins, global trade and much more. We might similarly ask: What kind of plant movements do we find when thinking with Watanabe's work and, indeed, with itadori? In her present text, Tsing explores this question. Plants move, yes, but nothing acts alone, so how and with what other kinds of entities does a plant like itadori move?

Koichi Watanabe: *Swansea, Wales, the United Kingdom*, 2005.

Moving plants: appreciating Koichi Watanabe

Anna Tsing

Red maple seeds float down a New England stream and sprout thickly on the muddy bank where the water deposits them. Most will die when the water rises, but if the stream bed changes, some may grow tall. Meanwhile, football-sized ripe durian fruits in Borneo crash to the ground, releasing enticingly rich smells. Animals, including humans, carry them off, discarding the seeds to grow and shade new hillsides. Invasive black cherries form an understory in a pine plantation in central Jutland, where jays have transported their seeds. In these and many other ways, plants continually move. The idea that plants should be an icon of stillness, rootedness and passivity is an unfortunate legacy of Western philosophy's neglect of actually existing plants (Marder, 2013).

Yet what it means for plants to *move* has changed. Today, shipping containers carry 18,000 seedlings; they have made it easy for industrial consolidators to seize the nursery trade and take it to the cheapest and least regulated spots on earth. Plants and soil whiz around the world, and cheap global stock undercuts local plant nurseries. With this trade comes plant invasions and diseases; native ecologies around the world are endangered for the profits of just a very few bosses.

Koichi Watanabe takes us to the beginnings of the industrial-and-imperial commercial trade in plants by telling us the story of *itadori*, Japanese knotweed (*Fallopia japonica*). German physician Philipp Siebold, Watanabe tells us, went to Japan in 1823, where he began to collect plants to send to Europe. In 1830, he was banished for smuggling. Despite a shipwreck that destroyed much of his botanical collection, Siebold was able to bring a large number of Japanese plants to the Netherlands — where he became an entrepreneur in the nursery trade. One itadori plant survived the shipwreck to be established in the Leiden Botanical Gardens. Yet, through cuttings and hybridizations, it became the twin sister and great-great-grandmother of many many plants across Europe and North America.

One key moment came early when Siebold sent some live cuttings to Kew Gardens in London. It was just in time for the "wild garden" movement in the UK, where imperial sensibilities were aestheticized in gardens whose ease and beauty required plants from all over the world (Casid, 2004). Itadori was just right for making shady spots for quiet contemplation (Bailey and Connolly, 2000). From such beginnings, itadori spread – not just from plantings, but also on its own force, growing up from even tiny fragments in the soil as well as from its copious seeds. Itadori *moved*. It went everywhere across Europe and North America, especially to deeply disturbed places such as urban renewal sites and

industrial wastelands. The strong shoots of itadori broke their way through cracks in cement and asphalt; before long, itadori was destroying roadways and coming up in basements, driving down property values. In its invasive forms, itadori takes over the places it grows, swallowing up whole ecologies until it is the only organism remaining. Itadori, it seems, had become a monster.

And yet, this is not the message of the lush photographs by Watanabe. Itadori, he shows us, is a familiar plant of Japan, whose surging layers of leaves force us to admire it. Both at home and abroad, it is impressive. Looking through its canopy, itadori forms a stained-glass panorama of light and shade. It fills the space of our vision with patterns of greenness. Positioned amongst a greenness that stretches beyond our sight, we are humbled and awed. There is beauty here, and there is wonder. In the preface to Watanabe's book, *Moving Plants*, Chihiro Minato writes of a childhood memory of the crisp snap of itadori stems breaking. Plants give us gifts not just of pattern and color, but also of smell and sound. Itadori is useful too, beyond making us experience in green: it produces food and medicine for those who know it well.

When do wonder and admiration turn to fear? There is no clear line; awe and terror can overlap. The Swedish detective drama *Wallander* showed a child abducted from a private lair in a dense grove of itadori. The grove's green walls make a secret place, a hideout for safety and privacy – but equally a site of vulnerability and violence.[1] Thus too the itadori in British gardens: first it seems such a pleasant companion, giving ramblers delight and shade, and then suddenly it turns to destroy the whole house. But itadori is not to blame. It grows; it spreads; it flourishes: it engulfs our feeble attempts at civilization. Itadori carries no malice. It has a Buddhist agency: world conqueror and world renouncer. It is not itadori but rather our imperial civilization that suddenly seems out of joint. What is this world we made for the malice-less conquest of itadori?

We have made a world of continual disturbance, where bulldozers beckon to young boys as symbols of power and pleasure, and native ecologies are "wasted, undeveloped" places, calling out to entrepreneurs. We have made a world where capital calls the shots, and every place is fair game for replacement, as long as the money is there. We have made a world in which human imperial conquests are accompanied by pests, pathogens, and weedy, invasive plants, among which itadori outdoes many others.

We have made a world of bolted-in, solid things that refuse to move. Despite our prejudices, it's not plants that are unmovable; it's us. Immobility: that's why our roads and houses are vulnerable to the movements of itadori. Watanabe offers one photograph of a house in Maplecrest, New York that has been engulfed by itadori (fig. 1). The itadori is huge: it has grown from one side of the house and out the other. The house appears to be sinking into itadori. Looking at such an image, how can we say that plants are not moving? Itadori has

1. "Wallander", season 3, episode 28, "Missing". First aired 19 January 2013, adapted from novels by Henning Mankell.

Fig. 1. Koichi Watanabe: *Maplecrest, New York, the United States*, 2007.

moved right through the house. Clearly, the problem here is that the house isn't moving. It won't get out of the way. It just stays there and lets itself break. In contrast, the bamboo, pole, bark, and thatch houses I lived in when working with a rainforest community in Borneo moved all the time. Hurricanes and earthquakes don't destroy bamboo houses. It's only cement and glass houses that are easy to break in their refusals to bend. In bamboo houses, too, some of the materials are alive. In the houses we occupied in Borneo, the tree-made posts began to sprout leaves before the human family decided to move on. A few years later, it was hard to distinguish an old house from a grove of trees. In Maplecrest, New York it appears that itadori is doing its best to return us to this situation.

Watanabe ends his meditation on itadori imagining its groves as a scene from the future, after the end of human dominance of the earth (Watanabe, 2015, 103):

> When I visited the sites covered by hybridized *itadori* suddenly I caught the odd feeling that I had come to the future world from which human beings had departed. Vegetation would be renewed year after year if people were gone and constructions were demolished. Hybridized *itadori* would be the main creature in this area. At that time, how would the ecological balance in this area be?

He follows this eerie meditation with a timelapse of this imagined world, taken in our time: in an industrial district in Silesia, itadori covers the rising banks of a canal, first in 2006 and again in 2011(fig. 2 and 3). In the second picture, the itadori is taller, more vibrant, greener (the second picture but not the first is in color); buildings have come and gone, but itadori keeps on growing. Itadori and more itadori: the "ecological balance in this area"

Fig. 2. Koichi Watanabe: *Katowice, Silesia, Poland*, 2006.

is the renewed growth of a single plant. This is Watanabe's final image: A praise song? A warning? Or both?

But perhaps this situation is not the end times; it might be, instead, the middle of things. Itadori is a creature of disturbance. If humans disappeared – and no, it wouldn't really require human disappearance, just the dieback of the industrial civilization of our times – itadori might spread for a while but then settle and decline. If industrial disturbances stopped disrupting succession, wouldn't trees eventually get in there? Itadori, I think, would eventually lose with the growth of pioneer trees, such as birches and pines. Eventually, too, pioneer trees might give way to mature forests in which a diversity of life might flourish; one-organism ecologies of invasion would give way to Darwin's entangled bank. Itadori is dominant in so many places because of the continuing clearance of native ecologies, which offers fertile terrain for disturbance lovers such as itadori. The Silesia photographs are indicative: we see the neglected back of what appears to be a factory, high-tension power lines and a waterway reduced to a drainage ditch. This is perfect country for itadori. Take all those away, and itadori might, indeed, settle down.

And yet: might we have lost our chance? Itadori has transformed itself in its travels. It is no longer the friendly creature Japanese travelers think they are seeing. That one itadori mother plant Siebold brought to Leiden multiplied – and while it had no similar partners, it proved wildly fertile with all kinds of other plants. Some were close relatives, such as o-itadori, the giant knotweed of Hokkaido and Sakhalin (*Fallopia sachalinensis*). Others were much more distantly related, including those classified in the same genus, such as Russian vine (*F. baldschuanica*) and, more surprisingly, those in completely different genera, such as Australian members of the genus *Muehlenbeckia* (Bailey, 2013). Merely placing flowering itadori amongst the stock of the global nursery industry – thus allowing every opportunity for promiscuous matings with many, many strangers –encourages ever-more new hybrid upstarts. Pretty much every European or North American itadori one sees

Fig. 3. Koichi Watanabe: *Katowice, Silesia, Poland*, 2011.

in a vacant lot, along a road or crowding out a riverside is a hybrid; but the kinds of hybrids are many and varied.

Hybrids have taken the opportunity to improve their abilities to invade human sites. New strains keep emerging – and they increase the success of itadori's spread across industrial civilization. Novel forms of itadori materialize precisely to thwart human attempts to curb and control itadori's spread; when humans kill off the vulnerable ones, the tough ones spread. The new hybrid itadori are better than ever at growing from fragments in the soil, and in any kind of soil (Barney et. al., 2006). Move some soil from a human-occupied site, and you are probably moving itadori too. Meanwhile, variants for every climate zone have developed. Itadori now produce chemicals that kill off the native plants of the places they want to live (Murrell et. al., 2011). "Hybridization increases invasive knotweed success" (Parepa et. al., 2014). Who knows: perhaps those talents might allow itadori's spread to continue even without industrial disturbance. Will alien visitors in the future find a northern hemisphere covered entirely in itadori?

From the beginning of the imperial nursery trade to the end of the world of humans, Watanabe carries us across space and time. *Moving Plants* is a project without an established genre: it may be photography, history, and botany – but it is also something bigger, a stimulus for the public imagination. The images and histories take us on a journey to get to know a world of cosmopolitan ways of being. The movement of plants is an entryway into both the comforting sameness and over-the-top terrors of our times. Everywhere we go, we see familiar things – out of place, like itadori. The plants stalk us, haunting, asking us who we are.

Bibliography

Bailey, J.P: “Case studies of classic examples of hybridisation and polyploidy: The Japanese knot-weed invasion viewed as a vast unintentional hybridisation experiment”, *Heredity*, Volume 110, 2013, p. 105-110.

Bailey, J.P. and A.P. Conolly: “Prize-winners to pariahs – A history of Japanese Knotweed s.l. (Polygonaceae) in the British Isles”, *Watsonia*, Volume 23, 2000, p. 93-110.

Barney, Jacob, Nishanth Tharayil, Antonio DiTommaso, and Prasanta C. Bhowmik: “The Biology of Invasive Alien Plants in Canada. 5. Polygonum cuspidatum Sieb. & Zucc. [= Fallopia japonica (Houtt.) Ronse Decr.]”, *Canadian Journal of Plant Science*, Volume 86, 2006, p. 887-905.

Casid, Jill: *Sowing empire: landscape and colonization*, University of Minnesota Press, 2004.

Marder, Michael: *Plant thinking: a philosophy of vegetal life*, Columbia University Press, 2013.

Murrell, Craig, Ester Gerber, Christine Krebs, Madalin Parepa, Urs Schaffner, and Oliver Bossdorf: “Invasive knot-weed affects native plants through allelopathy”, *American Journal of Botany*, Volume 98, Number 1, 2011, p. 38-43.

Parepa, Madalin, Markus Fischer, Christine Krebs, and Oliver Bossdorf: “Hybridization increases invasive knotweed success”, *Evolutionary applications*, Volume 7, Number 3, 2014, p. 413-420.

Watanabe, Koichi: *Moving Plants*, Seigensha Art Publishing, 2015.

Koichi Watanabe: *Hortus botanicus, Leiden, South-Holland, the Netherlands*, 2009.

Koichi Watanabe: *Aalsmeer Flower Auction, North-Holland, the Netherlands*, 2009.

Koichi Watanabe: *Kingston, London, the United Kingdom*, 2010.

Koichi Watanabe: *Seattle, Washington, the United States*, 2008.

Karin Lorentzen

Yuriko Saito

Romanesco, cauliflower, mushrooms or a flower bud are cast in plaster so that we can see and study the plants otherwise destined for a meal or too fragile to palm. In Karin Lorentzen's works, the cycle of growth and withering is stopped for a while in order to investigate the vocabulary of our everyday plants. In Lorentzen's own words, she uses the plaster to "look". To investigate parts of the plants otherwise hidden, such as the intricate patterning of a head of cabbage cut in two, or the way in which the Romanesco's fractal spirals are built up by Fibonacci sequences, in which every radius is the sum of the two preceding ones: 1, 1, 2, 3, 5, 8, 13. Subtly, the pale and colourless plaster simultaneously reminds us of the long held aesthetic idea that white statues – like those of neoclassicism – made way for a heightened sensitivity towards "pure" form without the distraction of vibrant colours and their immediate sensuous appeals. With Lorentzen's plaster plants, we furthermore lose fragrance, taste and tactile materiality of the living plant; but do we gain something else? If the white statues of heroes and mythical figures that we all know are so closely tied to a specific western history of beauty, what kind of aesthetics emerge when the plaster is cast for "ordinary" plants – those inconspicuous beings we all live from and with?

—

In her thought piece, philosopher Yuriko Saito engages this question by inquiring into the everyday aesthetics of plants – a topic she has worked with for a long time, in part via her book *Everyday Aesthetics* (2007). Starting from a dissatisfaction with western traditions for only noticing the aesthetics of the spectacular – whether in fine arts or nature – Saito proposes a notion of everyday aesthetics allowing for a way of noticing and engaging the plants present in our day-to-day doings. To Saito, the distaste for the ordinary is a problematic path that has allowed for a thwarted sense of care for nature. For this reason, we need to turn our attention to the aesthetics of our everyday plants and notice the beauty, as this is where we create our respective living environments.

Karin Lorentzen: *Deserted Land* (detail), 2014. Plaster, 105 × 105 × 5 cm

Plants and everyday aesthetics

Yuriko Saito

Things that are familiar to us tend to have aesthetic disadvantages. In the plant world, they are the ones that surround us and with which we interact in our everyday life: the oak tree in the backyard, dandelions growing in the lawn, ivy crawling on the stone wall, a head of cabbage to be used in pot au feu, and an onion to be chopped and sautéed. Their all-too-familiar ubiquity and all-too-ordinary appearance elude our aesthetic radar, which is calibrated to capture things that captivate us with out-of-the-ordinary stunning effects. How can a lowly dandelion compete against an orchid plant? Does a cabbage or an onion have a better chance to gain our aesthetic attention than exotic fruits and vegetables?

There is a Japanese proverb: 灯台下暗し "Right under a lighthouse is dark." A newly emerging discourse on everyday aesthetics attempts to shed light on that which is closest and most familiar to us in our lives: everyday environment and its ingredients. Dissatisfied with the twentieth century Western aesthetics' preoccupation with fine arts and spectacular nature, everyday aesthetics promotes cultivating an aesthetic sensibility toward the most mundane and commonplace. Advocates of everyday aesthetics, including myself, believe that there are many benefits of expanding the reach of aesthetics to include those which are closest to us in our daily life.

A major benefit of developing an aesthetic appreciation of mundane objects is the enrichment of our aesthetic lives. We can unearth aesthetic gems hidden in plain sight: a rather stunning geometry of the section slice of a cabbage and the remarkable transformation of a dandelion flower into airborne fuzz carrying many seedlings. The opportunity for an aesthetic appreciation of nature exists everywhere all the time, in our backyard and in our kitchen. We don't have to wait for an excursion into unfamiliar surroundings to gain aesthetic inspiration. As Aldo Leopold, a key contributor to the twentieth century American environmental movement, remarked in his *A Sand County Almanac*, "[T]he weeds in a city lot convey the same lesson as the redwoods" (Leopold, 1966, 292).We don't have to rely on the dramatic, the extraordinary, and the exotic to feed our aesthetic appetite. Instead, we need to overcome what Leopold calls the "underdog bias" – that is, our neglect, and sometimes disdain, for familiar plants in our backyard and roadside (Leopold, 1966, 76).

But perhaps it is human nature to pay attention to that which is unfamiliar to us, because, often not knowing what it is or what it does, it is easier to experience such an object without regard to its usefulness to our life. In comparison, we tend to adopt a practical attitude toward things with which we interact in our everyday life. Weeds in the lawn, such

as dandelion and crabgrass, need to be eradicated to protect the green carpet from any blemishes. Our dealing with a cabbage and an onion is focused on the end result of cooking them. This customary mode of regarding familiar objects, however, tends to restrict our experience. It is because, as Annie Dillard, a contemporary American writer, states, in our ordinary mode of seeing, "form is condemned to an eternal dance macabre with meaning" which makes us unable to "unpeach the peaches" (Dillard, 1988, 29). She finds it difficult to practice a different kind of "seeing that involves a letting go" that is made possible by "a discipline requiring a lifetime of dedicated struggle" to "gag the commentator, to hush the noise of useless interior babble that keeps me from seeing" (Dillard, 1988, 29).

However, the benefit of defamiliarizing the familiar is not limited to enriching our aesthetic life. There are also moral benefits, both for the individual and for the world. This unrestricted way of experiencing a familiar object by transcending its customary significance to our everyday life is the aim of Zen meditation. The thirteenth century Japanese Zen priest, Dōgen (道元), teaches that Zen enlightenment consists of a series of "forgetting" self and "acting on and witnessing oneself in the advent of myriad things", instead of "acting and witnessing myriad things with the burden of oneself" which he describes as "delusion" (Dōgen, 1986, 32). He states: "Flowers fall when we cling to them, and weeds only grow when we dislike them" (Dōgen, 1986, 32). The lament over fallen flowers and weeds grown in our garden has nothing to do with the flowers and weeds themselves; instead, it is caused by the categorization and valuation we impose on them. Zen enlightenment is a commitment to a thoroughgoing egalitarianism between and among things in nature. It teaches us to be *mindful* and *respectful* of everything in our everyday life. Indeed, he teaches his disciples to treat every ingredient for cooking with the same respectful manner.

> Do not arouse disdainful mind when you prepare a broth of wild grasses; do not arouse joyful mind when you prepare a fine cream soup. […] do not be careless when you work with poor materials, and sustain your efforts even when you have excellent materials. Never change your attitude according to the materials. (Dōgen, 1992, 282)

Thus, paying attention to and deriving an aesthetic experience from all-too-familiar objects has a moral dimension: it promotes an attitude of respect toward every gift of nature, which includes not only redwoods but also weeds creeping out of pavement cracks. The same can be said of the animal kingdom. We tend to support protecting aesthetically stunning creatures, such as whales, bald eagles, and seal pups, but not invertebrates and insects whose disappearance will have more dire consequences than the extinction of larger mammals. Stephen Jay Gould thus laments how "environmentalists continually face the political reality that support and funding can be won for soft, cuddly, and 'attractive' animals, but not for slimy, grubby, and ugly creatures" (Gould, 1993, 60). Think about what garners the attention of visitors to nature museums, such as botanical gardens, zoos, and aquariums. It is usually exotic plants and creatures, but not those plants, animals, and sea creatures easily found in the visitors' backyards and neighboring areas. These latter members of nature are thus more vulnerable to neglect, when in fact they are the ones over which we have some direct power of protection.

Turning our attention to our everyday surroundings is important because we are all implicated in creating our respective living environments. We can certainly help protect a distant rainforest by supporting a certain organization, making a donation for a cause, and boycotting those companies with a questionable environmental record. But doing so does not exempt us from critically reviewing how we create our own everyday environment. At least for those of us living in the United States, a case in point is the American obsession with a velvety-smooth green lawn. Creation and maintenance of this green aesthetic and cultural ideal exacts a heavy environmental cost, ranging from the inordinate amount of water used, to environmental harm caused by chemical fertilizer, herbicide, fungicide, and insecticide, as well as by the gasoline used for a motorized lawnmower, a hedge trimmer and a weed whacker. In a way, this is a strange preoccupation because so much effort is made at first to grow grass, only to thwart its growth later by periodic mowing to keep it at a certain height that is sometimes even specified in a town ordinance. This culturally-defined aesthetic ideal is responsible for rendering dandelion and crabgrass public enemy number one, in addition to creating a norm that those plants that are literally fertile, such as fruits and vegetables, need to be relegated to backyards where they cannot be seen by the public.

The obsession with a perfect appearance extends to fruits and vegetables themselves, not only in the United States but also in other industrialized nations. "Deformed" and "ugly" fruits and vegetables, such as two-legged carrots, cucumbers that are too curvy and green peppers with an extra bump, are often discarded by farmers or supermarkets because they do not satisfy their respective ideal shape. This weeding process results in the perfectly uniform and unblemished appearance of the fruits and vegetables on supermarket shelves, but creates food waste that, according to one estimate, amounts to one-third of the total fresh produce grown in the United States (Blatt, 2008, vii).

If aesthetics has been responsible for creating these problems, as well as causing inattention and neglect of the all-too-familiar, aesthetics can also be a part of the solutions. It is not surprising that art is the most effective means of facilitating what may be called an aesthetic paradigm change. The *Moving Plants* exhibition is one such example. Through decontextualization and defamiliarization, the works in this exhibit encourage the viewers to really "see" the most familiar objects, in this case plants, under a different light. They help make familiar things appear strange, urging us to transcend our usual mode of either ignoring them or regarding them only with a practical attitude, and to attend to the aesthetic gift they offer us.

A similar artistic strategy is gaining momentum in the creation of gardens and parks that feature indigenous plants and wildflowers as a challenge and alternative to a green lawn adorned with exotic plants. Previously decried for their messy, unkempt, and disorderly appearance, these gardens celebrate a different kind of beauty. Perhaps not stunning or luscious like a conventional picturesque garden, these gardens enhance a sense of place and embrace the natural fecundity and seasonal cycle. Because native wildflowers don't need extra water, fertilizer, pesticide, or herbicide, they also attract birds, butterflies and other forms of wildlife, contributing to a vibrant atmosphere. Piet Oudolf, the Dutch designer of Chicago Millennium Park's Lurie Garden consisting of indigenous wildflowers, as well as New York City's Highline, an abandoned raised train line converted into a walkway featuring wild flowers and plants along the way, articulates this new aesthetic vision: "I think it's the journey in your life to find out what real beauty is, of course, but also discover beauty in things that are at first sight not beautiful" (Piper, 2014).

Another artist, Fritz Haeg, is spearheading a project called "Edible Estates" that replaces the green lawn in a residential front yard with a garden with fruits and vegetables. This project challenges the uniformity and monoculture of green lawn as an icon of beauty, as well as the assumption that "plants that produce food are ugly and should not be seen" (Haeg, 2010, 17). Haeg instead calls for a paradigm shift in American domestic aesthetics, advocating fecundity, productivity, and "chaotic abundance of biodiversity" (Haeg, 2010, 22). Furthermore, in addition to the literal fruits of labor harvested from such gardens, there are a number of other benefits, ranging from environmental stewardship to promoting neighborliness by prompting conversations among neighbors about how the crops are doing and by sharing bumper crops.

The increasing acceptance and appreciation of these artistic projects is instrumental in promoting the creation of community gardens in urban spaces in the United States. These gardens are cultivated by area residents, often economically challenged, who grow fruits and vegetables there. These gardens appear crude, messy, and chaotic; in short, an "eyesore" to those who are used to urban parks with neatly trimmed bushes and, of course, a green lawn. The initial reaction to these community gardens was therefore negative because of their lack of aesthetic appeal. However, in addition to embodying the communal pride and collaborative spirit, such gardens often feature produce that feeds the area residents, giving rise to the notion of rich fertility. They also attract bees, butterflies and birds, providing liveliness, which constitutes a positive aesthetic value. Their seemingly messy, chaotic, and disorderly appearance can begin to appear aesthetically positive when we activate our imagination and consider their fecundity, productivity, and contribution to biodiversity and neighborliness. In this way, community gardens and wildflower gardens earn a new sense of aesthetic value based upon their contribution to enlivening the area community for both humans and nature.

Art's power to challenge and transform prevailing aesthetic norms also extends to the store shelf. One French supermarket chain launched a successful campaign extolling the virtue of "Inglorious Fruits and Vegetables", followed by an American supermarket chain's campaign for "Produce with Personality". Both campaigns feature visual images of deformed fruits and vegetables with strategic placement and favorable lighting to showcase their unique beauty.

Aesthetic considerations tend to be dismissed as superficial and dispensable fluff. However, the power of the aesthetic to move people in the most literal way is considerable. Speaking of nature, Aldo Leopold, for whom land ethic and land aesthetic were inseparable, states that "it is inconceivable … that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value" because "we can be ethical only in relation to something we can see, feel, understand, love" (Leopold, 1966, 261, 251). Referring to built structures and artifacts, the American architect Lance Hosey remarks that "long-term value is impossible without sensory appeal, because if design doesn't inspire, it's destined to be discarded"; hence, "aesthetic attraction is not a superficial concern – it's an environmental imperative" (Hosey, 2012, 7). Perhaps the most passionate and cogent statement regarding the importance of the aesthetic as a power to mobilize us comes from David Orr, an American environmental educator: "We are moved to act more often, more consistently, and more profoundly by the experience of beauty in all of its forms than by intellectual arguments, abstract appeals to duty, or even by fear" (Orr, 2002, 178-79).

Their insight regarding the power of the aesthetic signals the urgency of cultivating the capacity for attending to and aesthetically appreciating those members of nature that are too ordinary and too familiar. Developing the aesthetic appreciation of those members cannot but help nurture our affection toward them, which in turn encourages a caring, respectful, and protective attitude toward them. Appreciation of and respect for nature should start in our kitchen and backyard, where we can see, feel, touch, smell, and taste it.

Bibliography

Blatt, Harvey: *America's Food: What You Don't Know About What You Eat*, MIT Press, 2008.

Dillard, Annie: "Seeing", in *Pilgrim at Tinker Creek*, Harper Perennial, 1988.

Dōgen: *Shōbōgenzō: Zen Essays by Dōgen*, translated by Thomas Cleary, University of Hawaii Press, 1986.

____: *TenzoKyōkun* (*Instruction for the Tenzo*), in Deane W. Curtin and Lisa M. Heldke (eds.): *Cooking, Eating, Thinking: Transformative Philosophies of Food*, Indiana University Press, 1992, p. 280-285.

Gould, Stephen Jay: "The Golden Rule – A Proper Scale for Our Environmental Crisis", in Susan J. Armstrong and Richard G. Botzler (eds.): *Environmental Ethics: Divergence and Convergence*, McGraw Hill, 1993, p. 310-315.

Haeg, Fritz: *Edible Estates: Attack on the Front Lawn*, Metropolis Books, 2010.

Hosey, Lance: *The Shape of Green: Aesthetics, Ecology, and Design*, Island Press, 2012.

Leopold, Aldo: *A Sand County Almanac*, Ballantine Books, 1966.

Orr, David: *The Nature of Design: Ecology, Culture, and Human Intention*, Oxford University Press, 2002.

Piper, Thomas (dir.): *Fall, Winter, Spring, Summer, Fall*, YouTube: https://www.youtube.com/watch?v=Eb8LoJyuIC8, 2014.

Karin Lorentzen: *Romanesco*, 2013. Plaster, 14 × 12 × 10 cm. Photo: Erling Lykke.

Karin Lorentzen: Objects from *Wunderkammer* (palm and cone), The Botanical Garden, Aarhus, 2015. Plaster, plant material. Photo: Ole Akhøj.

Karin Lorentzen: Objects from *Wunderkammer* (lotus), The Botanical Garden, Aarhus, 2015. Plaster, plant material. Photo: Ole Akhøj.

Wai-Yi Monti Lai

Laurent Thévenot

With a background in eco-arts, Wai-Yi Monti Lai has been working centrally with plants as they wind in and out of our lives and weave us together with each other, our landscapes, cities and houses. In her work *Planting – Let them Grow*, Lai meticulously folds and forms mounds of flowers from newspaper and places them on the exhibition floor for visitors to take home with them. She folds the flowers and sends them on to their new lives and relations with the invocation: "Let them grow / Flowers sprouted / From invisible seeds / Never will cease / Let them grow / In your journey / With my soul". As such, in a work like this, Lai draws out and gives shape to new plant-attachments, while encouraging us to grow with them. In recent years, Lai has turned her sensibility for plants' ability for drawing things and people together towards farming in Hong Kong. To most, Hong Kong is known for its massive city and the 7.2 million people squeezed into an area slightly smaller than the Danish island of Funen. But it is not all city; in fact, Hong Kong is home to incredible landscapes and rich ecologies. However, as the need for more housing, more city and more business districts grows, these areas are in danger of being paved over and the ecologies lost. For this reason, Lai, along with other artists and creative practitioners, has turned to gardening and farming as a way of drawing attention to, and reminding people of, existing places and practices of value. Here, also, Lai turns our common concern for plants and their relational qualities into a connective tissue gathering people interested in everything from food, fresh air and sustainability, to Hong Kong's cultural and natural history.

—

Like Lai, Laurent Thévenot is invested in the manifold ways we engage in and with our environments, and how spaces and things – like gardens or plants – can become common-places for a plurality of concerns, via shared attachments. In his work with social theory, Thévenot has worked at creating a vocabulary for the processes of commonality. Even if we do not have the same educational background, live on the same street, vote for the same political party or live in a small town or a large city, gardens and plants can be intermediary objects of concern connecting us in unexpected ways. They attune us to the (environmental) politics of material worlds and render our attachments to these visible and shareable. In his thought piece, Thévenot thinks with the work of Lai and explores how artful acts of plant engagement may create common-places as they nurture broader environmental care.

Wai-Yi Monti Lai, *Planting III – Let them grow*, 2010. Interactive installation. Newspaper, dimension variable.

Arts of replanting common-places alive
— engaging with artful plants to communicate environmental care

Laurent Thévenot

> Suis-je de pierre? Il me semble que les feuilles des arbres sont en toile, ou en tôle, et que tout l'air est un décor qu'on regarde ou non.
> —
> Am I of stone? The leaves of the trees seem made of cloth or iron. And all outdoors is a painted scene to be looked at or not at one's pleasure.
> — Paul Claudel, "Tête d'or". Translator: John Strong Newberry

The cause that should bind us today most obviously to each other, affecting us all in general, is hard for us to mobilise and incorporate into everyday life. The more or less scientific names with which we identify it — sustainable development, ecology, the environment — do not ensure the rise in generality that makes a common cause.

Even the clear causality between cause and effect that results from climate change and is so tangible in the physical world that surrounds us before being elevated to a moral or political question does not succeed in constituting a cause able to gather together interested parties and unite their supporters.

Can the aesthetic commitment the artist is involved in creating come to the rescue? Does it provide an escape route out of the paradox in which we have become caught up: to suffer from a causality that affects us all, without being able to support the same cause?

To communicate far about that which is closest to us

A solution to the paradox will lead to the meeting with an environmental art form. Along the way, this will teach us something about the tensions that exist in our current ecological politics and politics in general, far out in its populist corners.

A cause is a matter that becomes discussed and defended in the public space in a way that is similar to the case to be resolved in a court of law. This space must be sufficiently detached

to format a judgement valid with respect to a third party. It must maintain a distance from the specific points of the situation in order to allow a public debate between criticisms and justifications. Even though the environmental cause benefits from "investments in forms" and quantification that are necessary to formulate a policy, it has not achieved the kind of "order of worth" that make other causes most legitimate.[1]

Among the various reasons for this difference (Lafaye and Thévenot, 2017; Blok, 2013), there is one in particular that catches our attention because it refers to the efforts to create an environmental art form that the exhibition deals with. It relates to the complicated relationship between the extremely global and the highly localised aspect of the ecological question. The environment is not just something that concerns the fate of the planet as a whole, but it is also something that impacts our daily lives, our homes and the use of our most immediate surroundings and those spaces we inhabit. When we attempt to communicate – in the sense of finding communicating room – some grounded judgements, to which others can voice their disagreement, we are forced to be objective, which is necessary for a public argumentation; a distance that makes it hard for us to express the personal and local commitment, whereby we lose our ground.

Another way to communicate one's attachments without the distance created by the *detachment* of the public debate

Discussions in the public space – especially those that take place in a participatory democracy – are not well suited to an expression of these personal and local commitments, which are often rejected as irrelevant in a debate on the common good. As a reaction to this, frustrated participants can follow a reactionary political path and close themselves off behind their national or cultural boundaries. In order to counteract these kinds of reactions – and go beyond the difficult co-existence between different cultures of nature – we ought to expand the political and social categories which are too narrow to grasp ways of making commonality without the *detachment* most often required by the public debate. Our transcultural studies have pointed towards a way of communicating and differing that is more accommodating of personal and local attachments. How can we make common something that concerns our most personal experiences at such an intimate level? We are aware that the answer will relate to an aesthetic experience. Let us not go too fast, however, but look first at a concept that is crucial to our understanding of this other mode of creating something in common – here characterised using a term that at first glance appears to have very little to do with art: *common-place* (*le lieu-commun*).

1. For a Danish introduction to this sociology, see Hansen, 2016. In English, see Thévenot, 2011.

Common-places offering communication between personal commitments to the world, as opposed to stereotypical clichés

The term common-place is currently little more than a derogatory word for a banal cliché. In our use of it, however, we go directly to its literal and original meaning: a place where to find a common ground. Originally, neither the Greek word *topoï* nor the Latin *locus communis* were seen as derogatory; they merely referred to the rhetoric. Our use of the term distinguishes itself both from the rhetoric and from its art of memory that inspired Pierre Nora in his "memory spaces" (*lieux de mémoire*). What we are trying to reach is a practical mode of making something common that is especially open to personal and local commitments and that functions with the aid of such "places"; a pragmatic commonality that makes room for these kinds of personal and local attachments. We would like to draw attention to the distinction between, on the one hand, the common-place where the intimate engagements with the world around us communicate, and, on the other, the superficial, stereotypical cliché that signifies a failure in the communication of these personal experiences.[2]

We can illustrate these concepts with some variations on a theme, leading us to the artist Wai-Yi Monti Lai. Aristotle's *Rhetoric,* which characterised *common-places* as distinct from *special places* (1358a, 12-20), was revived in the 20th century *L'empire rhétorique* by Chaim Perelman. This work illustrates the rhetoric of common-places, which is a way of formulating a preference (1362a, 21) with the aid of the expression *carpe diem,* which expresses the irreplaceable, unique and rare (Perelman, 2002, 50). This expression for the vulnerable – which needs to be looked after – fits well with the question of taking care of the fragile environment. The expression comes from the Latin version of the poet Horace "dum loquimur, fugerit invida aetas: carpe diem, quam minimum credula postero" ("while we speak, envious time has passed; seize the day and put little trust in tomorrow"). It should be noted that this maxim can be interpreted differently, depending on whether one emphasises the fragility of the present or the rejection of tomorrow, which does not lead one towards a sustainable development. Our purpose is not, however, to analyse a text in all its philosophical usages, from Epicureanism to Stoicism. We are not interested in the expression as a literary quote but in its use in a pragmatic context where a specific background makes it possible to communicate some personal commitments in an everyday situation. In certain societies, where poetry still offers a wealth of these kinds of communication places – such as the Russian, for example – a verse can serve as a *common-place* within the context it is used.

We find variations of this expression in two of the best-known poems in French and English. These two poems connect it with an intimate support of communication that has a beautiful future ahead of it and that relates to the fragile environment, which interests us here. When Ronsard talks to his lover Cassandre in the 16th century, what he urges her

2. More on this approach of common-places can be found in Thévenot, 2014.

to seize is a rose and youth, both of which are equally vulnerable ("Mignonne, allons voir si la rose …" ("Beloved, come let us see if the rose…")). At the end of the 16th century, Malherbe writes an equally popular variation, also using the rose. However, this deals with a still more tragic transience in that the poem has been written to a friend as solace after the loss of his daughter ("et rose elle a vécu ce que vivent les roses, / l'espace d'un matin." ("and being a rose, she lived as live the roses, / for the space of a single morning.")). In the middle of the 17th century, the English poet Edmund Waller in his equally famous poem "Go, Lovely Rose" speaks directly to the rose, imploring it to go and give to the young woman the courage to show her beauty, and then in the final stanza, he tells the rose to die as a kind of *memento* mori to the woman – that even things rare (in this sense beautiful) will inevitably die: "Then die – that she / The common fate of all things rare / May read in thee;".[3]

Today this rose is one of the most popular common-places, borne by the idea of the precious and fragile life of the picked flower. This is expressed in many different situations, from the bond of love to the gratitude expressed by the flower, which is given publicly to an artist together with the applause, and which many spectators in Russia hand over personally.

The artist's struggle with common-places

This rose is given new life in the works of Wai-Yi Monti Lai. She makes it clear to us what the exhibition is about and how it wedges itself into the area of tension between common-place and cliché. On the face of it, one might think that the contemporary artist was a sworn enemy of anything conventional and regards it as overly banal. Is it not the artist's job to "defamiliarise" the world around us, an expression coined by the Russian formalist Victor Shklovski. The artist's position is not, however, so simple if the artist turns his or her back on the lonesome, elitist avant-garde and looks for a "participatory art" (Thévenot, 2014). The late contemporary American poet Robert Creely was particularly preoccupied with this tension. In "Some Senses of the Commonplace" he talks about the intimate, situation-bound communication that takes place via common-places. He searches first and foremost after the "commonplaces, that seemed the most apt and specific thing that I'd think to think about: the whole dilemma as to how the commonplace is *ever* the case, and as to how one *ever* finds it specific, seemed to me the absolute preoccupation", a place "that everybody would feel at home with" (quoted in Clark, 1993, 83 and 87). Some years later he wrote the poem "Inside my Head", which starts with three lines along the same theme: "Inside my head a common room, / a common place, a common tune, / a common wealth, a common doom". In a poem from the same series we find an echo of the above motif with the rose: "*Go, lovely rose …* So was that story told / in some extraordinary place then, *once upon a time* so old / it seems an echo now as it again unfolds." This common-place is unfolded and given new life in a personal way, which is expressed very precisely with the verb "unfold". Creely uses it again in the following verse to describe more specifically the unfolding of the rose's delicate petals. The poet connects the commonality issued from the fairy tale (*once upon a time*) with the personal experience: "I point to *me* to look out at the world. / I see the white, white petals of this rose unfold. / I know such beauty in the world grows cold."

3. Nor must we forget the gendered relationships, wherein a mature man – the poet – initiates contact with a much younger woman, and as Corneille sets in verse 100 years later: "Marquise, si mon visage / A quelques traits un peu vieux, / Souvenez-vous qu'à mon âge / Vous ne vaudrez guère mieux" ("If Marquise you find that my face / Has some features a trifle old, / Remind yourself that at my age, / You will be scarcely better off"). It is also worth mentioning the heartfelt response from the young woman, penned by Tristan Bernard and made popular by the singer Brassens, which links it all: "Peut-être que je serai vieille, / Répond Marquise, cependant, / J'ai vingt-six ans, mon vieux Corneille, / Et je t'emmerde en attendant " (Perhaps I will be old one day, / Says the marquise in reply – however / I'm twenty six Corneille old chap, / And right now you can go 'n' get stuffed!).

"Let them grow" and "Leaves of words"

In her participatory environmental art, Wai-Yi Monti Lai invites us to take part in a game of associations and communication around some common-places, and she unfolds magnificently the themes we have already discussed. Her work transcends my written commentary, thanks to the intimate resonances she has created in us. In her installation "Let them grow" she shows the audience a carpet of roses produced from pages of a weekly magazine, thereby inviting us to communicate with this refreshed common-place (fig. 1). Just like the rose, the leaf that falls from the tree is the object of a common-place, which relates to an attachment that is just as precious as it is fragile, and leads one to thoughts of a lost love. "Les feuilles mortes" (literally, "The dead leaves") by Jacques Prévert is a poem that has developed into one of these popular songs which offer a reservoir of common-places. This poem is now known all over the world thanks to the English version "Autumn leaves", which has been interpreted by singers ranging from Edith Piaf, Frank Sinatra, Nat King Cole and Tony Bennett, to Barbra Streisand and Eric Clapton. In her project "Leaves of words", Wai-Yi Monti Lai moves from the rose to another common-place: the leaf. This work does not stop with the fallen or withered leaf, but gives this familiar imagery new life by moving onwards to the sap, which gives the leaf life, and from this sap to the ink that feeds the pen and the brush in writing and drawing. Hence the title of the project, which brings us from the leaves of a tree to paper leaves, from the foliage to the word. In the artist's studio, which she has created within this public space, she invites the audience to crush leaves from trees and use the sap to paint a small watercolour addressed as a postcard to an unknown recipient (fig. 2). Instead of those clichés normally contained in a postcard, the artist enables a much more personal version, because it is created by the exhibition's guest. Communication thus takes place not only between people via the common-place of the postcard, but circulates like the blood from plants in peoples' bodies as they become emotionally affected by the painting.

Fig. 1. Wai-Yi Monti Lai, *Planting III – Let them grow*, 2010. Interactive installation. Newspaper, dimension variable.

Fig. 2. Wai-Yi Monti Lai, *Leaves of Words Project*, 2011 till now. Public participatory project. Water and leaf pigment on paper.

Do you know how to plant cabbage? (*Savez-vous planter les choux?*)

One of the best-known French singing games deals with giving life via a plant, with a chorus of "Do you know how to plant cabbage?" (*Savez-vous planter les choux?*). Just two generations ago children were told that cabbage plants not only produced new heads of cabbage, but also babies. The chorus recounts the way of planting cabbage "like we do" (*à la mode de chez nous*). In olden times, the term "mode" referred to a common way of doing things according to local custom rather than to a passing fad of dressing. The expression is also linked to the exclusive company where this custom applies: with us (*chez nous*).

The theme of the song, which appears at first sight to be traditional and conservative, actually unfolds when played. It transcends local customs and becomes an inclusive mode of communication based on the most intimate thing we have: our bodies. The words are directly linked to the actions and involve moving parts of the body so that the movement follows the words, as is the case with all singing games. Rather than the words, the song stages the act of planting itself, and each verse introduces in an increasingly extravagant way of using a new body part to plant the cabbage: the feet, the hands, the elbow, even the nose …

Wai-Yi Monti Lai's art urges us to plant right here, in this place, to sow the seeds for a revivified, new *common-place* right, so that a re-born plant might unite everyone who takes care of it and gains pleasure from it.·

Bibliography

Blok, Anders: "Pragmatic sociology as political ecology: on the many worths of nature(s)", *European Journal of Social Theory*, 16(4), 2013, p. 492-510.

Clark, Tom: *Robert Creeley and the Genius of the American Common Place*, New Directions, 1993.

Lafaye, Claudette and Laurent Thévenot:"An ecological justification? Conflicts in the development of nature", in Cloutier, C., J.P. Gond and B. Leca (eds.): *Justification, Evaluation and Critique in the Study of Organizations: Contributions from French Pragmatist Sociology*, Research in the Sociology of Organizations, Emerald Group, 2017

Perelman Chaïm: *L'empire rhétorique: rhétorique et argumentation*, Vrin, 2002 [1977].

Thévenot, Laurent: "On Engagement, Critique, Commonality, and Power", an interview by Paul Blokker and Andrea Brighenti, *European Journal of Social Theory*, (Special Issue on Pragmatic Sociology: Theory, Critique, and Application, edited by Paul Blokker) 14(3), 2011, p. 383-400.

____ : "Engaging in the politics of participative art in practice", in Tasos Zembylas (ed.): *Artistic Practices*, Routledge, 2014(a), p. 132-150.

____ : "Voicing concern and difference. From public spaces to common-places", *European Journal of Cultural and Political Sociology*, 1(1), 2014, p. 7-34.

____: Engagementsregimer, (ed. Magnus Paulsen Hansen), Hans Reitzels Forlag, 2016.

Wai-Yi Monti Lai: *Getting started on the rice paddy fields from scratch*, Lai Chi Wo, 2015. Photo: Christina YM Chan.

Wai-Yi Monti Lai: *Happy Rice Bowl – growing rice in cityscape of Hong Kong*, 2017. Rice seedlings cultivated from Lai Chi Wo. Photo documentation.

Wai-Yi Monti Lai: *Happy Rice Bowl – growing rice in cityscape of Hong Kong*, 2017. Rice seedlings cultivated from Lai Chi Wo. Photo documentation.

Yukiko Iwatani

Cecilie Rubow

Heartleaf lily, fireweed, bronco grass, cogon grass and rough cocklebur: these are some of the plants Yukiko Iwatani works with in her small, delicate sculptures and installations made with found elements from the surrounding nature. By using techniques of plant manipulation, Iwatani makes these works of art with nothing but the properties of the plants themselves – also when the fragility of the materials makes this seem almost impossible. Central to Iwatani's practice is the process: she finds the plants, collects them, takes them home with her, and as they hang to dry, she notices and gets to know them – for one, two, six months, or as long as it takes for her to see their character: "It's like if you ask a person to dance; depending on their personality, the movements will be different". She says that each plant has a character and a form and that it is her job to see it and then give the plants their form, so that people may see them anew, notice them and hopefully start caring for them. To Iwatani, our world is in turmoil because we have stopped noticing and caring for the "nature- and plant-things" that intersect our lives all the time. They're everywhere, but we never notice so we don't care. She gives them their form so that we'll start noticing and caring.

—

In her thought piece, the arts of noticing our everyday plants are also of key interest to Cecilie Rubow. Her text has taken on the form of a garden diary or suburban almanac. Like Iwatani, Rubow is curious as to how we get closer to the plants that constantly surround us, and how we care for them, given our frequent hopeless inadequacy when it comes to their nurture: why does it always seem to be the dandelions that thrive best in our garden? How do we count the plants that should matter and does it matter? And are we (in Denmark at least) brought up to ignore the outside as best we can? Rubow takes a cue from Iwatani and has recorded her ongoing efforts towards attentiveness and care for her immediate nature- and plant-things.

Picked plants. Photo: Yukiko Iwatani.

Suburban almanac, winter

Cecilie Rubow

Jan 27

Last summer I had thirty-two edible plants in my garden. Coriander and parsley wasted away for some reason, so I don't know if I can include them in the thirty-two.

Jan 31

Year-round I tend the garden, plant, sow and cut down, especially in the summer months I'm busy, concentrated, sometimes several hours each week. I always sow too many seeds and cannot bear to thin out, so beetroots press against each other and the Brussels sprouts, still standing out there, badly leaning to one side, have only tiny cabbages.

I'm not sure what else to write. I've been working too much and my thoughts are cut into pieces, scattered and inaccessible. For several years, attention to others' thoughts, drafts, sketches and project proposals has risen in inverse proportion to my own work.

It's winter, and I can't find any entrance to my garden life, not much life at all. Now, at the beginning of a research project on secular sanctifications of nature, I feel like I'm caught in a fog, uncertain of which way to go from here. The other day I got lost in the woods, a few kilometers from home, I followed a path I've taken before, talking silently to myself and without noticing it, I took a wrong path and continued one kilometre onward until I encountered a road. First I did not recognise it, because I thought I was somewhere else. When I identified my position on my phone, I remembered how the sensation of getting lost made the place feel quite narrow, without extension and directions. Only when I had recalibrated myself again with the compass did the space re-open. I wonder if this is a general experience of getting lost – and found?

I often tell my students that it's a common experience to get lost in one's research. In the forest, I knew that I was lost when I stopped at a road I didn't recognise. Research is not linear and I hope something will unexpectedly show up.

Feb 1

Regardless of countless cases of flow, with damp hair and soil black hands, I have no clear goals for my garden and haven't had time to realise my best ideas. It's a suburban garden, seven metres wide and perhaps twice as long. Every day I open the door to the garden and I

sense it more than I look at it. When it's summer I leave the door open.

I don't know how to count the inedible plants. I could count them if I knew their names and species and habits, but my schooling in biology is desperately lacklustre. Undoubtedly, it reflects the 1970s penchant for frozen vegetables and disgusting sausages and the stubborn idea that children at school should be kept inside in groups of 28.

My garden has grown in importance over several years. Spring, summer and fall, it's like a magic chamber in which all troubling concerns are wiped away. I know. I'm sure. An hour or two offers guaranteed delight. A five-minute break in the middle of work always provides an impulse to go on or to take an interesting detour. I don't understand why and can't find the right words to describe this impulse. The words I do know are romantic puffs of the *beautiful*; ecopsychological shortcuts to *transcendent meaning* and the *restoration effect* or evolutionary references to human *biophilia*. If it was a true and strong force, the world would be different.

No matter how many moments I recall from my own, my parents' and grandparents' gardens, they are all glowing with a sense of presence. I can light up one image after another, sense the seasons, the bonfire pinching the nose. The plum tree that branched and created the perfect nest and resting place, for dreaming and doing nothing. I feel its bark in my hands, ruffled in a dark way, not like the apple tree's light and smooth bark. The branch offered an ideal view to the road. The roses, forest strawberries and the new walnut tree. I know it all so well in *some* sense, but can't describe it any other way than in this *staccato* form. Strangely, the sounds from that time are much more distant in my memory (is that why I get so happy in spring when the birds go berserk? Because I'm *re*minded so convincingly?). I must exert myself in new languages! How do I learn to speak about this?

Feb 2

If I invited ten people from each corner of the world to inspect my garden from a hot air balloon, they would say that it's a small garden. It's not relative; it's so square, it can't grow in any direction. The hedge at the rear is 180 centimetres tall (if we followed the rules) and 60 years old and would long since have fallen over or developed into a shrubbery if it wasn't cut back every year; the vine has frayed bark and the white lilac is old enough to add a little character to the corner with the compost heap. But there is no room for large trees or crops that can feed anybody for more than a few days. My garden is a small stamp on a large sheet without its own landscape. Has it also gotten lost? Instead of a hedge of nut trees, there are just two trees (with long dangly catkins now). The growth of the lovage is impaired by a marjoram on one side and half a miniature greenhouse on the other. In August the lovage doesn't protrude further than 60 centimetres. If my international guests would come down from the hot air balloon, they would see that there is no vanishing point and no hiding places, no unfolding displays, as in the romantic gardens.

My garden has an environment though. The neighbour's juniper reaches over the fence, behind which you can see the crowns of old apple trees, poplars down the avenue and a huge birch. Seen from the inside, the spheres of the garden are expanding into gigantic dimensions. The other day, in the evening, I saw Mars right next to the airplane from Aalborg.

Feb 5

Again, it's a hurdle race, and I have no time to do what I want to. Hurdle: postponed exams, hurdle: finalise unfinished articles, hurdle: meetings of committees, hurdle: meetings before the committees. I brag about my new research project, but I can't get beyond what I feel like I've already said for a year. There is no development; no budding seeds, no tentacles or underground root systems winding and evolving beneath the soil.

From the first floor, I can see into the neighbours' gardens; most of the trees' branches look like bristles, empty in the cold weather. The bushes are transparent. Not even weeds can figure anything out. Winter is now overwhelmingly deep. It has become embedded in the mind, which is just as scoured as the partly snow-covered slopes under the kids' sledges.

There are much fewer songbirds. The bees are dying out, the red list is getting longer and longer. How can you make a thick description of neglect? Possibly quite easy. Ask anybody.

Feb 10

Dandelion could belong to the edible species, but I don't eat them. Every year the same yellow pattern. I sit on my stool and weed them out just before they to run to seed. They stand close in one corner of the lawn and my project fails every time. Right now I'm sure that they are gathering their forces beneath the grass roots. The roots grow up again, send hollow stems off and generally get just a little bit more stubborn and rebellious each time. I don't have any strategies, not for the clover that attracts bees and hoverflies, or for the daisies and moss that slowly expand their patches. I would love for the grass to become even more wild and I seem, quite predictably, happy about the idea of a higher richness of species in my garden, worried as I am about the global ecological crisis. But there are also considerations to be taken for badminton and dining tables. The inedibles are my critical friends in my backyard.

Feb 11

Further down the street, there is a well-kept Japanese garden in the middle of this very Danish townhouse neighbourhood, with its rules for green hedges and a pre-disposition

for settled lawns. There's also a labyrinthine rock garden at another house. But otherwise it's 193 variations over the same theme, with lawns surrounded by bushes and hedges and pollards, and remarkably few perennials. I wonder if there's anyone who can beat my 32 edibles.

In two weeks time I'm going to the first meeting in my new research group. We will meet in a forest. I write about my own garden in an attempt to pry myself out of my mute enthusiasm and my partial attempt to upgrade my garden literacy.

Feb 24

It snowed yesterday, first sleet, then large snowflakes, and in a few hours the road and the garden had fifteen centimetres of powder neatly arranged on top of each twig and straw. The Brussels sprouts bent down even further and two of the small cabbages were turned into snowman Hans' eyes. Rolled up in 10 minutes, a metre and a half high. The children and the garden belong together, and now they are soon growing out of the garden. It's becoming my garden, more and more for each year. Plans are brewing.

Feb 26

Snowman Hans' eyes reminded me of the edible/inedible issue. I somehow got off on the wrong foot by focusing on the edibles first. Throughout the fall, I have not harvested any of the small cabbages. I also tend to forget the rhubarb. There are tomatoes hanging too long. Years in which the grapes were not picked, apples rotting on the ground and fat pigeons feasting on the blackcurrant. So they are not exactly edibles because they are all eaten.

Last night, I said, "Now we eat some of the Brussels sprouts." I picked a few handfuls, some grey and half-eaten by I don't know who. They tasted like Brussels sprouts and were well prepared with salted capers, but there was nothing special about them just because they were homemade or fresh or organic. Cabbage is an old plant, not easy to delude.

Mar 4

The chillies I brought inside in the fall, to see if they could hibernate, are a sad sight. Almost no leaves are left and those trying to hang on are thin and slack. I wonder when I can begin to fertilise them and cut them down a bit. I have a guide book to chillies, but whenever I consult it, it is too late or too early. I don't read books about child care either, and preferably I don't follow any cookbook recipes. It's best when it just happens because it grows in one's attention. In the same way, anthropology is at its best without method, but this is not what I tell the students, since they don't have time for the detours.

I've just been out in the garden. Crocuses are towering above the winter aconite, and now good emails are popping up with interesting book projects. The hibiscus has tooted a sublime red flower since yesterday and prompts a swarm of memories each time I pass it. I think faster than I can record it, and much faster than I can write.

Dark areas of my mind dawn. I'm starting to read my own thoughts.

Mar 5

I've decided that the lawn should be much smaller. I will expand the bed on the right side and shape it as a circle crossing another circle. I have put sticks in the ground and drawn up the plan on paper.

We can play badminton somewhere else.

Mar 6

It was on Facebook that I saw the first snowdrops. I neglected our own for several weeks, also the winter aconite. You can tell yourself that they are signs of spring, and we have held our faces up against the bright sun, slept in sleeping bags. It brings optimism, but not spring. The shadow is unmistakably hard winter.

Mar 8

To garden. This is what I do in the garden, but what is it? It's a way of doing and being and thinking and feeling at the same time. To garden is to be *present* among the non-humans in the garden, to work your way with the plants, to *participate* in the moist soil, the pleasant coolness under the leaves of the nut trees on a hot day, the *familiar use* of certain tools, the *moods* of growth and decay, the *invitation* by the dew in the grass. The list could go on, but am I getting any further?

Mar 15

I'm back from the small creek down the hill. I wanted to check up on ramson and anemone. The fragrance of the tiny ramson leaves created an instant passage to last summer and the summer before that, when we mixed the leaves with olive oil and cheese – and the sad story of some German tourists who mistook it for the deadly lily-of-the-valley. So much for pick-it-yourself Nordic cuisine. The anemone lies pale underneath a thick greasy layer of beech leaves.

Mar 17

New days. I read what I want, order train tickets, rent houses, buy equipment for field work. It couldn't be better. Almost no more duties in the calendar. I have cut the dead branches of chillies and given them a little fertiliser. Bought new potted plants. Oleander has been taken over by scale bugs. Red clover is waking up, small shabby shoots are coming out, constantly throughout the winter I have removed the thin, cold and slimy half-dead leaf stalks, and I know that the first shoots are the vanguard of dozens of bright purple flowers that sprinkle amazingly fast. I write on paper, iPad and computer, in notebooks, in many documents, at the same time, it's quite messy, but seems productive.

Mar 24

Yesterday I didn't go outside. A quality of the garden is its house. What if I lived in the garden and only sometimes went into the house? It would be miserable.

Mar 29

The other day I slept outside in the freezing dark. It was a restless night since I was constantly reminded that I was sleeping (disturbed by noises and a hard mattress). In a way, it was optimal. My garden is thus optimised. The neighbourhood here is right next to a forest, a creek and a dammed-up lake (the basis for one of the first hydropower systems in the country) with large oaks, a beech forest, meadows and noisy ducks. It's 15 kilometres from Copenhagen Town Hall, and in this little fleck of land, I'm overlooking the sprouts *and* the universe. It's a suburban garden as an optimised intermediate zone.

At the same time, I can't get away from the feeling that, regardless of the closeness to everything, the insurmountable distance to the plants and to the planets is the same. As an earthling, I want (at least for the time being) to develop a friendship with my non-human family in my garden (and in ambitious moments, the wider environment) and see if I can find a suitable and amiable language along the way. I'm lagging behind. I must exert myself.

In the early morning, the birds' exalted chorus awoke me. Yesterday the first anemones stood right up. The chillies are growing in the pots. I read, write, conduct interviews. Borrow books and work impatiently. I'm busy, disturbed.

Wild plants. Photo: Yukiko Iwatani.

Yukiko Iwatani: *Rough cocklebur*, 2013.

Yukiko Iwatani: *Drooping brome*, 2014.

Yukiko Iwatani: *Crepidioides*, 2016.

Yukiko Iwatani: *Heartleaf lily*, 2017.

Åsa Sonjasdotter

Inge Schjellerup

The relation between food production and cultural history is the starting point for Åsa Sonjasdotter, and the potato plays a very important role in her work. Historically, the potato came to Europe with the colonisation of South America, and here it had huge importance for the demographic development – from hero-crop during the famine years of the French revolution to the felon of the Irish Potato Famine. And the vegetable is still central in foods all over the world, as well as in international food politics. In her work *The Order of Potatoes*, Sonjasdotter tells the story of such potato-politics, and of varieties that are restricted from commercial circulation in the EU. These old and new strains are bred by farmers for small-scale use and are genetically too diverse to meet EU regulations on distinctiveness, uniformity and stability. Apart from written and documentary aspects, an important part of Sonjasdotter's practice is to grow these old varieties in community gardens, such as the Prinzesseningarten in Berlin, as well as in the context of art exhibitions, making the potato available for visitors to dig up, take home and consume. As such, visitors get closer to the potatoes as crop and material.

—

Through her lifelong work in Peru, the potato has also come to take on a key role in the work of Inge Schjellerup. In Peru she has worked with everything from domestic living standards amongst Peruvians, to the importance of cultural and biological diversity in the Andes. However, as Schjellerup tells us in her text, the potato has been vital across all aspects of Peruvian life. Whether we engage farming, myth or matrimony, the potato-story is inextricably interwoven with Peruvian culture. Together, we stand to learn from Sonjasdotter's work and Schjellerup's text that the potato is not one but many, as we are taken through the stories and histories of potatoes as told in words, images and the tactile experience of growing potatoes.

Åsa Sonjasdotter: *The Order of Potatoes*. Prinzessinnengarten, Berlin, summer 2011–14.

The Magic Potato[1]

Inge Schjellerup

Spuds, taters, murphies, tubers, goobers, doolies, and praties: these are but a few of countless odd names bestowed upon the beloved potato through the ages. In Peru they call it papa.

Origin of the potato

The potato has been cultivated throughout the past 8,000 years in South America, providing a nutritional foundation for many of the prominent indigenous civilisations of the Andes.

Through genetic analyses of wild species and local varieties in the Andes region, researchers recently determined that the cultivated potato originated north of Lake Titicaca in Peru; contrary to previously prevailing belief, it did not originate from a variety of geographical locations. The latest morphological studies also indicate that there are just four species of *Solanum tuberosum*: the Andean and Chilean cultivated species and three hybrid cultivated species of a bitter potato. Yet there are 3,000 varieties of potato in the Andes region alone. There are many types of potato. They range from round to thick, thin or tubular; they can be smooth or very coarse on the surface with deep holes; and they come in the colours red, yellow, white, purple and blue (fig. 1). Each of these many varieties has its own unique name: truffle potato, yellow potato, narrow potato, mealy potato, white potato, large potato, long potato, very small potato, black potato and potato with black content. In one village I frequented through many years in connection with field work, they had 45 varieties, each with a name of its own. The varieties vary greatly in terms of when and where they must be planted – depending on factors including altitude and soil quality – how they must be stored, how they are cooked and for what dishes.

The peasants of Bolivia and some parts of Peru plant potatoes according to the position of the Pleiades in the night sky. When the constellation is clearly visible, the peasants expect early and heavy rainfall that will give them a good harvest. High cirrus clouds shielding the Pleiades portend drought, so the peasant farmers wait for a month and plant their potatoes in November or early December.

In the late 1500s, the Quechua author Guaman Poma de Ayala wrote a petition to the Spanish king chronicling life in the Inca Empire and the events transpiring following the arrival of the Spaniards. The Inca Empire – much like the preceding Tiahuanaco Empire that flourished on the high plains of Bolivia around Lake Titicaca at 4,000 metres altitude

1. Parts of this text have previously been published in Danish in, "Djævelens æble, kartoflen kommer til Europa", in *Dansk Landbrugsmuseum. Årbog 2008*, Dansk Landbrugsmuseum, 2008, p. 18-25.

Fig. 1. Potatoes from Prinzessinnengarten, Berlin, summer 2011–14. Photo: Åsa Sonjasdotter.

Fig. 2. Potato planting by Lake Titicaca with ard – like in the Danish Iron Age. Photo: Inge Schjellerup.

– depended on extensive potato farming and storage; some of Poma de Ayala's many illustrations depict potato cultivation during the reign of the Incas. The original manuscript is part of the collection at the Royal Danish Library in Copenhagen.

Potatoes are still cultivated to this day in the expansive Andean high plains, in the valleys surrounding the historic Inca capital of Cuzco and along the sparse fertile stretches of Peru's mountains (fig. 2). A *papacancha* or *topo* is the area of a cultivated field required to feed a family. The actual size varies, as fields at higher altitudes must be many times larger than at lower altitudes due to differences in soil quality and crop yields. Fields at high altitude must be seven to ten times larger than at lower altitudes, as the soil must lie fallow for seven to ten years after harvest.

Through many years of field work among indigenous Andean societies, I have witnessed and heard many tales attesting to the central cultural role of the potato in this region. My informant Ramiro Matos Mendieta once told me, for example, that it is customary to test one's future wife by having her peel a pot of newly boiled potatoes of a certain variety. If she fails to remove the peel without scraping away any of the potato, then she is not good enough and must postpone her wedding until she's perfected the technique. For this same reason, the variety is called "warmi huacrachi" – "the potato that makes the woman cry". The oldest women in the family are often tasked with training the younger, eligible girls in the art of peeling potatoes.

Fig. 3. Potato planting with foot plough like in the Inca Empire. Photo: Inge Schjellerup.

Fig. 4 and 5. Potato planting and harvest in the Inca Empire. Guaman Poma de Ayala, Royal Danish Library.

In northern Peru, potatoes are now planted in December after working the soil from August onwards. The men dig holes with their *chaqui taccla*, a type of foot plough used the same way today as in earlier times. The women trail behind the men and plant the potatoes, dropping one in each hole, often with a little guinea pig manure (fig. 3). In June the potatoes are earthed and in July they are harvested (fig. 4 and 5). Just as we in Denmark have had many rituals through the ages for ensuring a good harvest, many Peruvians pour out maize beer, *chicha*, and lay coca leaves on the fields to ensure a good potato harvest.

In the time of the Incas' reign, units of time were defined by how long it took to cook potatoes at the high altitudes, where water boils at lower temperatures. The following is a song in Quechua (the language that was spoken by the Incas and the native language of the Quechua people of the Andes today) that was sung while working in the fields:

Great lord, cover me
with your golden spade, with your silver hoe.
Lay me, bury me
in the green field.

Potato mother, fear not
if your roots touch the stones.
Potato mother fear not,
when you meet storms of hail.

When I return one day,
you will stand with buds as the lilies.
When I return one day,
you will stand in bloom as the lilies.

Myths and potatoes

In Chile, an abundance of myths and legends relating to the potato thrive to this day. One of them tells of the potato's origin:

An Indian chief wanted to make love with one of the goddesses in the same way as the gods. When the gods embraced, the ground quaked and the seas rose. The chief knew this well, but nobody had ever seen it for themselves. To surprise the goddesses, the chief swam out to the nearest island. Simply approaching the island was forbidden for ordinary mortals, as it was reserved for the gods. And, indeed, the chief only managed to see a colossal iguana, mouth agape and dripping with saliva and foam, and a very long, fire-spewing tongue. When the gods saw the chief approaching, they quickly hid him under the ground, and as punishment for so brazenly nearing the island, his entire body was covered with blind eyes and then transformed into a potato to be eternally eaten by humans.

Another myth holds that villagers must expose their seed potatoes to smoke or a mixture of garlic, copper sulphate and ash to prevent the evil Christ (the devil) from causing injury to the household.

Those seeking to harm a neighbour can steal a potato from his kitchen and bury it in the nearest cemetery on the summer solstice. If the neighbour finds out, he will do the same, which is why so many flowering potato plants are seen in the cemeteries.

Those seeking knowledge of their future can also dig up three potatoes on the summer solstice. One must be peeled immediately, the second partially peeled, and the third must remain intact. All three potatoes are then to be placed under the bed. At midnight, you put your hand under the bed and blindly pick a potato; an unpeeled potato holds the promise of wealth, while the peeled potato spells poverty.

The Spaniards encounter the potato and its arrival in Europe

Spaniards of the 1500s were amazed to discover so many new and unfamiliar crops in the Americas. The following comes from an account of their first travels in present-day Colombia:

> The houses [of the Indians] were all stocked with maize, beans and truffles [= potatoes], spherical roots which are sown and produce a stem with its branches and leaves, and some flowers, although few, of a soft purple colour; and to the roots of this same plant, which is about 3 palms high [= 60 cm], they are attached under the earth, and are the size of an egg more or less, some round and some elongated; they are white and purple and yellow, floury roots of good flavour, a delicacy to the Indians and a dainty dish even for the Spaniards. (Juan de Castellanos, 1537, in Hawkes, 1990, 22)

Another description comes from Cieza de León, one of the most credible Spanish chroniclers who travelled through western South America in the 1540s:

> Of provisions, besides maize, there are two other products which form the principal food of these Indians. One is called potato, and is a kind of earth nut, which, after it has been boiled, is as tender as a cooked chestnut, but it has no more skin than a truffle, and it grows under the earth in the same way. (Cieza de León, in Hawkes, 1990, 22)

The first potatoes to arrive in Europe yielded no tubers, but only leaves and flowers because of the difference between the amount of daylight in the two locations. These potatoes came from present-day Peru, where the days have approximately 12 hours of sunlight. The first plants to yield potatoes in Europe were imported from present-day Chile. These plants probably came to Europe as part of the provisions on a Spanish warship returning from the city of Cartagena, Colombia around the year 1565. However, a great deal of prejudice and superstition had to be overcome before the potato rose to prominence in Central Europe and much later in Denmark (Schjellerup, 1987 and 1992).

In 1573, Hospital de la Sangre in Sevilla, Spain purchased a few pounds of potatoes from a Spanish potato farmer. They were used as a luxury food for the patients, who apparently developed quite an appetite for potatoes, as the hospital was ordering potatoes by the sack (25 lbs / 11.3 kg) ten years later. Potatoes had also become an established part of the standard diet in the local area by that time.

However, the spread of potato cultivation was slow throughout most of Europe in the 1600s and 1700s. There was almost no limit to what the potato could be blamed for. The mere fact that the potato belongs to the nightshade family kept most people from even tasting it. Farmers were well aware that the nightshade family included a number of old medicinal and poisonous plants, such as mandrake, henbane, scopolia, deadly nightshade and jimsonweed. Meanwhile, peculiar notions and prejudices abounded regarding the potato, which was seen as a curse. Russian peasants called potatoes "Devil's apples" and considered them to be impure and unholy because they were not mentioned in the Bible.

The potato and Denmark

The French Huguenots brought the potato to Denmark in 1719, planting the crop in the vicinity of Fredericia, where they had been allowed to settle as Protestant refugees. In the

beginning, the potato was regarded as a curiosity and failed to take hold in the Danish diet. The late 1750s saw a surge in the price of agricultural products, leading King Frederik V to launch efforts to expand agricultural land. German colonists were recruited to come and cultivate the Jutlandic heath, which was largely uncultivated at the time. When they began cultivating the heath, local residents of Viborg disparagingly called them "Potato Germans", but they slowly began buying their potatoes.

Danish peasants viewed the potato with great scepticism and were at first unsure about how to deal with the new plant. They were unaccustomed to growing vegetables and they had difficulty with the different farming methods, which were more labour-intensive and at other times of the year than they were used to.

The potato was called "the German clump" and "pig feed", and it was believed that the fruit (potato apples) rather than the tubers constituted the edible part of the plant. Others ate the tubers raw and noted that they could just as well chew on a candle as a potato (Kyrre, 1913).

A Danish tome of 1799, *The New and Complete Householding Book*, recommends waiting until September to eat potatoes, as they are considered immature and harmful to one's health if eaten before that time. In 1816, a law on the production of brandy included a special provision banning imports of grain brandy. This prohibition undoubtedly sparked the cultivation of potatoes, which subsequently swept across the nation, bringing with it problems in terms of prices and control. The potato also assumed a variety of forms, including schnapps, potato starch, French fries, crisps and more.

Today the potato is the fourth most important crop in the world after wheat, maize and rice, with total annual production at around 300 million tons. A medium-sized potato contains about half of the recommended daily intake of vitamin C for adults – something that cannot be said for wheat or rice. Potatoes contain 78% water, 18% carbohydrates (mostly in the form of starch), 2% protein, 0.18% fat and 1% mineral components. When cooked, the potato contains more protein than maize and twice as much calcium. In recent decades, however, the potato has lost much ground to pasta and rice.

Bibliography

Cieza de León Pedro, in Victor van Hagen (ed.): *The Incas*, translated by Hariet de Onis, Oklahoma Press, 1959 [1554].

Guaman Poma de Ayala website: http://www.kb.dk/permalink/2006/poma/info/es/frontpage.html

Hawkes, J.G.: *The Potato: Evolution, Biodiversity and Genetic Resources*, John Wiley & Sons Ltd, 1990.

International Potato Center website: http://cipotato.org/es/

Kyrre, Hans: *Kartoflens Krønike (Potato Chronicle)*, Copenhagen, 1913.

Schjellerup, Inge (ed.): *Den forædlede vilde. Kartoflens historie (The Ennobled Wild. History of the Potato)*, Aalborg, 1987.

____: "Djævelens æble og den hellige urt" ("The Devil's Apple and the Holy Herb"), in Tybjerg, Tove and Hjørdis Nielsen: *Møde mellem to verdener (Meeting of Two Worlds)*, Museum Tusculanums Forlag, 1992, p. 85-97.

____: "Djævelens æble, kartoflen kommer til Europa" ("The Devil's Apple: the Potato Comes to Europe"), in *Dansk Landbrugsmuseum. Årbog 2008*, Dansk Landbrugsmuseum, 2008, p. 18-25.

Åsa Sonjasdotter: *The Order of Potatoes*. Prinzessinnengarten, Berlin, summer 2011–14.

Åsa Sonjasdotter: *The Order of Potatoes*.

Åsa Sonjasdotter: *The Order of Potatoes*. Installation view from the exhibition "Deep Green", Den Frie Udstillingsbygning, Copenhagen, 2009.

Janet Laurence

Geoffrey C. Bowker

Janet Laurence's works take a starting point in conceptions of art, science, and history. She often works site-specific and displays local plants in installations mimicking the setting of natural science research into plants. For instance, in her work *Waiting – Hospital for Ailing Plants*, a transparent structure echoes botanical glasshouses and scientific laboratories. In smaller boxes, we see plants in small flasks and Petri dishes, between glass sheets and alongside other objects like 3D prints and plastic tubes. In these settings, Laurence twists and doubles our perceptions of nature as a category that is both obscured and shaped by the scientific eye. Through laboratories, we get to know plants in a new way. They are not just pretty or nutritious, they photosynthesise and provide us with clean air. When plants breathe, we breathe, and when we pave over, disrupt or simply ignore this, we slowly create an environment that is inhospitable for all species. But is scientific knowledge all we need? What happens when we – humans – are in fact wilfully and scientifically shaping our planet into a place of increasingly hostile environments? We plan in the hopes of being able to resuscitate those beings we might miss after all.

—

In his work, Geoffrey C. Bowker has followed such practices of planting and archiving to potentially save plant life, as with the large seed vaults located across the world, also known as the doomsday vaults. Thinking with Laurence, Bowker asks about this time of sweeping human planetary impact: the Anthropocene. The time where it is becoming frighteningly clear, we may soon need this scientific version of hospitals, or cryochambers, for plant life. What do we stand to learn about this moment if we let ourselves be guided by the "double vision" offered by Laurence's medicinal cabinets and gardens as spaces for revival and resuscitation, but also for confrontation of our entwined being and plight?

Janet Laurence: *Waiting – A Medicinal Garden for Ailing Plants*, 2010. Transparent mesh, duraclear, mirror, oil, acrylic, glass veils, plant specimens, 500 × 300 × 300 cm. 17th Biennale of Sydney, Royal Botanic Gardens, Sydney, Australia, site specific installation. Photo: Jamie North.

This moment is different:
Janet Laurence and the Anthropocene

Geoffrey C. Bowker

Janet Laurence's work for me speaks richly to reading with and about nature; two such vital skills for the Anthropocene. Charles Lyell (1830), in a foundational work for scientific geology, wrote in the 1830s an impassioned description of his epiphany of seeing Mt Aetna break through the clouds and suddenly (in that brief brilliant moment) comprehending the changes wrought upon the earth. It is a sudden recognition of the beauty of nature, the overflowing vitality of it, all at once. This is the double vision through which I read Laurence's work: isolating and examining in order to understand, so as to act well in the present whilst keeping open the capacity for rapture.

Her work, *The Brilliant Brief Moment* from the Glasshouse series (fig.1), immediately conjured for me the Incredible String Band with their song lyric: "This moment is different, from any before it / This moment is different – it's now". Richer resonances came as I was contemplating it: convivial, promiscuous ones. In the late eighteenth century in Europe, the mountains were seen as dark, sinister abodes of the supernatural (Nicholson, 1959). The Gothic novels of that period (think the wonderful Ann Radcliffe, 1794) had windswept, drear castles nestled in mountains, perched atop crags. Then there was a gestalt switch in the early nineteenth century to seeing mountains as truly sublime (and later beacons of health – where you went to recuperate from tuberculosis). They were places to visit and be inspired by, just as one might look into the night sky and be awed by the starry light. In that moment when we suddenly apprehend nature, all manner of memories come showering down. Proust (1929) wrote about this kind of moment in *Remembrance of Things Past*, contrasting the kind of memory that tries to recall (what bird is that?) from that which suddenly has recall thrust upon it (involuntary recall: the sudden evocation of all the temporalities of life and their attendant memories; oh my gosh, at this moment I remember all the sunsets I ever saw!).

Being in the Anthropocene entails experiencing its multiple temporalities. If you fast forward through geological history over the past 4.543 billion years, the earth flows, breaks into separate floating islands and re-agglomerates. Later, at a faster rhythm, you see life itself transforming the earth and the oceans: biodiversity spawned out of geodiversity, teeming life creating and consolidating its niches. At a still faster rhythm, which moves asymptotically to the present, time is paradoxically ever slower, richer with meaning as humans bring new modes of reasoning about and interacting with the world it develops.

Fig. 1. Janet Laurence: *The Brilliant Brief Moment (Classroom, Villa Tugendhat)*, 2016. Duraclear on acrylic mirror, 100 × 208 cm.

Fig. 2. Janet Laurence: *Fugitive*, 2012. Site-specific installation for TarraWarra Museum of Art, Victoria. Laboratory and hand blown glass, video projection, taxidermy specimens, mirror, minerals, duraclear on acrylic, gauze-wrapped plant, animal bones.

By "asymptote", I refer to the paradoxical slowing of time towards infinity as "sensations" move faster and faster. Proust's *Remembrance* does this beautifully with the descriptions of Albertine's face as palimpsest: the more pervid Proust's neurasthenia, the more layers of time he sees and the more he is able to read into the face. In philosophical terms, this is close to Spinoza's concept of the world eternal existing in the present moment. And then there's just us, now, flecks in the amber of the present moment who scale over every temporal rhythm. We take all of these moments together: the moment of planetary formation giving us the metals and the minerals so vital to our existence; the moment of the development of life to give us the stored solar energy accumulated over millions of years in oil, peat, coal; the very present in the maximization of resource use in headlong pursuit of the singularity.

The Brilliant Brief Moment is the point at which we both see ourselves as part of a much larger flow and become aware of ourselves and what we are doing in the present. Time slows into this expansive moment in Laurence's work. That moment of seeing nature as a whole, and at the same time recognizing that we see it through a set of veils – it is through "useful" science that we see the world today.

Of Laurence's wonderful *Fugitive* piece (fig. 2) – would that I had seen it outside the screen – she writes: "I'm intrigued by the tiny space between life and death when the concept is infinite." Another moment, another kind of now. Michel Serres, in his book *The Hermaphrodite,* evokes this moment when one is between a statue (dead, solidified, away from the party) and alive (in the ballroom). Between life and death; between living creature and taxidermic specimen. At that tiny space, at that moment, the specimen is not yet a statue which enters into the dizzying array of networks of modern technoscience. It is not yet subject to this modality, yet is only barely part of the wonderful multiplicity of life. Caught in this duality, it reaches its maximal ontological diversity: the concept is infinite. The move in that moment of death to separate off and preserve the specimen for contemplation at leisure – or rather at the frenzied pace of scientific research – is one which freezes a given understanding of life. I've always been surprised by the nature of the Svalbard Seed Vault in Norway, described by Crop Trust in epic, Star Wars terms: "Deep inside a mountain on a remote island in the Svalbard archipelago, halfway between mainland Norway and the North Pole, lies the Global Seed Vault." That's where we keep the seeds which will guarantee that we have enough genetic diversity, should a blight wipe off one of our monocrops or mono-species in its most productive form. In the deliberations on determining its possible starting point, one suggestion for demarcating the Anthropocene was to use chicken skeletons as the marker – chickens, those finger-lickin' things, are by far the most common and widespread birds on the earth: their remains can be found buried under Antarctic ice, worked into the loam of a rain forest or populating our urban landfills. One single species to define an epoch.

That at this liminal moment between life and death we choose the seed or the species, as defined by their genetic markers, as the chief modality of our preservation (we need to, it is said, "preserve" biodiversity) and our conservation seems absurd. The *nec plus ultra* to efforts like archiving seeds are the wild schemes to preserve biodiversity as genetic sequences in computers. What is wrong with this picture is what Alfred North Whitehead

(1929) describes as "misplaced concreteness". The plant has an infinite present: it's genetic data sure, but also the network of microorganisms its roots interact with in the soil; the microflora and fauna that teem in its own xylem, the myriad insects that feed on or find shelter with it – and which facilitate its propagation. At this very brief moment, between life and death, it moves between this double infinity, this double vision.

When is now? When is this brief moment which is transfixed between the instantaneous epiphany and the liminal state between life and death? This is a political question. A common trope for thinking the future is that we are approaching an asymptotic limit. This can take the form of the human lifespan – we are living longer and longer until we reach a natural limit (say 120-140 years old) after which we will need a form of transcendence (the singularity) to get beyond it by subsuming ourselves into different temporalities (we become one with the machine or we understand our body/genome as machinic). The world's average temperature will continue to rise incrementally, until we reach the limit of, say, 4.5 degrees centigrade – after which a catastrophic set of processes go into play, where we either turn the world into a machine (large scale geo-engineering) or we humans evacuate the premises for the next comers. Or again, we will continue to consume the world's natural resources until we hit the Malthusian limit (the ur-asymptote), after which either catastrophe sets in, or we back into a machinically-enabled (the Internet of Things) sustainability.

The temporal figure of the asymptote is core to the imaginary I grew up with. When I was young (see Nuttall's Bomb Culture) we were "two minutes" away from nuclear winter – the clock was always about to tick over. Now we are "two seconds" away from human-based ecological disaster (see the timelines on how long life has been on earth, how little we humans have, and how close we are to precipitating the apocalypse).

The role of the apocalypse is interesting here – there is a smooth transition in the Enlightenment period from priests to scientists (and now to sociotechnical programmers) as masters of the point of discontinuity – the invariably imminent cataclysm. At this asymptotic point, history will "catch up with us" – either at the Pearly Gate, where our past sins finally get their full accounting and we are rewarded according to our just merits, or when our overspending of resources will finally get its full accounting and we shall all turn into troglodytes. For this narrative, the apocalypse has already occurred – the point that Jean Baudrillard (1989) makes is that we are already living nuclear winter: its effects are rippling back in time. The "clathrate time bomb" is the sudden release of methane from clathrates or from permafrost – it's hanging over our heads. The language of runaway positive feedback loops is the same as in the 1970s, when we had the vision of the next ice age suddenly descending after a few bad winters, caused a rise of albedo in the poles, setting up a vicious positive feedback loop: we want catastrophe in our time. So you want it not quite yet (after all, paradoxically, humans and species in general are doing tolerably well now with climate change) but you want the urgency. If we lose clathrates at a "beach near you" then the sea floor could collapse, leading to mega-tsunamis (the "clathrate gun" now seen as less likely).

The apocalypse is a very politics-friendly form of temporality. It is so hard to enter figures into the discourse, such as at least 40,000 people killed every year in the UK by air pollution, or the number of people killed as a consequence of Volkswagen lying about their emissions. Serial killers, with much lower body counts, get more coverage. Generically, it is much easier to document and act upon punctual disasters (earthquakes, nuclear meltdowns) than slow moving ones. Asbestos provides a popular form of accounting since it's easily pinpointable: even though the money spent on removing it is generally wasted. The logic of the accounting records is that they "should" tell a story of social/individual apocalypse rather than background malaise – or, indeed, "real time" accounting in general: for climate change, we are awaiting the "trigger" moment. If politics is indeed the art of the possible, then all temporalities that do not beat to the rhythm or respect the cycles of our political economy have to be excluded.

To take but one example of many, Tim Flannery's (2005) writing about the apocalypse, as poetic as it may be, is all about a remarkably bleak future. He has a lyrical chapter describing how assorted species (including those lovely alpine meadows) are getting pushed further and further up mountain sides in our time as the climate warms, so that eventually they will just disappear like the Cheshire cat; in the same chapter, he says that what will love this Assumption of the Meadows is the evil anopheles mosquito, which will bring us malaria and death invading the lower lusher areas. Oh, Tim, why would only evil mosquitoes flourish? How do we account for a future which is not to our time scale? Frequently, we talk about a period just beyond our time horizon – the year 2050 is a popular one now – far enough ahead that it's really not tomorrow, but close enough that we sense the urgency. We could call this the future of the generational horizon (using the standard if outdated calculus of a human generation every thirty years). By pushing apocalyptic change out to just over thirty years from now, we can argue that it's not quite us who are affected by it, nor is it quite our political system which should respond. The generational horizon is one of the varieties of the future that allows us to feel a judicious mix of terrible, helpless, and vaguely confident. One of the difficulties of climate change is the anomalous status of the present. If the "present moment" is me and my generation then maybe we should just maximize ecosystem services now. For the purposes of the argument, let's take ecosystem services to be either an "exploitative" model which is about making certain that I most enjoy my current plunder of the earth's resources – après moi le déluge; or the more extended (nicer) version that factors in spiritual and other values as part of the economy of the present. Either is as bad as the other in the long term.

Fig. 3. Janet Laurence: *Deep Breathing: Resuscitation for the Reef*, 2015. Site-specific installation for COP21, Muséum national d'Histoire naturelle, Paris. Various materials, images and film projections, specimens borrowed from the collections of the Muséum national d'Histoire naturelle and the Australian Museum, Sydney.

In this particular present, the general goal is to prevent the future. What you want is a smooth functioning system with exactly the climate we have today and the species that we have today, extrapolated into the indefinite future. This is also the future of maximal acceleration (we want more and more out of our unchanging present – as symbolized by the ever-increasing speed of computer clocks): economies must ineluctably grow. This is the ever more compressed present – where geological epochs, swathes of human history collapse onto a working system. Compare this to a present which is the present of our current interglacial era: there is a strong tendency among geologists to argue that whatever we do will not prevent the next, inevitable ice age. Or a present where we accept that species loss – including possibly our own – is a very good thing in general (where would we be without the asteroid that killed the dinosaurs; why should not other sentience succeed?). Unfortunately, the present of climate change comes with a ready-made telos; one which tries to freeze this moment and this species – this is far too anthropocentric.

In *Deep Breathing: Resuscitation for the Reef* (fig. 3 and 4) we see the fragile networks of techno-science offering a breath of hope: the alembics and the test-tubes which necessarily in the present interpose between "us" and "nature".

So three possible moments – the epiphany, the moment between life and death and the frozen present. We need the moments of the double vision – the epiphany and the analysis – to escape the false promise of the third. Life always overflows; we are necessarily planetary mangers (Serres, 1980).

Fig. 4. Janet Laurence: *Deep Breathing: Resuscitation for the Reef*, 2015. Site-specific installation for COP21, Muséum national d'Histoire naturelle, Paris. Various materials, images and film projections, specimens borrowed from the collections of the Muséum national d'Histoire naturelle and the Australian Museum, Sydney.

Bibliography

Flannery, Tim: *The Weather Makers: The History and Future Impact of Climate Change*, Grove Press, 2005.

Lyell, Charles and M. J. S. Rudwick: *Principles of geology*, University of Chicago Press, 1990 [1830].

Nicholson, M.H.: *Mountain Gloom and Mountain Glory: the Development of the Aesthetics of the Infinite*, Cornell University Press, 1959.

Proust, Marcel: *A la recherche du temps perdu*, Paris, NRF, 1929.

Radcliffe, Ann: *The Mysteries of Udolpho*, https://www.overdrive.com/search?q=B900C172-8E56-40F3-8C0C-91A97B4D115D, 2016 [1794].

Serres, Michel: *Le Contrat Naturel*, Champs-Flammarion, 1980.

Whitehead, Alfred North: *Science and the modern world, by Alfred North Whitehead*, The Macmillan Co., 1929.

Janet Laurence: *Waiting — A Medicinal Garden for Ailing Plants*, 2010. Transparent mesh, duraclear, mirror, oil, acrylic, glass veils, plant specimens, 500 × 300 × 300 cm. 17th Biennale of Sydney, Royal Botanic Gardens, Sydney, Australia, site specific installation. Photo: Jamie North.

Janet Laurence: *Elixir*, 2003. Wooden traditional house, screen-printed glass panels, paint, vials, plant extracts, schocu, laboratory & hand-blown glass. Site-specific installation, Echigo-Tsumari Art Triennial, Japan.

Camilla Berner

Anders Blok

Weeds and invasive plant species are often the key protagonists in Camilla Berner's work. Whether stubbornly attending to the plant life on a plot of stony wasteland in the middle of Copenhagen (e.g. *Black Box Garden*, 2011), or creating astonishing bouquets from wildflowers and weeds (e.g. *Plant Collection,* 2014/15), Berner engages the somewhat strained nature/culture relations as they play out in our most common and inconspicuous land- and cityscapes. When negotiating our relationship with plants, a curious set of categories prevail: words such as utility plants, ornamental plants, weeds and invasive species. These categories are both useful and important for various purposes, but they are also highly political and thoroughly cultural categories. A weed is a "plant out of place" and, as such, is defined by its cultural story. What counts as weedy and invasive species, and to which degree, is the subject of ongoing deliberation as we simultaneously negotiate all kinds of binaries along the nature/culture divide.

—

In his text, Anders Blok is thinking with these binary aspects of Berner's work, asking how she engages with and dwells on the fractal repetitions nested in the nature/culture distinction. In his work as an environmental and urban sociologist, Blok has long researched cities as interesting places for a novel and specific set of ecological assemblages: as places where the intensity of human and non-human cohabitation is condensed. We may well primarily see the concrete, bricks and asphalt, however – and much like we learn from Berner's artworks, Blok has drawn on conceptual resources (including those of Bruno Latour) to help us notice and examine the non-human life-forms bursting through the cracks, the people who care for these stubborn ecological entities, and the politics (and sometimes policies) they set into motion.

Camilla Berner: *Plant Collection no.1 from Krinsen, Kongens Nytorv*, 2014–15.
Fine art baryta 325 g print, 120 × 85 cm.

Deep in the maze
– urban nature and repetitions of the not-quite-similar

Anders Blok

Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.
— Robert Frost, "The Road Not Taken", 1916.

To contemporary urban dwellers in a place like Denmark, the term "urban nature" is likely to cause a slightly jarring sensation, and perhaps spark a moment of reflection. After all, the Danish word for urban nature, *bynatur*, literally juxtaposes two entities – the city and nature – that were supposed to remain opposites in the so-called Western-modernist worldview to which we otherwise may adhere. In this scheme, the city stands for human artifice, the epitome of culture. Nature stands for, well, nature, that which is untouched by and independent from human desires and interests, the flipside of culture.

In everyday life, we all know that things are not that clear-cut, that the two entities of city and nature mix and blur in intricate ways. But this just raises new questions for us; or better put, it raises similar questions at many divergent levels. At what point or from what angle do these weeds in the pavement, this school of inner-city toads, these trees in my nearby urban park, qualify as nature? When driving west from (say) Copenhagen, at what suburban junction, exactly, have I exited the city? And since most of rural Denmark is agriculture anyway, is there even a point at which I have entered into nature?

"Nowhere", wrote sociologist Louis Wirth (1938, 1-2) from his position in 1930s Chicago, "has mankind been farther removed from organic nature than under the conditions of life characteristic of great cities." Yet, even Wirth's contemporaries in the arch-modernist architecture collective of Bauhaus begged to differ, as they sought to put grasses on their flat building roofs. Parks and other greenspace became part of any well-ordered modern city, as spaces for recreation, nature learning, fresh air and healthy habits. Urban parks, however, were to be as controlled and un-weedy as anything else in the functionalist city.

More recently, once-hardened boundaries between the city and nature have become more porous and permeable in the practices of urban professionals and citizens, as well as in urban thinking and theorizing. Which architect these days would dream of projecting a new

Fig. 1. Camilla Berner: *Pavement and Parliament*, 2003. View of exterior context formerly owned by engineering company FLSmidth. Photo: Camilla Berner.

Fig. 2. Camilla Berner: *Pavement and Parliament*, 2003. Installation view. Grass sown in between the concrete elements. Photo: Anders Ingvartsen.

Fig. 3. Camilla Berner: *Pavement and Parliament*, 2003. Installation view. List of species registered outside the building. Photo: Anders Ingvartsen.

urban neighborhood or redeveloping an old one without making ample space for urban community gardens, lush and wild-growing bushes and trees, surface rainwater handling with attendant plants and animals, and generally just a lot of greenery? Sustainability, biodiversity, climate adaptation and ecosystem services all belong to the list of contemporary truths circulating widely in urban planning circles, locally and globally.

However, as cities are naturalizing, there is also a sense in which urban culture as a way of life has come to metabolize and spread its effects well into the most remote wildernesses on the planet. If we have indeed entered the Anthropocene era, the era of humanity as a geological force, then this is in no small measure due to forces of planetary urbanization and its attendant territory-crossing economies and ecologies of oil extraction, coal mining, deforestation and dispersal of plastic, chemical and carbon waste. The ecological footprints of the world's major cities remain disproportionately large, even as they also deindustrialize, leaving new urban ruins for plants and community gardens to re-conquer. Grass may well come to grow over our cities,[1] but meanwhile, plastic will have spread over our oceans.

Amidst such a welter of unforeseen side-effects and out-of-joint metabolisms, it is tempting to give up on the nature-culture distinction altogether: if cities incorporate and

1. Besides being a biblical quote, *Over Your Cities Grass Will Grow* is also the title of a documentary on German artist Anselm Kiefer, directed by Sophie Fiennes (2010). On his workspace and spectacular *gesamtkunstwerk* in Berjac, France, Kiefer says: "The Bible constantly says everything will be destroyed — and grass will grow over your cities. I think that is fantastic. And grass will grow here too. It already is, everywhere."

shape all of our ecosystems, and if nature is a hybrid assemblage of biotic life with human-induced technological forces, then why not simply admit that the distinction is now obsolete? Anthropologists will only be too keen to tell us that our naturalist worldview, in which we imagine one nature and many cultures, was always a Western-modernist oddity anyway, set amidst a plurality of other collectives around the world who do not share such preoccupations. There is nothing natural in wanting to sharply distinguish culture from nature.

Yet, if we discard the nature-culture scenography altogether, then where do we locate the slight sense of jarring conjured by the notion of urban nature? Where do we place the sound intuition that this notion opens up a novel interval, a third space in-between the city and nature, for us to explore and inhabit? Moreover, what to do with the inconvenient sense in which this very space *depends* in part on the work of the nature-culture distinction itself, as it connects and establishes a new resemblance, and a new common ground, between its two terms: urban and nature? It is as if we would not want the nature-culture distinction to entrap us, but we could not quite do without its suggested bifurcations, either.

In this messy situation, Euro-American artists – no less than the social scientists for whom anthropologist Marilyn Strathern (2011) invented the expression – may want to grant themselves a certain *binary license*. That is, in a situation like that of urban nature, in which everything depends on the way binary distinctions (nature/culture) come to be nested within and related to each other, the artist can seek to dwell for a moment on the point of bifurcation itself. Moreover, such an attention may well lead one to speculate on the

patterns that emerge when the binary formula is itself replicated across settings, levels and contexts. Camilla Berner strikes me as a contemporary artist who has given herself such a binary license – and who has found very creative ways of exploiting the many possibilities thus opened up.

We are on the site of an old abandoned industrial building, in Valby outside Copenhagen, but it could really be anywhere in postindustrial Euro-American suburbia (fig. 1 and 2). Outside the factory, different species of grasses and bushes have found their way up through the desolate concrete pavements, shaped into a pattern by the visible fissures, material markers of a process of construction, use and decay. Inside the factory, the artist has planted what looks like straight lines of fresh bright-green grass, similarly following fissures in the concrete elements of the floor. Hung on the wall inside the factory, a list displays all the species of grasses, plants and bushes located in the nearby vicinity outside – thus hinting also to the various invisible practices of the artist (fig. 3).

How many binary distinctions are simultaneously at work in this work? Who knows? Here is a start: besides (Euro-American) culture/nature, my sense is that our list would quickly grow to include such notions as (urban) growth/decay, (architectural) inside/outside, (temporal) past/future, (sensory) grey/green, (ocular) visibility/invisibility, (human-induced) order/spontaneity, (vegetal) homogeneity/richness, and (practice-based) art/ecology. Yet, much like the list on the factory wall, the value of this listing is itself questionable: perhaps the interesting thing is not so much the number of binaries as such, but instead how the artistic practice has come to nest and relate them in specific ways. That is, the pattern that emerges.

A relevant option, surely, would be to say that the above binaries, while superficially distinct and different, in fact all act as *repetitions* of the same basic form: the nature-culture distinction as such. As Strathern rightly points out, binary distinctions like nature/culture may appear to lead down forks in a road, but they arise from a process that works without maps or plans (not unlike the forks of Robert Frost, one imagines). When pursued over time and across different experiential levels – say, when we recognize the nature/culture binary successively in the grey (culture)/green (nature), inside (culture)/outside (nature) and homogeneity (culture)/richness (nature) bifurcations of this work – what emerges is not identity or wholeness, but *not-quite-similar repetitions*. Only the distinction itself remains constant.

If one were to visualize this mathematical pattern of not-quite-similar repetitions, we can follow the lead of sociologist Andrew Abbott (2001) in realizing that the result would be *fractal*: the same distinction between nature and culture repeats itself for all kinds of fissures made visible in the work, across a variety of levels of abstraction. There is no end to this maze-like effect. Once planted by the artist, are we then to take the bright-green grass inside the factory as nature or culture? Does it matter in this respect that the pattern formed by this grass looks visually similar to the (human-shaped) pattern of (now) naturally growing (richer) grasses outside (the building)? Would it matter whether the species of bright-green grass shows up on the list, signifying its simultaneous presence in the human-shaped (naturalized) environment? If so, does that judgment rely more on natural science (ecology) or on aesthetics (art)?

Now, in setting up this maze-like pattern of fractal distinctions, of course, the work invites reflection on the part of the viewer and at all bifurcations as to which path to follow—whether by this we mean visually, in engaging with the layers of the work, or we mean practically, in thinking about its possible ethical import. Surely, we all want to live in greener cities, cities more ecologically rich and healthier than our industrial past, and full of contemporary art (by the way)! Yet, does this work really lead us down such a well-trodden path? In my own view, what makes this work delightful is its very ability to constantly defer and deflect such reflection, to keep us trapped in the maze of our own distinctions.

By way of not-quite-similar repetitions and twists, the work thus uproots the nature-culture distinction that we thought we knew so well; it does not discard it, but it puts it in perpetual motion. In doing so, it teaches us something important about urban nature as an ambivalent, in-between, liminal space. Try as I might, I am unable to sense any stable common ground emerging from this work. As everything moves around, factories and cities decay, artists take over from blue-collar workers, plants crack open the derelict pavements, species are counted and enlisted in the service of a new ecological ordering; I am left wondering where I am in the maze that is urban nature. This is how I understand the work's title: it sends me oscillating between the (weed-fissured) pavement that is my familiar urban world and the parliament (of nature) in which we will all, eventually, have to work out our new perplexity in common.

Perhaps philosopher Gilles Deleuze (1994) would have expressed it something (but not exactly!) like this: difference and repetition are not each other's opposites; rather, difference is what you get when you repeat the *same* distinction across a *shifting* territory or assemblage of elements. Similarly, as I see it, Camilla Berner has continuously extended her binary license in new directions, pushing nature-culture bifurcations into still-other sites and settings, deploying still-other media, in pursuit of still-other effects. In doing so, she has created a fractal pattern of her own, one in which the ambivalences of urban nature have arguably come into sharper focus and public visibility.

Who would have thought that, in the midst of what is usually the busy and bustling historical square of Kongens Nytorv in Copenhagen, a total of 84 plant species, making up a peculiar mixture of naturally spontaneous and culturally left-over grasses, weeds, bushes and berries, could come to co-exist and intermingle (fig. 4)? Known as *Krinsen*, this site became

Fig. 4 and 5. Camilla Berner: *Oversete Nyheder / Unnoticed News*, 2014. Krinsen, Kongens Nytorv, list of species. Photo: Camilla Berner.

for a while a not-quite-similar repetition of the rapidly mushrooming format of urban gardens, themselves precipitating a fine-grained patterning of urban greening from the well-ordered to the wild-growing (another binary, of sorts). This time around, the artist takes the path less travelled, at least initially. What happens, she seems to say, if we extend the gardening gesture of caring for vegetal nature *beyond* its usual cultural boundaries?

This particular boundary has a definite semiotic marker: weeds. Weeds, we quickly realize, is culture's way of bifurcating nature into wanted and unwanted, legitimate and illegitimate, in-place and out-of-place. In the urban gardening practices of the artist, however, the tables are turned: weeds, it seems, become the site, the locus, that allows for otherwise-unnoticed bifurcations in urban history and culture to come into public view. Proliferating purple thistles are allowed to bear witness to the car-induced growth of carbon dioxide in the air. Documenting the many unruly newcomer species helps unearth a history of strict cultural preferences in nature conservation practices. In turn, photos of elaborately aestheticized weed-flower arrangements find their way into museums, still the epitome of high culture.

As weeds become tools of heterotopic criticism, the reaction follows a perhaps predictable pattern: upon a string of complaints from neighboring institutions, the wild-growing urban garden is subjected to cultural taming, losing most of its species in the process. Interestingly, however, the garden lives on in the shape of photos, newspapers and drawings that find their way into the city's main museum of urban history, the Museum of Copenhagen, as part of their exhibition on urban nature. From being materially brandished from the city, the semiotic wildness of the garden thus enters the city's archival history, attaining its own legitimate space in its urban-green self-image. We are left, perhaps, with bifurcations and oscillations well-known to socially engaged contemporary art: what pattern, we can wonder, does art itself weave inside the maze of political engagements through which our urban nature(s) take shape?

However, the artist's practice of enumeration – of the 84 plant species (fig. 5) – points as well to a different path: what would have happened, we might speculate, if this garden had been kept in public view not as an artistic intervention but as a scientific field experiment in human-plant co-habitation in the Anthropocene? If not via the trials and tribulations of serious inquiry, of experimentation on means and ends, how else are we to know about this novel in-between space of urban nature? A similar bifurcation (art/science) seems to be at play in Berner's contribution to the *Moving Plants* exhibition, where her artistic site, the former brown coal mining landscape at Søby, in fact now serves as just such a scientific field-station. Here, biologists, anthropologists and artists together excavate still-more layers of a site whose material and energy effects extend well into the history of Danish post-war urbanization.[2] In doing so, relations of art to science may in the process come to stand out as the nested and fractal pattern that they are.

At this point, it is perhaps fitting for me to turn the gaze around, in order to point to elements of the binary license that I have granted myself throughout these short reflections. Most importantly, of course, to think in terms of the nature-culture distinction and its many fractal proliferations is to think like a Euro-American social scientist, one whose own sense of weedy-ness depends on a prior cultural patterning. Is it not tempting, to say the least, to search for what lies *outside* that pattern? Yet, and this is the difficulty, what we initially find behind the nature-culture distinction is simply… more culture. The others out there may have other natures, for sure, but caught unaware, it will just look like culture to me.

Such, perhaps, is the challenge of the present exhibition, in which Euro-American artists like Camilla Berner meet their East Asian counterparts on the territory of vegetal-aesthetic relations. What happens to the nature-culture distinction under such conditions (which is itself a bifurcation)? Extrapolating from anthropologist Philippe Descola (2013), we should expect to see a meeting of two patterns of interiority and physicality: whereas Euro-American naturalism grants interiority – souls, intentions – to humans while denying it to plants, East Asian analogism composes *all* elements of the cosmos, plants included, from intricate pluralities of interior and physical elements, each in specific proportion. In this sense, while all is difference, analogism simply has no place for any nature-culture distinction.

2. The brown coal beds in Søby constitute a fairly unique natural-cultural entanglement in Denmark, having hosted intense mining activities for 30 years from the 1940s onwards and now constituting an ecologically rich, human-induced landscape. As such, it has become a scientific field station for the research group Aarhus University Research on the Anthropocene (AURA), also a collaborator in the Moving Plants exhibition.

The important point, it seems to me, is not whether this new binary distinction (naturalism/analogism) actually maps onto its presumed geography of the exhibition (and how we would ever know). Rather, it may serve to open up a new fork in the road, with analogism surely the path less travelled, at least in a place like Denmark. In doing so, it throws plants themselves wide open to artistic exploration, setting up a third space in-between the terms of nature and culture that might otherwise come to overdetermine it. Hence, what we might at first be tempted to take as a stable relation, of art to plants, aesthetics to nature, is set into perpetual motion, allowed to proliferate into fractal patterns and maze-like adventures.

Two roads diverge in a clearing at Rønnebæksholm. I hope you take the one less travelled by, as that may well make all the difference. But even if you take the other one – as I tend to do – rest assured that your attempt to repeat your own form will nonetheless lead to a pattern of differences.

Camilla Berner: *Plant Collection no. 10, 30 Tongui-dong, Jongno-gu, Seoul 11.08.16*, 2016. Archival Pigment Print, 120 × 90 cm.

Bibliography

Abbott, Andrew: *Chaos of Disciplines*, University of Chicago Press, 2001.

Deleuze, Gilles: *Difference & Repetition*, Columbia University Press, 1994.

Descola, Philippe: *Beyond Nature and Culture*, University of Chicago Press, 2013.

Frost, Robert: "The Road Not Taken", in *Mountain Interval*, Henry Holt and Company, 1916.

Strathern, Marilyn: "Binary License", *Common Knowledge*, 17(1), 2011, p. 87-103.

Wirth, Louis: "Urbanism as a Way of Life", *American Journal of Sociology*, 44(1), 1938, p. 1-24.

Camilla Berner: *Plant Collection no. 4 from Krinsen, Kongens Nytorv*, 2014–15. Fine art baryta 325 g print, 120 × 85 cm.

Camilla Berner: *Plant Collection no. 2 from Krinsen, Kongens Nytorv*, 2014–15. Fine art baryta 325 g print, 120 × 85 cm.

Camilla Berner: *Plant Collection no. 6 from Krinsen, Kongens Nytorv*, 2014–15. Fine art baryta 325 g print, 120 × 85 cm.

Camilla Berner: *Plant Collection no. 8, Siljangade 5-7, Copenhagen, 13.06.16*, 2016. Archival Pigment Print, 160 × 142 cm.

Essays

Introduction to the essays

Whereas the first part of this book consists of "thought pieces" – texts written by scholars who have been invited to think with, write and explore concerns they share with the artists in the *Moving Plants* exhibition – the following two contributions are of a different nature: essays addressing two central topics that permeate *Moving Plants*: plants and art.

The first essay is by Natasha Myers, an anthropologist of science and technology who has long studied the biosciences and their explorations of life on a molecular scale. In her recent work, she focus on plants as they intersect with lives and draw things together in unexpected ways. Plants are beautiful, green and pleasing, but we are also desperately dependent on them – not least at a moment in time where we have released vast amounts of carbon dioxide into our atmosphere. We literally need plants to breathe, a fateful commonality Myers examines in her text. We may live in human-made ecological times, but in order to survive we must strive for a short *Anthropocene* and the rapid realisation of how crucially we are rooted into the *planthroposcene*.

T.J. Demos is one of the only contributors to this book who is an 'art professional'. Demos is an art historian and theorist who has worked extensively with eco-arts and aesthetics. Though this field intertwines with a much broader space of art at various points of intersection, Demos has importantly traced the (dis)connections between environmentally concerned arts into a sort of history of eco-arts engagements. In his essay, Demos touches on one aspect of this movement: works focusing on gardens and plants. He does this by critically engaging the case of Documenta, a large art festival held in Kassel, Germany once every five years. The 2012 edition of the festival, dOCUMENTA(13), paid special attention to plants and gardens from artists who are also climatically invested, thus making a good case for asking whether – and if so, how – arts can garden against the apocalypse.

Photosynthetic mattering: rooting into the Planthroposcene

Natasha Myers

Thinking with plants, this essay aims not only to summon the elements, but also to hail agents of elemental rearrangement, to call out those composing our airs, waters, and soils. One way to tap into the elemental forces making and breaking worlds today is to pay attention to the *rearrangers*, the choreographers, the beings whose doings catalyze, synthesize, and stir up planetary substances and energies. We need a way to think the agencies of rearrangement. Who and what rearranges the elements on worldly scales? Here I am thinking not only with the elements that populate the Periodic Table, but also with the more alchemical forms of earth, air, water, fire, metal, and wood that shape multiple cosmologies about elementary forces.

Models are, of course, models of models of models, all the way down (Edwards, 2010; Myers, 2015a). Even still, NASA's time-based simulation of the global carbon cycle, visualized over the duration of one year, offers one way that we might begin to render the scale and intensity of elemental rearrangements going on, on this planet (fig. 1).

In this rendering, carbon dioxide, coded red for emergency, can be seen to accumulate with alarming intensity. Note the distinct fluxes and flows taking shape in the northern and southern hemispheres. Note the uneven distribution of massive carbon plumes generated in zones of heavy industrialization. Thinking with decolonial feminist technoscience scholar Michelle Murphy (2016), we may read this animation as an index of sites of chemical violence, an animation of the world-making, earth-breaking chemical rearrangements of airs, waters, and soils in the wake of what she calls "industrial exuberance". These are some of the elemental rearrangements that we have come to rely on but that perhaps we cannot continue to live with. Perhaps this simulation could be used to foment environmental justice movements that can conspire to shut down the toxic flows of what anthropologist of science and technology Kim Fortun (2012) calls late industrialism.

And yet, it could also foment a different kind of movement. Note that industrial plants are not the only rearranging agents indexed here. Follow the link to the NASA simulation and you will see what happens month by month as the seasons change, especially in northern forests in the summer. This animation renders the force and power of those other plants, the ones who metabolize carbon dioxide at an earthly scale. The photosynthetic ones — those green beings we have come to know as cyanobacteria, algae, and plants — catalyze elemental

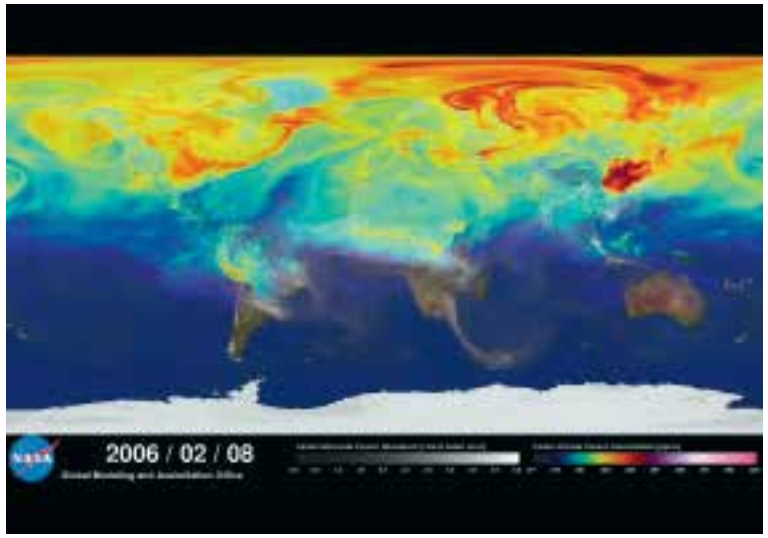


Fig. 1. Still image from the video "A Year In The Life Of Earth's CO_2" from NASA's Goddard Space Flight Center.

rearrangements we truly cannot live without. How can we learn to read this simulation, not for data to feed an economizing logic that sees plants and trees performing ecosystem services, but as a document to remind us that *we are not alone* (see also Myers, 2016).

Photosynthesis circumscribes a complex suite of electrochemical processes that spark energy gradients across densely folded membranes inside the symbiotic chloroplasts of green beings. Textbook diagrams familiar from high-school biology class are simplistic renderings of that utterly magical, totally cosmic alchemical process that tethers earthly plant life in reverent, rhythmic attention to the earth's solar source. Plants are sun worshippers and worldly conjurers. They draw on the energy of the sun to rearrange the elements: they compose with hydrogen, water, oxygen, carbon dioxide, nitrogen, phosphorous, potassium, calcium, magnesium, zinc, sulfur, chlorine, boron, iron, copper. It is clear that plants are also forms of alterlife (Murphy, 2016) taking shape in "mutant ecologies" (Masco 2004), as they incorporate and redistribute, among other things, bromine, lead, mercury, glyphosate, and even strontium 90. Photosynthetic organisms form a biogeochemical force of a magnitude we have not yet properly grasped. Over two billion years ago, photosynthetic microbes spurred the event known today as the oxygen catastrophe, or the great oxidation. These creatures dramatically altered the composition of the atmosphere, choking out the ancient anaerobic ones with poisonous oxygen vapors (Margulis, 1988). If we were to continue to fall into the trap of naming linear time-bound eras after singular agents, we might be rattled to think that we are living in the wake of what should have been called the Phytocene (Myers, 2016).

These green beings have made this planet livable and breathable for animals like us. Lapping up sunlight, inhaling carbon dioxide, drinking in water and releasing oxygen, plants literally make worlds. They not only hold the earth down and the sky up, they sing in nearly-audible ultrasonic frequencies as they transpire, moving massive volumes of water from deep in the ground high up into the atmosphere.

Pulling matter out of thin air, they teach us the most nuanced lessons about mattering. Growing from multiple centres of indetermination (Deleuze, 1986), plants continually regenerate new tissues as they release their spent materials. Thickenings, elongations and expansions give way to contractions and desiccation. Plants' falling leaves and limbs teach us about the myriad of ways that *life cusps death and death cusps life* (Myers, forthcoming). As Maria Puig de la Bellacasa (2015) and Anna Tsing's (2015) work teaches us so poignantly, plants come into being just as they continually come undone, feeding the decomposers' bent on making compost.

We thrive on plants' wily aptitude for chemical synthesis. Consider caffeine, nicotine, taxol, salicylic acid. Biologists call this "secondary metabolism". I think this is a total misnomer. All cultures and political economies, local and global, turn around plants' metabolic rhythms. Plants make the energy-dense sugars that fuel and nourish us, the potent substances that heal, dope and adorn us, and the resilient fibers that clothe and shelter us. Plants are the substance, substrate, scaffolding, symbol, sign and sustenance of political economies the world over. What are fossil fuels and plastics but the petrified bodies of once-living photosynthetic creatures? We have thrived and we will die, burning their energetic accretions. And so it is not an overstatement to say that we are only because they are. The thickness of this relation teaches us the full meaning of the word *interimplication*.

Plants are a force and a power to be reckoned with. But we are ravaging the forests to make way for industrial crops and plantations, paving over agricultural lands, filling in swamps, wetlands and bogs, acidifying the oceans and filling them with toxins. Plants have a remarkable capacity for widespread movement, but they can't run fast enough to keep up with climate change. And we are not just destroying their habitats. The fetishization of global carbon budgets as the ultimate metrics of planetary health and viable futures, plants and trees are, in some accounts, being rendered climate criminals. The argument goes like this: as climactic shifts make forests more vulnerable to fire and insect infestations, forests will cease to be sinks for atmospheric carbon and become unstoppable sources (see Myers, 2015c). But the grounds for such claims are shaky: it is not clear how forests sequester and release carbon or how best to monitor and quantify these processes, let alone how to analyze the other complex and concatenated cycles involved in forest metabolism (e.g. Buchholz et al., 2013). As a result, impoverished data and models are being fed into a calculus that justifies – in the name of climate action – what is, in effect, a vast and expanding resource grab.

In one of the most egregious examples of the misuse of climate data, the former Conservative government reworked Canada's forest policy to argue that old-growth forests must be logged now to make way for young, managed forests, which, according to their models, absorb more carbon from the atmosphere. One atmospheric scientist at Yale University is even attempting to argue that we must stop planting trees if we want to mitigate climate change. Plants, she claims, are prime sources of those noxious, volatile compounds contributing to greenhouse gases. Deforestation – she promises – will help to cool the planet (Unger, 2014).

Many of the origin stories for that era we seem bent on calling the Anthropocene hinge on profound shifts in the ways people have staged their relationships with plants: from the earliest domestication of corn; to the clearing of vast amounts of land for sugar, rubber, and cotton plantations made possible through slavery and colonization (e.g. Todd, 2016; Tsing, 2004); to the extraction of vast amounts of petrified photosynthetic life from reservoirs that fed the expansion of the Industrial Revolution and today's petro-capitalisms; to the Green Revolution, which continues to unfurl in a time of late industrialism with the proliferation of chemical herbicides and pesticides in twenty-first century forms of industrial agriculture. The vast and expanding soy fields in South America remind us that the distinctions between living plants and industrial plants are harder to discern (e.g. Gordillo, 2014).

It is crucial to note that each one of these proposed founding moments of the Anthropocene are riddled with forms of violence and destruction that have shaped the lives of both plants and their people. Donna Haraway insists that the Anthropocene foments the allure of "man's tragic detumescence", a posture that leans precariously towards inevitable apocalypse, and promises ruin and devastation (Haraway and Kenney, 2015). If, as Frederic Jameson (2013) suggests, it is easier to imagine the end of the world than the end of capitalism, then it is clear to me that the Anthropocene is no place to linger. How do we get out of the Anthropocene? What ways of thinking, making and doing might come in its wake? (see also Myers, in press a).

Those interested in checking themselves out of this anthropocentric fantasy might consider ways to rearrange our relationships with plants. I propose that it is time for a radical solidarity project that insists that we are of the plants. I want us to root ourselves into a way of doing life I half cheekily and half seriously want to call the Planthroposcene (Myers, 2017, in press). The Planthroposcene does not name a time-bound era but an aspirational episteme marked by a profound acknowledgement of the joint and uncertain futures of plants and peoples, and a profound commitment to collaboration. Rather than signaling a temporal period after the fact, my formulation pivots around a generous reading of the suffix "-cene." I hear "-cene" in multiple registers: both through Haraway's (2015, 167) attention to the "root meanings of -cene/kainos", which she interprets as a "temporality of the thick, fibrous, and lumpy 'now,' which is ancient and not"; and in its homophonic vibrations with the terms "seen" (de la Cadena, 2015), and "scene" (Pandian, 2015). Indeed, following Marisol de la Cadena (2015) the singular optics of conventional Anthropocene thinking make it hard to "see" other "scenes", especially those "anthropos-not-seen", those ways of doing life that have been disappeared and invisibilized by multitudinous instantiations of colonial violence that have written people out of the past, present, and future. How might we learn to render visible a wider range of naturalcultural practices, so that we might begin to stage liveable encounters among plants and people (Myers, in press a)?

The Planthroposcene is a call to change the terms of encounter, to make allies with these green beings. Thinking with Timothy Choy, we must learn not just how to collaborate, but how to *conspire* with the plants, to foment plant/people conspiracies. To do this we must relinquish control and abandon the notion that we hold domain over these green beings. We must get to know plants intimately and on their terms (Myers, in press b). And so, we need a planthropology (Myers, 2015b) to document the affective ecologies taking shape between plants and people, to learn to listen to their demands for unpaved land and, as Maria Puig de la Bellacasa (2015) reminds us, for a time outside of the rhythms of capitalist extraction. We need to tap into their desire for forms of life that are not for us. To do this, we must learn to *vegetalize* our all-too-human sensorium (Myers, 2014), and as Carla Hustak and I (2012) have argued elsewhere, learn how to *involve* ourselves with plants. We must reconstitute what Anna Tsing (2015) might call a planet fit for "collaborative survival". If not, their undoing will truly be our undoing.

Bibliography

Bellacasa, Maria Puig de la: "Making Time for Soil: Technoscientific Futurity and the Pace of Care", *Social Studies of Science* 45, Number 5, 2015, p. 691-716.

Buchholz, Thomas, Andrew J. Friedland, Claire E. Hornig, William S. Keeton, Giuliana Zanchi, and Jared Nunery: "Mineral Soil Carbon Fluxes in Forests and Implications for Carbon Balance Assessments", *GCB Bioenergy* 6, Number 4, 2013, p. 305-11.

Cadena, Marisol de la: "Uncommoning Nature", *E-Flux Journal 56th Biennale*, August 22, 2015. Accessed May 4, 2016: http://supercommunity.e-flux.com/authors/marisol-de-la-cadena/.

Choy, Tim: "Breathers Conspire – On Drawing Breath Together." Presentation on the Elements Thinking Panel (co-organized by N. Myers, M. Puig de la Bellacasa, and D. Papadopoulos) at the Society for Social Studies of Science, Annual Meeting, Barcelona Spain, September 2016.

Deleuze, Gilles: *Cinema 1: The Movement Image*, University of Minnesota Press, 1986.

Edwards, Paul N.: *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming*, MIT Press, 2010.

Gordillo, Gastón R.: *Rubble: The Afterlife of Destruction*, Duke University Press, 2014.

Haraway, Donna, with Martha Kenney: "Anthropocene, Capitalocene, Cthulhucene", in Heather Davis and Etienne Turpin (eds.): *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environments and Epistemologies*, Open Humanities Press, 2015, p. 255-70.

Haraway, Donna: "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin", *Environmental Humanities* 6, 2015, p. 159-165.

Hustak, Carla, and Natasha Myers: "Involuntary Momentum: Affective Ecologies and the Sciences of Plant/Insect Encounters", *differences* 23, Number 3, 2012, p. 74-118.

Jameson, Fredric: "Future City", *New Left Review* 21, 2003, p. 65.

Masco, Joseph: "Mutant Ecologies: Radioactive Life in Post–Cold War New Mexico." *Cultural Anthropology* 19, Number 4, November 1, 2004, p. 517-50.

Margulis, Lynn: *Symbiotic Planet: A New Look at Evolution*, Basic Books, 1998.

Murphy, Michelle: "To What Extent is Embodied Knowledge a form of Science and Technology by Other Means?" Keynote Lecture at the Society for Social Studies of Science Annual Meeting, Barcelona, Spain, September 2016.

Myers, Natasha: "A Kriya for Cultivating Your Inner Plant", Centre for Imaginative Ethnography, Imaginings Series, 2014.

____: *Rendering Life Molecular: Models, Modelers, and Excitable Matter*, Duke University Press, 2015(a).

____: "Conversations on Plant Sensing: Notes from the Field", *NatureCulture*, Number 3, 2015(b), p. 35-66.

____: "Amplifying the Gaps between Climate Science and Forest Policy: The Write2Know Project and Participatory Dissent", in *Canada Watch*, Special Issue on "The Politics of Evidence", (ed. by Colin Coates, with Guest Editors Jody Berland and Jennifer Dalton), Fall 2015(c), p. 18-21.

____: "Photosynthesis", in "A Lexicon for an Anthropocene Yet Unseen", Theorizing the Contemporary, *Cultural Anthropology*, January 21, 2016. http://culanth.org/ fieldsights/790-photosynthesis.

____: "From the Anthropocene to the Planthroposcene: Designing Gardens for Plant/People Involution", *History and Anthropology*, March 1, 2017, 1-5. doi:10.1080/02757206.2017.1289934.

____: "From Edenic Apocalypse to Gardens Against Eden: Plants and People in and After the Anthropocene", in Kregg Hetherington (ed.): *Infrastructure, Environment, and Life in the Anthropocene*, Duke University Press, in press (a).

____: "Becoming Sensor in Sentient Worlds: A More-than-natural History of a Black Oak Savannah", in Gretchen Bakke and Marina Peterson (eds.): *Towards an Artful Anthropology*, Bloomsbury Press, in press (b).

Pandian, Anand: *Reel World: An Anthropology of Creation*, Duke University Press, 2015.

Todd, Zoe: "Relationships", Theorizing the Contemporary, *Cultural Anthropology*, January 21, 2016. https://culanth.org/fieldsights/799-relationships.

Tsing, Anna Lowenhaupt: *Friction: An Ethnography of Global Connection*, Princeton University Press, 2004.

____: *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton University Press, 2015.

Gardening against the Apocalypse
– the case of dOCUMENTA (13)[1]

T.J. Demos

"We are told that we live in a state of permanent crisis, a state of emergency and thus of exception", wrote Carolyn Christov-Bakargiev in her main curatorial statement for dOCUMENTA (13).[2] Calling to mind the endless wars in the Middle East, the retraction of civil liberties worldwide, and the generalized conditions of emergency law theorized, for instance, by Giorgio Agamben as the contemporary "state of exception", and by Paul Virilio as "pure war", this recognition could seem to set the stage for an engaged presentation of agitprop political art. Joined by a supportive team of curatorial agents,[3] the director of this most ambitious of international exhibitions chose, however, to respond to the state of crisis with a marked prevalence of artist-rendered gardens. Overgrown with experimental planters, creative landscapes, and installations relating variously to horticulture, farming, and natural life-forms, the 2012 iteration of documenta, the high-profile exhibition that occurs every five years in Kassel, Germany, was the most "green" yet. However, the show's implicit linkage of gardening and political emergency, intentionally or not, also came to demonstrate a schism and state of crisis in terms of how ecology is addressed within the artistic realm.

The many models of garden-as-art, all created for the 2012 show, included: Kristina Buch's *The Lover*, an open-air butterfly habitat installed in front of Kassel's Staatstheater, a central location in the exhibition, which comprised approximately three thousand plants ideal for the insect. The artist bred forty-five different butterfly species in her temporary Kassel apartment, over three thousand insects in total; as they hatched she delivered them at dawn to her garden installation. Acknowledging that it's impossible to enclose such bug life in the wild, Buch pointed to the infinite nature of her garden project: "Inherent in the work is the fact that you cannot really contain or control it. You can't own it. By nature it's boundless and ephemeral."[4] Christian Philipp Müller's *Swiss Chard Ferry, The Russians aren't going to make it across the Fulda River anymore* presented a group of small barges floating

1. The present text is an abridged version of chapter 7 in T.J. Demos: *Decolonizing Nature: Contemporary Art and the Politics of Ecology*, Sternberg Press, 2016.

2. Carolyn Christov-Bakargiev, dOCUMENTA (13) press release, October 25, 2010. The letter is published as the third "notebook" in the series *dOCUMENTA (13): 100 Notes – 100 Thoughts*.

3. The curatorial team's "agents" included Leeza Ahmady, Ayreen Anastas and Rene Gabri, Sofía Hernández Chong Cuy, Sunjung Kim, Koyo Kouoh, Joasia Krysa, Marta Kuzma, Raimundas Malašauskas, Chus Martínez, Lívia Páldi, Hetti Perkins, Eva Scharrer, Kitty Scott, and Andrea Viliani.

4. Kristina Buch, as cited in Walleston (2012). The only remnants of the butterfly breeding were the empty chrysalides, which were exhibited in a vitrine in the nearby documenta-Halle.

on a canal in Karlsaue Park, each filled with sixty edible varieties of the leafy vegetable. Müller realized his project in cooperation with the University of Kassel's Department of Organic Agricultural Sciences, and drew on various seed banks worldwide. The Cold War era pontoons were borrowed from the German Technical Relief Organization — an infrastructure of post-disaster relief aid, calling to mind an emergency situation plagued by food scarcity. And Song Dong's *Doing Nothing Garden* (fig. 1), centrally located on the lawn in front of the Orangerie, comprised a six-meter-high accumulation of rubble and organic refuse, which, without further artistic or agricultural intervention, sprouted grass and flowers and displayed neon signs that read "Doing" and "Nothing" in Chinese. The entropic site dramatized Song's Tao-like maxim: "That left undone goes undone in vain; that which is done is done still in vain; that done in vain must still be done" (Engström, 2011). These were admittedly only a small selection of the many "green" projects presented in the extensive exhibition; nonetheless, they indicate a tacit but sustained commitment to investigating artist-directed creative ecologies in the era of environmental crisis.

To some, gardens might seem irrelevant in addressing our world of crises and emergencies, but in fact they represent, and might be seen to respond to, the most urgent of global conflicts: the financialization of nature by agricultural and pharmaceutical corporations enforcing use of their patented genetically modified seeds; greenhouse gas emissions from a monoculture- and export-based agribusiness reliant on chemical fertilizers and fossil-fuelled transportation industries; and the destruction of unions and small-scale farms displaced by large-scale mechanized agricultural production.[5] In these different cases, life itself — from biological organisms to human labour — has become increasingly subjected to capitalist ownership, exploitation, manipulation, and ruin. However, without precise contextualization, biotic artworks — as in the case of Documenta — risk becoming mere embellishments to the natural environments and landscapes they are situated in. Case in point was Claire Pentecost's vertical gardens, which, sprouting a range of edible vegetables, adorned the front grounds of the Ottoneum natural history museum (located next to the exhibition's main venue, the Fridericianum). For her contribution, the Chicago-based artist, collaborating with designer and philanthropist Ben Friton of the urban gardening nonprofit Can YA Love, created a series of structures concerning soil as a medium of organic life and its relation to the urban context. "Can soil be distinguished from real estate?" she asked. "If people can make soil from organic waste but they have no land, what are the options for growing food in limited space?" Answering these questions, Pentecost's proposals took the form of pillar-like vertical planters made out of metal mesh, "simple and inexpensive and easily adapted to dense urban spaces" (Pentecost, n.d. Also see Pentecost, 2012). However, placed in front of the natural history museum, far from a dense urban space, the eight-foot-high towers packed with dirt and plants appeared to be extensions of the museum's lush landscaped exterior, as if her project were merely decorative sculpture composed of organic aesthetics. Far from evident was the radical nature of her proposals, meant as prototypes for self-sufficient food production in land-poor urban areas, based on conceptually delinking arable land from commercial property — that is, unless one were familiar with the artist's politico-ecological commitments.[6]

5. "The globalization of agricultural systems over recent decades is likely to have been one of the most important causes of overall increases in greenhouse gas emissions", owing to their energy-intensive, high-emissions model of industrial agriculture and reliance on international transportation (Shrybman, 2000, 1; cited in Klein, 2014, 68).

6. Pentecost's prototypes, in my view, are not of the restorative eco-aesthetic variety, as they are directed toward crisis situations in public space. As sites of political antagonism, they function as interventions into concretized cities and their food deserts, but are hardly redemptive or reparative in a definitive or simplistic way, as is sometimes proposed as the goal of eco-aesthetics, especially in landscape design or community participation.

Varieties of political ecology

Curator Christov-Bakargiev described the 2012 instalment of documenta as "an exhibition without a concept" in the run-up to the show. As such, the curators effectively outsourced the show's conceptualization to its impossibly extensive, and sometimes internally conflicted, "100 Notebooks".[7] While this overwhelming panoply provided little immediate service to visitors at the exhibition, the publications do open up fertile territory for considering the pressing environmental matters raised, among the many other topics. The series assembles essays by a range of artists and theorists, including some relating to the ecological, which suggest numerous productive, if competing, ways to approach the gardens and, more broadly, the treatment of the environment in the exhibition. For instance, Donna Haraway's contribution, *SF: Speculative Fabulation and String Figures*, develops the terms of a techno-organic hybrid aesthetics, building on her well-known work on cyborgs, which finds inspiration in the science of gene research and bioengineering. For Haraway, "SF" proposes multiple meanings — "speculative fabulation, speculative feminism, science fiction, science fact, science fantasy" (Haraway, 2012, 4). Each, like the intertwinements of "string figure" games to which the author also alludes, represents a bridge between categories in ways reminiscent of her cyborg, "a creature of social reality as well as a creature of fiction" that prefigures a world transcending the oppressive binaries of modernity (male-female, culture-nature, subject-object, technology-biology, etc.).[8] Haraway's contribution was not merely theoretical; her penchant for post-binary multiplicity was also discernable in the exhibition's spatial dispersion — with more than fifty locations comprising a rhizomatic geography throughout Karlsaue Park — and in the show's thematic diffusion, where a hundred approaches eclipsed any single reigning

7. The number 100 plays off the exhibition's traditional hundred-day run. The notebooks were published individually and then together as one volume with additional material after the exhibition ended, as *The Book of Books*, Hatje Cantz, 2012. On Christov-Bakargiev's stated absence of one curatorial concept, see Conrad (2012). An e-flux announcement sent out by the exhibition after it had ended added this (non)clarification: "An exhibition could be thought of as a pre-reflexive consciousness, a qualitative duration of consciousness without itself" (September 8, 2012). Also see Smith (2015, 37-68).

8. "A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Social reality is lived social relations, our most important critical constructions, a world-changing fiction. […] Contemporary science fiction is full of cyborgs-creatures simultaneously animal and machine, who populate worlds ambiguously natural and crafted. Modern medicine is also full of cyborgs." (Haraway, 1991, 149-50).

theme (in addition, Haraway served as a member of the exhibition's "honorary advisory committee").[9] Her influence was also felt in the "natureculture" and "intra-actional" aspects of the "becoming with" ontology of the gardens – all terms of Haraway's (although not used by the curators) – suggesting hyphenated mediums that both organize and provide socio-aesthetic support systems for human life, a theoretical framework that significantly opens up the conceptual potential of the artists' work with gardens.

Yet mobilizing Haraway's insights as a model for environmental aesthetics proves tricky in this context, especially when placed in relation to the more overtly political garden practices in the exhibition. Providing one such example, the collective And And And embraced an anticapitalist, organic localism, with several garden kiosks selling regional food and produce on the exhibition grounds during the length of the show. The initiative, run by artists Ayreen Anastas and Rene Gabri, formed part of the dOCUMENTA (13) core research team, and in that capacity investigated the notions of the commons and noncapitalist living in gatherings and seminars across the world over the two years preceding, like their public hearings on the practices of Monsanto – in Illinois on January 28, 2012, and in Iowa on April 21, 2012. The creative modelling of legal theatre outlined how Monsanto produced 20% of US corn in 2011, 85% of which was GM, and critically examined the corporation's harmful effects, both socioeconomic and environmental. At the beginning of the inquiry, one of the presiding judges explained, "We are here to consider not just violations of statutory or common law, but violations of the laws of nature, of ethics, of humanitarian principles, of environmental principles, and of the precautionary principle. [...] In this courtroom, by mixing together both claims and claimants in one proceeding, we are doing law that is impossible" – that is, in conventional legal courts. "We are bringing together consumers and farmers, human concerns and the pleas of the voiceless, the politically silenced and the interests of nonhumans as well." The video that documents the hearings shows diverse witnesses, including local farmers and animal impersonators, taking the stand and describing the injurious ecological effects of Monsanto's products (such as Roundup herbicide, designed to be used with GM crops), including their devastating impact on the migrating Monarch butterfly and local ladybug populations. "Pesticide is homicide", declares one organic farmer, linking the poisoning of nature to a deadly act against animals and humans alike.[10]

In addition to supporting such off-site events, And And And organized an open experimental public program in a large workshop space near the back of the Kassel train station during the length of the exhibition, inviting artists, activists, farmers, students, thinkers, residents, and visitors to participate in daily public discussions.[11] Their program addressed diverse philosophical, political, pedagogical, and aesthetic matters of concern, "grounded in a conviction that, today, all fields of human activity must critically re-examine the values, assumptions, and modalities of doing." ("About And … And … And", n.d.). More specifically, the group attempted to realize a process of "militant joyful collective research into non-capitalist life", revolving around "commoning in Kassel", to ask, "What is it that we are capable of sharing and can we construct a common space or a common time for thinking about common concerns?" ("Commoning in Kassel", n.d.; "A Militant Joyful Collective Research into Non-Capitalist Life", n.d.).[12]

The political ecology of this work – though not unrelated to Haraway's approach to SF and her emphasis on the speculative, fictional, and fantastic – is perhaps most directly connected to the practice of Indian environmental activist Vandana Shiva, another of the exhibition's notebook authors, known for her activism against the commercial patenting of seeds and plant life in India by corporations like Monsanto and Syngenta. Haraway also opposes the patenting of life-forms (as commodified GMOs in agribusiness and the pharmaceutical industries), but her techno-feminist sci-fi aesthetic does not ultimately fit with Shiva's alter-globalization climate-justice activism, leading to a conflict of ecological visions (see Haraway, 1997, 62). As Shiva writes, in *The Corporate Control of Life*, "Living organisms, unlike machines, organize themselves. Because of this capacity, they cannot be treated as simply 'biotechnological inventions,' 'gene constructs,' or 'products of the mind,'" terms that are used to justify their commercial patenting as human creations (Shiva, 2012, 7).[13] Challenging this logic, and condemning the corporate "biopiracy" of indigenous culture and resources, Shiva emphasizes the fight to protect the legal sovereignty of noncommercialized knowledge, and the free and universal access to the life processes of humanity's shared heritage, such as regenerative seeds, clean water, and fertile land. These views resonate with the queries of And And And, particularly where they speculate about a radically different, post-capitalist world: "Can we imagine addressing these questions of our basic necessity for sustainable food production without arguing for a necessary shift in priorities which through contemporary capitalism define sustainability first and foremost through the lens of profit?" ("Food", n.d.).[14]

9. For the exhibition, Tue Greenfort created *The Worldly House*, a mixed-media archival installation in Karlsaue Park inspired by Haraway's writings. The exhibition also expanded to Kabul, Cairo, and Ban, aspects that extend beyond the scope of this analysis.

10. For the hour-long documentary, directed by Sarah Kanouse and Sarah Lewison, excerpting moments from the hearings, see "Monsanto Hearings" (n.d.).

11. However, for those who weren't physically present, the meetings' proceedings are largely inaccessible, relayed via short online descriptions on the group's website (andandand.org), with few archival transcripts and little video documentation.

12. Also see Anastas and Gabri's investigation of the commons as part of their project at The Showroom in London: "common(s) are ideas, language, seeds, air, water, the earth under our feet, the spaces and cultures we collectively produce each and every day, the forests, the seas, the trees and all that bares and gives life. indeed common(s) are the premise of life. They are the ecology of practices and complex entities which conjoin the many forms of life on the planet." ("Some Preliminary Notes for London", n.d.).

13. Between 2008 and 2010, some 261 patents were filed related to growing "climate-ready" crops, involving seeds able to ostensibly withstand extreme weather conditions – close to 80 percent of these patents were controlled by six agribusiness giants (DuPont, BASF, Monsanto, Syngenta, Bayer, and Dow) ("Who Will Control the Green Economy?", 2011, 23).

14. The artistic-activist platform 16 Beaver Group, based in New York (including And And And members Anastas and Gabri, who were involved in Occupy Wall Street as well), has also investigated the question of the ecological politics of food in the aftermath of documenta. See, for instance, their workshop, "Food Sovereignty, Housing Activism, and Climate Justice within a Common(s) Horizon" (2014).

Conversely, Haraway's model, as instantiated by the cyborg, "does not dream of community on the model of the organic family", and "would not recognize the Garden of Eden", as s/he is "wary of holism, but needy for connection" (Haraway, 1991, 151). For Haraway, writing more with speculative theoretical intent than with activist purpose, the "lively area of transgenic research worldwide" – giving rise to such hybrids as "the tomato with a gene from the cold-sea-bottom-living flounder, which codes for a protein that slows freezing" (Haraway, 1997, 88) – inspires visions of new forms of emancipation from essentialist identities and cultural-ontological purities that are socially oppressive and conceptually simplistic. She has also voiced a suspicion of activist positions that oppose corporate science with the values of the local and organic: "I cannot help but hear in the biotechnology debates the unintended tones of fear of the alien and suspicion of the mixed. In the appeal to intrinsic natures, I hear mystification of kind and purity akin to the doctrines of white racial hegemony and U.S. national integrity and purpose" (Haraway, 1997, 61).[15] Yet with Shiva's politics in mind, Haraway's enthusiasm for GMOs conjures a philosophical commitment that may unintentionally align with corporate practices, like Monsanto's global threat to small farmers, biodiversity, and human health.[16] The Spanish philosopher Alicia Puleo points out that Haraway would rather be a cyborg than a goddess, the latter implying an essentialist and organicist form of ecofeminism – whereas Shiva would prefer being a sacred cow than a mad cow, the latter produced by techno-biological farming practices (a risk of Haraway's eschewal of organicism) (see Puleo, 2012, 358, citing Haraway, 1991, 181; and Shiva,1999). While "radical constructivism [as in Haraway] has been a tool for emancipation from prejudice", Puleo writes, "it may become a sophisticated license to domination", particularly when directed by the interest of biogenetic capitalism; in this case, constructivism functions as "the cultural corollary of neoliberal productivism" (Puleo, 2012, 359, 362).

Disowning life

There was consequently a profound divergence within the discourse on the garden in dOCUMENTA (13) – between Haraway's post-human constructivist approach to biotechnological hybridity as a model of creative liberation on the one hand, and, on the other, Shiva's postcolonial commitment to ecological justice opposed to corporate property claims on organic resources pilfered from local communities in the Global South. There was no better place to address this debate between the respective political ecologies represented by Haraway and Shiva than during "On Seeds and Multispecies Intra-action: Disowning Life", a two-day public conference taking as its starting point, in the words of the press release, "dOCUMENTA (13)'s ecological perspective, building on a global alliance between different forms of research and knowledges that is actively being developed in a variety of fields."[17] Though there wasn't any discussion that addressed the relations and conflicts between Haraway and Shiva's disparate approaches or public consideration of the larger stakes of their positions. Such a discussion would demand various forms of critical engagements, with the political economy of sci-fi aesthetics (of the kind Haraway supports) in relation to social and climate justice activism (of the kind Shiva advocates).[18] However, the garden practices of dOCUMENTA (13) do offer, and potentially stage, such critical engagements for the much needed discussion. Like Buch's butterfly habitat *The Lover*, which offers an aesthetic imaginary of being-together that displaces the human subject from a position of masterful sovereignty, resonating with Haraway's work on companion species, post-anthropocentric sociability, and distributive agency (as pollinators, the insects are integral to the biodiverse web of life on which humans depend, and Buch proposes that relationality as a source of love, rather than one of profit or exploitation) (see for instance Haraway, 2003). Similarly, Müller's *Swiss Chard Ferry* provides a way of conceiving an experimental interdisciplinarity between art and organic agroecology, corresponding to Shiva's support for the sharing of non-GM seeds and the strengthening of a newfound ecological commons, as well as to Haraway's call for a new "techno-scientific democracy" built upon cultural-scientific collaboration, according to which wartime technology becomes relief-aid infrastructure, buttressing what Haraway calls our "response-ability." (Haraway, 1997, 95; Haraway, 2015, 164, n17). These activist-artistic practices also figure as forms of social engagement, collective mobilization in public space, and ambitious proposals for a different natural-cultural world today, as well as the reinvention of contemporary art.[19]

15. For a recent (Haraway-indebted) critique of both Shiva's neo-humanism and the perceived dangers of organicism, see Braidotti (2013, esp. 49, 101).

16. On the dangers of GM foods to human health, the environment, regulatory practice, and democracy, see Smith (2004); Robin (2010), as well as Robin's 2008 film of the same name; *Zeese and Flowers* (2013); and "Former Pro-GMO Scientist Speaks Out on the Real Dangers of Genetically Engineered Food" (2013). One major problem with such biotechnology is the lack of independent rigorous evaluation of the public health and environmental impacts of GMOs, especially with the FDA typically colluding with corporate interests and fast-tracking the approval of experimental applications.

17. For archival videos, see "On Seeds and Multi-species Intra-action: Disowning Life" (n.d.).

18. For inspiring examples of political eco-criticism, see Dawson (2013, 63-81) and Nixon (2013).

19. For further discussion of farming-as-art, see Spaid (2012, 14-43). Spaid argues that such a category has operated since the 1960s in multiple ways: to engage issues of place; make art pragmatic by producing things people need; over a platform for survivalist individualism; enrich modes of community engagement; reject farming as a simple means to an end by reinventing it as an aesthetic space; provide a creative and experimental path toward self-sufficiency and radical democracy; and release farming from market mechanisms.

Bibliography

"A Militant Joyful Collective Research into Non-capitalist Life", *dOCUMENTA (13)*, n.d. Accessed December 3, 2015: http://d13 .documenta.de/#en/programs/the-kassel-programs/and-and-and/a-militant-joyful-collective-research-into-non-capitalist-life.

"About And … And … And", *dOCUMENTA (13)*, n.d. Accessed December 3, 2015: http://d13.documenta.de/#programs /the-kassel-programs/and-and-and/about-and-and-and.

Braidotti, Rosi: *The Posthuman*, Polity Press, 2013.

"Commoning in Kassel", *dOCUMENTA (13)*, n.d. Accessed December 3, 2015: http://d13.documenta.de/#/programs/the-kassel-programs/and-and-and/commoning-in-kassel.

Conrads, Martin: "Of Dogs and Humans: Documenta 13 in Kassel", *Goethe Institute*, June 2012. Translated by Chris Cave. http://www.goethe.de/ins/cn/en/lp/kul /mag/bku/9556034.html.

Dawson, Ashley: "Biohazard: The Catastrophic Temporality of Green Capitalism", *Social Text* 31, Number 1, Spring 2013.

Engström, Einar: "Song Dong and Yin Xiuzhen: The Way of Chopsticks III", *Leap*, October 23, 2011. http:// leapleapleap.com/2011/10/song-dong-yin-xiuzhen-the-way-of-chopsticks-iii.

"Food", *dOCUMENTA (13)*, n.d. Accessed December 3, 2015: http://d13.documenta.de/#en/programs/the-kassel-programs/and-and-and/food.

"Food Sovereignty, Housing Activism, and Climate Justice within a Common(s) Horizon", *16 Beaver*, September 16, 2014. http://16beavergroup.org/mon days/2014/09/16/thursday-09-18-14-food-sovereignty-housing-activism-and-climate-justice-within-a-commons-horizon.

"Former Pro-GMO Scientist Speaks Out on the Real Dangers of Genetically Engineered Food", *Food Revolution Network*, June 2, 2013. http://gmosummit.org/former-pro-gmo-scientist.

Haraway, Donna: "A Cyborg Manifesto", in *Simians, Cyborgs and Women: The Reinvention of Nature*, Free Association, 1991.

____: *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Techno science*, Routledge, 1997.

____: *The Companion Species Manifesto: Dogs, People, and Significant Otherness*, Prickly Paradigm, 2003.

____: *SF: Speculative Fabulation and String Figures*, dOCUMENTA (13): 100 Notes – 100 Thoughts, no. 33, Hatje Cantz, 2012.

____: "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin", *Environmental Humanities* 6, 2015.

Klein, Naomi: *This Changes Everything: Capitalism vs. the Climate*, Alfred A. Knopf Canada, 2014.

"Monsanto Hearings", *Compass*, n.d. Accessed September 28, 2015: http://midwestcompass.org/monsanto-hearings.

Nixon, Rob: *Slow Violence: and the Environmentalism of the Poor*, Harvard University Press, 2013.

"On Seeds and Multispecies Intra-action: Disowning Life", *dOCUMENTA (13)*, n.d. Accessed December 3, 2015: http://d13.documenta.de/#/programs/the-kassel-programs/congresses-lectures-seminars/on-seeds-and-multispecies-intra-action-disowning-life.

Pentecost, Claire: "soil-erg", n.d. Accessed September 15, 2015: http://www.publicamateur.org/?p=85.

Pentecost, Claire: *Notes from Underground*, dOCUMENTA (13): 100 Notes – 100 Thoughts, no. 61, Hatje Cantz, 2012.

Puleo, Alicia H.: "From Cyborgs to Organic Model and Back: Old and New Paradoxes of Gender and Hybridity", *Comparative Critical Studies* 9, Number 3, 2012.

Robin, Marie-Monique: *The World According to Monsanto: Pollution, Corruption, and the Control of the World's Food Supply*, New Press, 2010.

Shiva, Vandana: "Mad Cows and Sacred Cows", in *Stolen Harvest: The Hijacking of the Global Food Supply*, South End Press, 1999.

____: *The Corporate Control of Life*, dOCUMENTA (13): 100 Notes – 100 Thoughts, no. 12, Hatje Cantz, 2012.

Shrybman, Steven: *Trade, Agriculture, and Climate Change: How Agricultural Trade Policies Fuel Climate Change*, Institute for Agriculture and Trade Policy, 2000.

Smith, Jeffrey M.: *Seeds of Deception: Exposing Corporate and Government Lies about the Safety of Genetically Engineered Food*, Green, 2004.

Smith, Terry: "Carolyn Christov-Bakargiev: On Not Having an Idea: dOCUMENTA (13)", in *Talking Contemporary Curating*, Independent Curators International, 2015.

"Some Preliminary Notes for London", *Commoning Times*, n.d. Accessed December 3, 2015: http://commoning times.org/london.

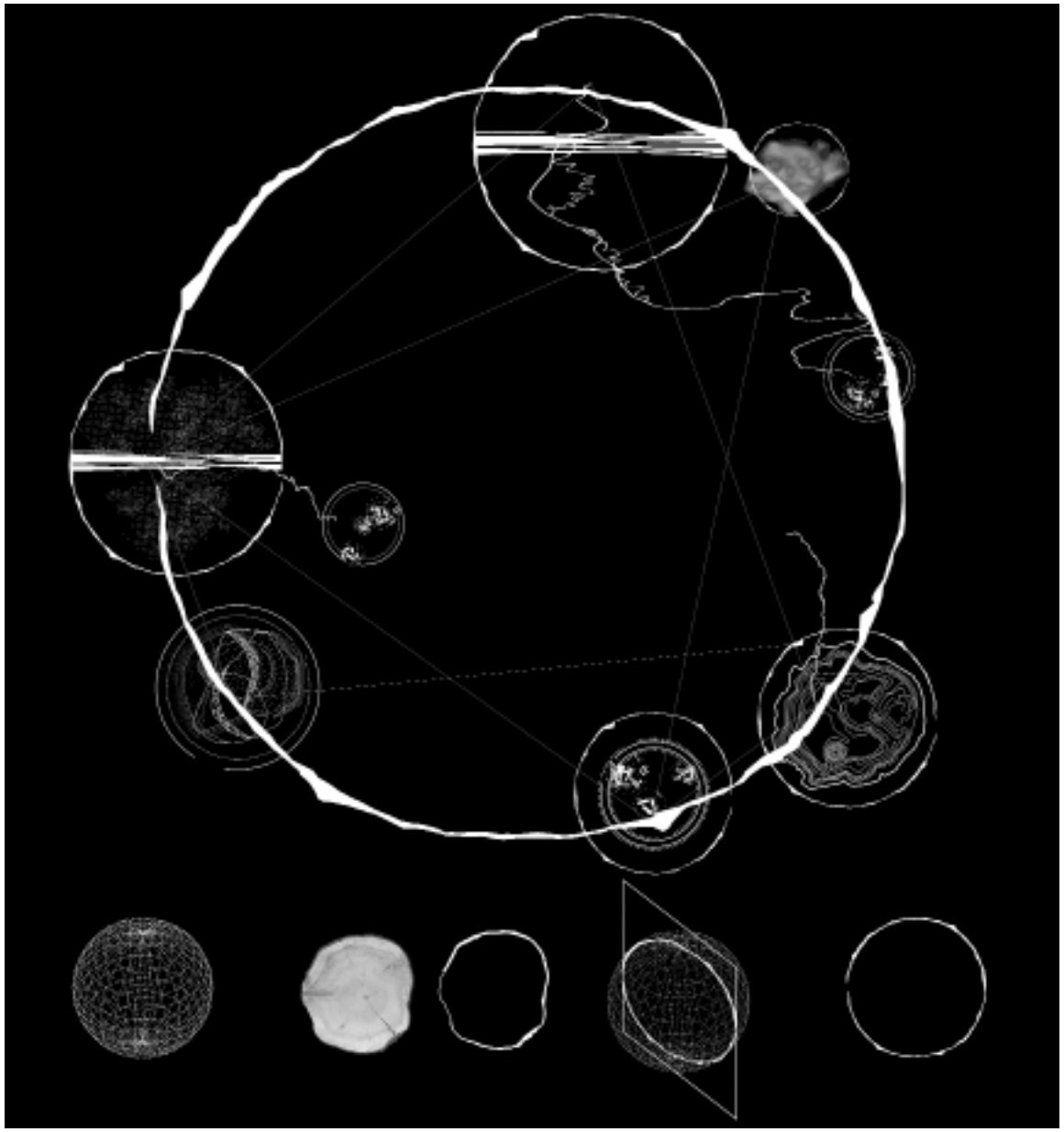
Spaid, Sue: *Green Acres: Artists Farming Fields, Greenhouses and Abandoned Lots*, Contemporary Arts Centre, 2012.

Walleston, Aimee: "Kristina Buch's Constant Garden", *Art in America*, June 26, 2012. http:// www.artinamericamagazine.com/news-features/news/kristina-buch-documenta-13.

"Who Will Control the Green Economy?", *ETC Group*, November 1, 2011. http://www.etcgroup.org/content/who-will-control-green-economy-0.

Zeese, Kevin and Margaret Flowers: "The Growing Global Challenge to Monsanto's Monopolistic Greed", *Truthout*, May 22, 2013. http:// www.truth-out.org/opinion/item/16516-the-growing-global-challenge-to-monsantos-monopolistic-greed.

Interview



Alexandra Arènes: *Diagram of the critical zone of the globe: membrane and scientific constellations*, 2017.

Can we land on earth?

– an interview with Bruno Latour

Line Marie Thorsen and Anette Vandsø

As with many great intellectuals, it is not exactly straight-forward to assign Bruno Latour to a specific disciplinary native soil. He is in part a philosopher, but also an anthropologist of science and technology, a sociologist of our contemporary world, and much more besides. More than anything, he is a thinker of nature-culture hybrids.

Though he has been a central figure in the field of Science and Technology Studies (STS) since the 1970s, not least via his Actor-Network Theory, Latour's work has gained momentum across a broader sphere of socio-cultural sciences in recent years. Since his early studies of laboratory life, Latour has argued that the Western idea that all things natural exist in a pure state of separation from all things cultural is a *modern* myth, sustained in part by the differentiation between the natural sciences and the humanities since the early 17th century. However, we have in fact never been modern – as one of Latour's most renowned books stated in 1993 – since hybrids of nature and culture have always proliferated. With the earth-spanning climate and environmental crises that we are collectively facing, it has become obvious that the modernist commitment to human (cultural) exploitation of global nature has not worked out very well. In the time of the so-called Anthropocene,[1] it is now abundantly clear that we humans, or rather *earthlings* in Latourian idiom, are inextricably entangled with our non-human others. A good way to see this co-dependency, Latour argues, is to follow the practices of scientists in their laboratories and beyond.

Combining his concern regarding ecological crises and the sciences, Latour has recently followed and studied soil sciences: pedologists, geologists, geo-chemists and others. Learning from soil scientists, he is approaching a new way of figuring out and understanding *where* we reside, once we stop believing that we live on the vast and limitless globe imagined during times of so-called modernity. If we can no longer see ourselves as modern humans living and acting detached from nature, then what kind of attached earthlings are we now becoming? What kind of strange and surprising entanglements must we now take into account to even define the land on which we stand? To Latour, the soil sciences may help provide empirical and philosophical tools in this process. Specifically, he has engaged the

1. The Anthropocene is a geological proposition, designating the current epoch of our earth, potentially succeeding the Holocene. The name comes from the ancient Greek words *anthropos* (human), and *kainos* (new or recent), indicating that earth has entered a period of significant changes determined by human activities measurable in the earth's layers, or strata.

notion of *critical zones*, from the cluster work undertaken in various scientific constellations across the world. In Latour's work, the notion of critical zones is extended from the very specific sections of land studied by soil sciences, to one critically fragile and thin liveable zone spanning our earth – or rather, Gaia.

Gaia is the name Latour adopts for the earth we effectively forgot during our fantasies of modern society on an inexhaustible globe. Gaia *is* the earth we so desperately need to reorient ourselves towards, to figure out where we are. As Latour writes in his text *A Plea For Earthly Sciences* (2007), we are in fact completely dependent on figuring out how to exist with Gaia, as a war with her is impossible to win: "Either we come out on top of Gaia, and we disappear with her; or we *lose* against Gaia, and she manages to shudder us out of existence." In other words, whether we should defeat or be defeated by earth, we lose.

To Latour, in the Anthropocene – this new time of ecological crises – we are all immersed in a gigantic process of collective reorientation: what kind of earthly beings are we now becoming, and which kind of earth are we submerged in? Part of the answer, he suggests, lies in rediscovering Gaia; that is, literally learning to live *in* a new earth, a new soil and ground, by exploring the critical zone(s) for planetary living conditions. In addition to scientists and many others, Latour argues that contemporary artists bring important skills to this process. Over the years, Latour himself has taken on the task of co-curating several art exhibitions, most recently the *Reset Modernity!* exhibition in Karlsruhe in 2016.

We met Bruno Latour for a conversation on these questions and on the important role that art might play in our effort to rediscover our grounds.

Let's start from the very ground – the soil – because to us and to the artists working centrally with plants, soil is obviously important. One of the things we are curious about asking you is linked to your recent work, where soil, earth, and becoming earthbound play a key role. Why is it so important to think about this, when thinking about Gaia and political ecology?[2]

One specific element in my interest in soil is that nature is too big. So my argument is that much of the difficulty of political ecology, is that it's associated with the word *nature*. Nature is everything that is not human – from here to the big bang – and goes through such a vast array of different things that it is almost impossible to mobilise anyone to the defence of the access to nature. A computer would be an artificial part of nature as well as flowers, plants, the big bang, the moon and galaxies and so on. When people hear the word nature they immediately get lost.

So nature in this sense means matter in all kinds of forms?

Yes, nature in this sense becomes equivalent to matter, to objectivity, to what is known by the natural sciences. And it's very difficult to re-politicise such a vast conglomerate of completely different things. One of my interests in soil arose when I encountered – watching soil scientists [pedologists] whom I studied many years ago – a new type of geo-scientists. They cut in earth and nature, a very specific domain which seems to be difficult to grasp for political and artistic engagement. A domain that you don't get when you have *nature*, and you don't get when you have *the globe*. Like nature, the globe is made of everything from way below in the core as well as when you go up, including the moon, the stars and the planets. This is, of course, of great scientific and cosmic interest, but it's very difficult to reconcile with our own concerns. *My* interest in soil, which is slightly larger than the *soil* of soil scientists, is basically the little zone – the critical zone, as they call it – around earth, made and maintained by living forms. The membrane that goes a few kilometres up and a few kilometres down. And it's very important for artists that we see it, not from above like the photo of earth as the blue marble, but sideways, so to speak. That we only see it from the inside (fig. 1).

So we are inside the soil and earth you are interested in, as opposed to the image of the earth we might have from school geography books, where the earth is sliced through and we are very far away on the outside, looking in? Does this mean that we need new ways of representing this earth – new ways of representing Gaia?

Yes, Gaia has long protested the limited ways in which we represent her. And she's saying: "You don't understand me, you are not capturing my existence well".[3] I gave a performance lecture in a theatre a few months ago, where I tried to show the difference between visualising nature and visualising soil, or rather, the critical zone of earth. Compared to the totality of the globe, the critical zone is a very small rim, nothing more than a varnish.

2. Bruno Latour (2004) has worked centrally with the notion of political ecology, especially through the 1990s and early 2000s, as a key concept for rethinking our *politics of nature*. More recently, the concept Gaia has figured more prominently in his writings, as a way of addressing our present ecological crises.

3. Bruno Latour is here referencing an article by Swedish scholar Martin Gren entitled "Mayday – a letter from the Earth" (Gren, forthcoming).

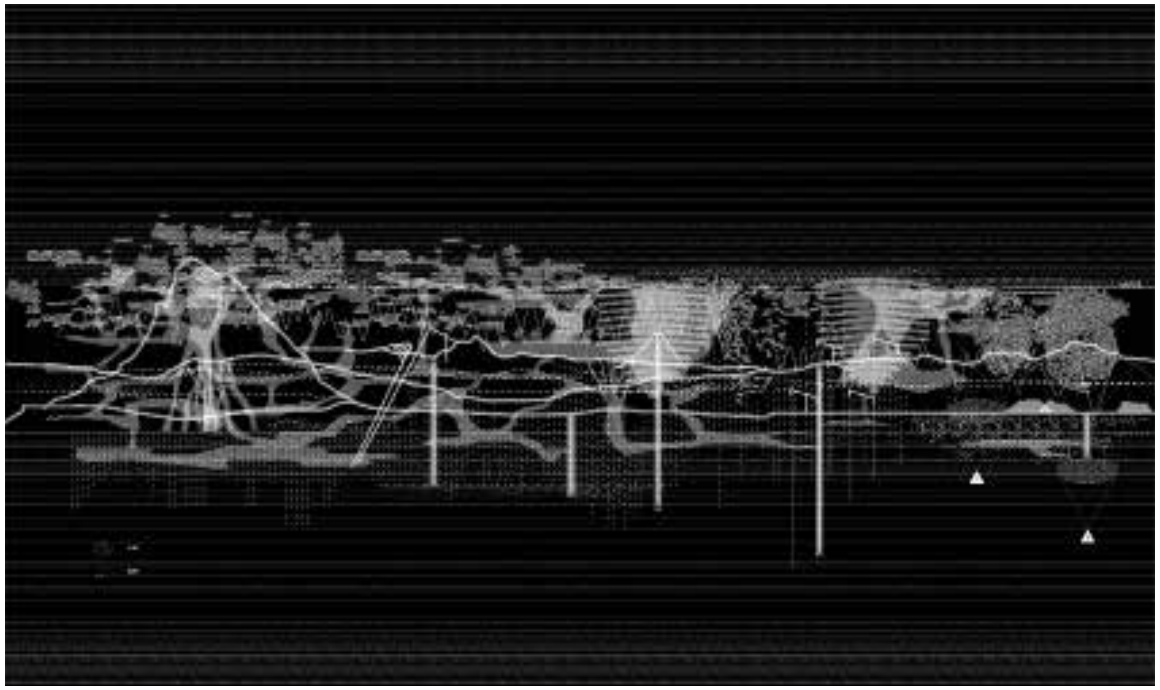


Fig. 1. Alexandra Arènes: *Cross section of the critical zone, sideways layers*, 2016

So you have borrowed the notion of critical zones from a group of scientists; are these soil scientists?

They include soil scientists. But they are actually coming more from geochemistry and bio-geochemistry, and they are interested in hydrology and geomorphology and the broader discipline of biology and eco-systems. But within this notion of critical zones, they are bringing together lots of disciplines that are looking at the same layers but in different ways. Critical zones bring these disciplines together, much like the work done in AURA [Aarhus University Research on the Anthropocene] with the brown coal beds in Jutland.[4] That is, you take a field site and try to understand as much as you can from this site, mixing high science with boots-on-the-ground science. In the critical zones I've studied, they bring instruments of high accuracy, and then, from one site to another they collaborate to standardise the data. It's close to what we usually call geography, but it's a new way to reenergise the many things geographers are doing, with a very strong anthropogenic aspect. This work is a way of bringing people and disciplines together, trying to make them collaborate with each other.

What would you then say is the connection between these very concrete critical zones of soil and other sciences, and the way you work with critical zones as a concept? One of the interesting things you write about critical zones is that a critical zone can be a lot of different things: it can be a garden and it can be the Amazonian Basin.

This difference is also what I'm interested in. Because the scientists of critical zones work from a more classical paradigm of science – they are interested in the specificities of particular places. And these specific critical zones are amazingly heterogeneous. When you are on the earth-system, every single kilometre, metre and centimetre is different, and they confront and enhance the heterogeneity of the critical zone, which is why I find them so interesting. They are recovering the heterogeneity of the land, so to speak. But critical

4. The cross-disciplinary research group, Aarhus University Research on the Anthropocene (AURA), has been collectively researching the former industrial brown coal beds in Søby, Denmark as a local Anthropocene landscape. In June 2016, Bruno Latour visited AURA and the brown coal beds along with Belgian philosopher of science Isabelle Stengers. For the exhibition *Moving Plants*, Camilla Berner has also worked and conceived her art at the brown coal beds of Jutland.

zones are better than *land* because it's much more than land or even soil. It's also better than *the globe* and it's better than *nature*. However, to the scientists of critical zones they are just critical because we live in it and it's fragile, and, thermodynamically, it is far from equilibrium. They use the term critical in a common-sense manner.

But you add a philosophical substance to it?

Yes, it was too good to not be used. So I generalise it, as when I say "the critical zone of the globe". This is not their term.

This seems to connect to your thinking about "the land of old", "the globe" and "the earth".

Ah yes, then I politicise the whole thing. I work with artist and architect Alexandra Arènes in trying to figure out the relationship between these three poles or attractors (fig. 2). The third pole, the earth or critical zone – the new place we need to locate – is neither the globe nor the neo-local, and Alexandra tries to visualise what it is: this new thing that artists, art historians and scientists are collectively trying to describe. It's a very interesting movement, where everyone is trying to figure out what this thing is. This third pole has many different scales and it can be a garden as well as an entire landscape, but it's layered and because of this it's never *exactly* what you see: you are embedded into it, you never see it from above. You see it sideways.

In the performative lecture that I did in the theatre a few months back, I'm actually *within* the layers. We wanted to project the layers of the third pole [earth] on the floor, so that I was walking within it, so to speak. But the spectators couldn't see a thing, which is actually a beautiful philosophical point because we don't see the critical zone in which we reside. That is what's interesting and that's why it's something artists and scientists have to work on together. *Seeing* the critical zone belongs to a different register of visualising or scopic regime that has to be explored. This is the work that Alexandra Arènes is doing, collaborating with critical zonists[5] – biochemists and others – to describe and find ways of visualising critical zones. The scientists are as eager as us to do this work.

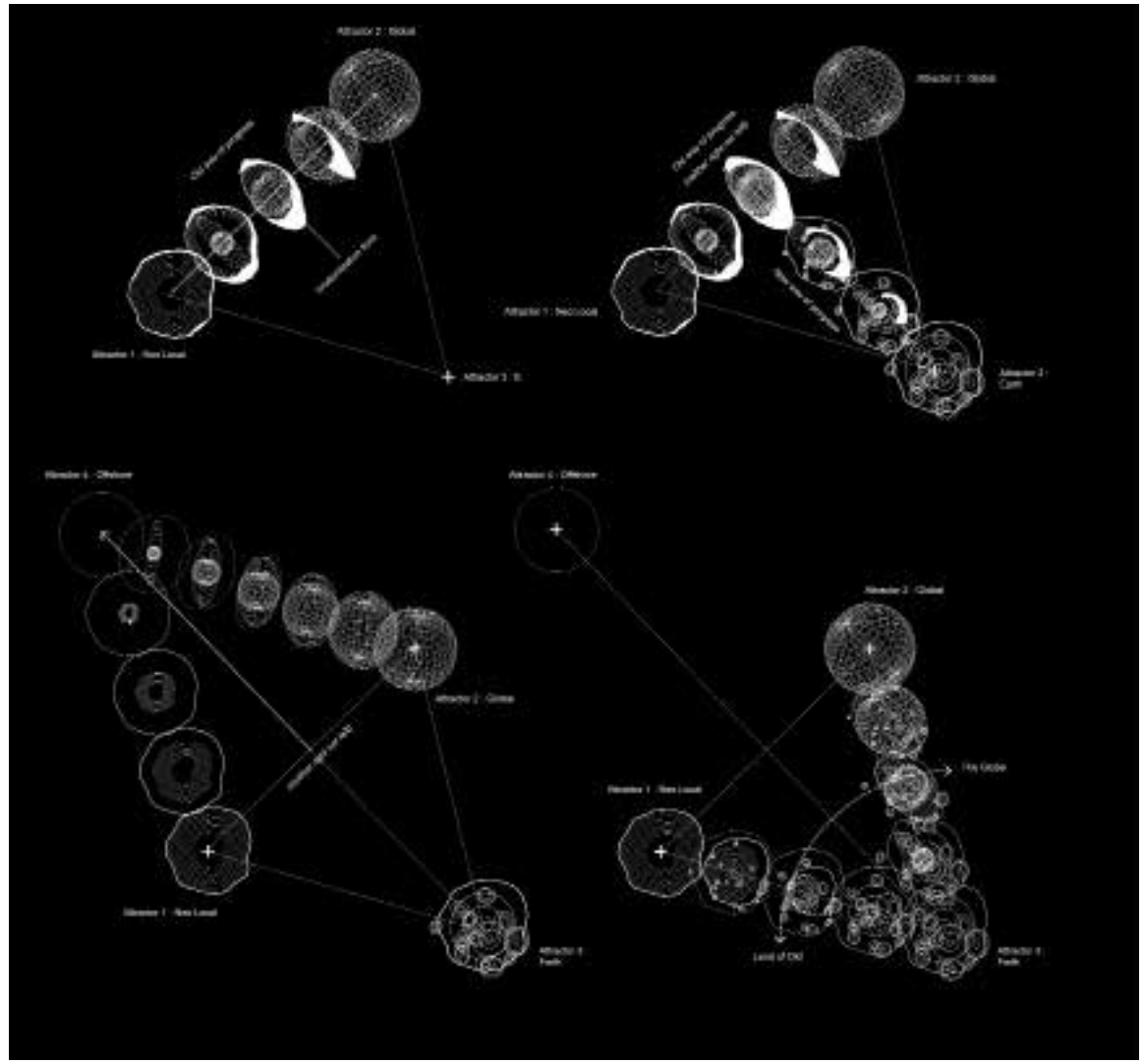


Fig. 2. Alexandra Arènes: *The political attractors*, 2017.

5. A term Bruno Latour has proposed to describe the mixture of disciplines working on and in critical zones.

And does this relate to your writing on how we need to be in the earth rather than on the earth? Is this what art might be capable of—getting us in the earth?

This is the argument. I'm trying to find words for what everyone is feeling. But it's very interesting that when you do exhibitions about this, like I did recently in Karlsruhe with the *Reset Modernity!* show, it just isn't very attractive. Because it has this mundane, earthly, ruinous, brown, layered character, which is not the sort of thing that looks like the global horizon of modernity.

There was a moment when the arts still existed with the accelerationist movement,[6] which pushed further along the modernising line. This, of course, still exists, but it's the wrong direction, because there's no earth corresponding to the modern globe. The globe and the earth are now physically, politically, diplomatically and geopolitically distinct. This is why, in the diagram (fig. 2), I added a little thing on the bottom left figure. This is Mr. Trump. Mr. Trump is inventing a fourth attractor. It's simultaneously the extreme ideal of the traditional soil or land of old [the first attractor], but also the extreme of exploiting globalisation [the second attractor]. It's simultaneously completely global – with billionaires running the show – but while telling people we should go back to where we were in the 1950s.

I think I invented this fourth attractor because it has to do with our understanding of fascism. However, it's not a fascist invention, because a fascist invention would be more along the traditional line [the land of old]. But Trump has invented something else, which is simultaneously a return to the land of old but reinvented, which is why I call it neo-local. It's a new local, a new land of old, but combined with business, with real estate and reality TV – which is completely contradictory, and detached from any sort of things. I find it interesting how all of the members of the American government and all of the establishment in place now are climate deniers. And if you look at the diagram, the position of this neo-local [the fourth attractor] is exactly the opposite of 'the earth'. Trump is the first completely ecological government, except in the negative. You cannot make sense of it and its complete *un*reality if you don't realise that it's actually built on the denial of the ecological crisis.

6. Following Latour's notion of modernity, part of it is the ideal of progressive acceleration forward: the post something or other. This has also been a central ideal to artistic practices. In this context, Latour is also hinting at and generalising an actual theoretical movement that arose in the 2000s under the banner of accelerationism.

One of the things I really like about the diagram is that down here, where the critical zone is [the earth or third attractor], it becomes a big mess.

Well it is, and Alexandra found a way to elicit one concept of the big mess, which is that it's more worldly than the neo-local, and it's much more localised than the global, which is of course what we are all struggling with: not linking local and global, but reinventing at different scales for different objects, many ways of being local and global simultaneously.

So where does this put us in terms of rediscovering earth?

Well, we do the exact opposite of saying it's either the land of old or globalisation. We are here, at the third attractor, the earth. It's the same globe, just diverted. The globe in real estate is a very strange thing. Of course, real estate has a contact with soil, but it's a most stupid and uninteresting way of defining soil. It's the old soil of the first attractor, of the land of old. But now, in rediscovering earth, we are simultaneously reinventing what it is to *have soil* and I find the desire of people to have soil absolutely legitimate, because we can't find our ground.

In my view, Alexandra has found a very beautiful way of visualising the earth, not the globe, but the earth as Gaia (fig. 3 and 4). And it doesn't have the same aesthetic as the globe. It's partly a ruin because it's completely anthropogenic and destroyed, but at the same time it's also full of different entities.

So if we are experiencing a representational crisis regarding Gaia or earth, what kind of merits would you think art can have over, for instance, science or religion, which you have also dealt with in terms of rediscovering the earth and representing it?

The representational crisis is a common problem for everybody. It's not that art has specific competencies for this – I mean, I think it has specific competencies – but the crisis is an enigma all disciplines have in common. We don't know how to represent the place where we have to land after we tried to be modern, so we need resources from all sorts of places, and one of them is arts, another is sciences. Of course, we also need religion but we are completely dependent on artists and scientists because here we have a massive amount of competencies to produce alternative forms. But it's not

Fig. 3. Alexandra Arènes: *Untitled*, 2015.

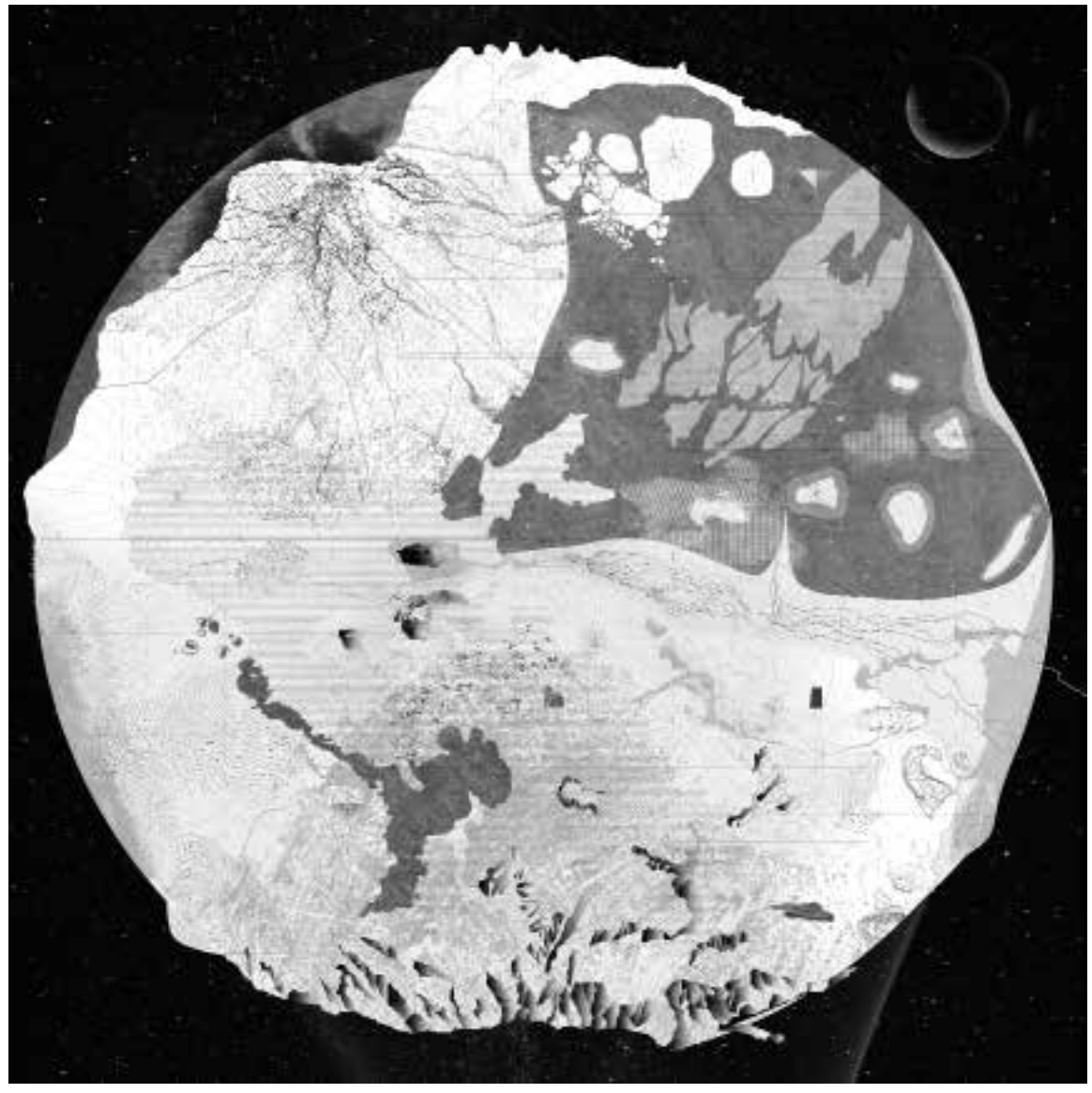


Fig. 4. Alexandra Arènes: *Anthropogenic earth*, 2015.

the arts as *art*; it's the arts as artists equipped with skills, who are learning what the world is made of.

But it seems to me, in the things you're saying now, that art actually does have a particular position in articulating, or in helping us in finding the way to this earth which we have difficulties locating?

No, I don't think so; the artists were modernist when we were modern and they were formalist when we were formalist. They are like all of us, trying to understand what time and space we are in. It's not because artists have a special flair for it, it's their skills which are specific, when they seriously deal with the same topic as the religious, the scientists and civic society. Because we are so deprived of moves, abilities, forms and feelings, in all the sense of aesthetics, art is important because of artists' skills and how they can be used in collaboration with scientists and civic society.

So to you it's actually the collaborations and the meeting points between all these disciplines that are important? It's not so much arts that are important, but spaces where all these different sensibilities work together – for instance in a critical zone?

Yes. The "here" – where we are – is an enigma. We are all lost, we just know that we have to land somewhere, but we don't know where.

And we need the collective efforts to find our landing spot?

It's swarm work and we need lots of different competing and collaborating skills, trying to figure out where the hell are we landing! So, an anthropologist like Anna Tsing [head of the AURA project, see p. 19] doing field work and inventing concepts like *plantationocene* and *living in ruins*, is as important for the swarm of narration as a biochemist discovering a new phosphorus cycle. As interesting as an artist finding a way to represent in her work the completely unscalable, complex, and non-visible-from-the-outside earth.

Now we are talking about where to land, about space, but is this also a problem of time? Is there also a temporal aspect to our current process of reorientation?

On time, we are slightly more organised, because of the Anthropocene figure. The dispute around time is organised around the dispute about the Anthropocene; the name, the concept, the date, etc. I think it's more elaborated and almost institutionalised now, which is different from the question of space, so *where* we are is even more disturbing than *when*. *Where* is not as organised, precisely because of our understanding of nature: people say that we are now more interested in nature than ever before, but that's completely wrong. It's not nature we are looking for, we cannot do anything with nature. I think that's why many people are so fascinated with soil: it's something completely different from trying to be modern. When you talk about earth, soil, dirt, compost and all of this, it's obviously a different way of imagining the *where*. What I was trying with the diagram (fig. 1) is exactly to orient us towards *where* we are. The urgency makes us think and imagine in another way: where do we land?

Still, somehow the things we are talking about here, people would call nature in common parlance. And of course, while curators, artists and scholars can insist on not using that term, what people see, for instance in an exhibition showing plants or gardens, is nature. So how do you think that we can actually use an exhibition – like you have done in Reset Modernity! *– to centre on specific attachments, rather than vast nature, regarding the ecological crisis?*

I can only talk as a curator now. But we decided [for *Reset Modernity!*] that there can be no one single plant. Green, global and natural. All these things are completely wrong in terms of finding out where we are. We don't know where we reside, and to help us rediscover earth, art should do things completely different from boring *nature-stuff* and nature art, where you have the globe, homogeneity and *things green*. We did not show one single image which could be even vaguely related to the repertoire of nature. The first thing I told my co-curators was that everything has to be brown, layered and not green whatsoever. It was precisely to help the visitors to shift attention away from what we associate with nature: green, globally unanimous and nice. It was really about earth – about soil.

But if we only have humans and soil, then don't we risk losing the layered texture of critical zones? Don't we lose the heterogeneity of the many layers, if we don't have the green, the plants, animals and such? I'm curious to

what thinking you did for choosing that particular aproach, other than just eliminating nature*?*

It was precisely about seeing the stratigraphy. Of course there are things above, up there, that might be green, but the main affect of the exhibition is that we are in it – the layers of earth – and we are looking at it sideways: we see layers and we are one of the layers. Because the problem with gardens, plants and so on is that they positively reemphasize the notion of artificiality. I wanted to show clearly that it's not about nature *and* artifice, that we can't make the modern disinction this way. We wanted to see the conceptual effect; that we are landing on a different type of territory, so don't believe that you know what it is when we talk about nature!

Of course, it's just one of a hundred ways art deals with the issue, and we need the collective skills from artists, scientists and others, to find out where we are landing. Nothing stands on its own. Neither a tree, nor art, nor anything else.

Bibliography

Gren, Martin: "Mayday – a letter from the Earth", in Marijn Nieuwenhuis and David Crouch (eds.): *The Question of Space: Post-Disciplinary Interventions on the Spatial Turn*, Rowman and Littlefield, forthcoming.

Latour, Bruno: *We Have Never Been Modern*, Harvard University Press, 1993.

____: *Politics of Nature – How to Bring the Sciences into Democracy,* Harvard University Press, 2004.

____: "A Plea for Earthly Sciences", in Judith Burnett, Syd Jeffers and Graham Thomas (eds.): *New Social Connections: Sociology's Subjects and Objects*, Palgrave Macmillan, 2010, p. 72-84.

Contributors to the catalogue

ANDERS BLOK is Associate Professor at the Department of Sociology, University of Copenhagen. His research and teaching deals with questions of urban environmental change, engagement, and politics across major cities in Europe and East Asia. Over the coming years, he will be leading a new research project (funded by the Velux Foundation) on civic engagement with urban nature in Denmark. The project explores the hypothesis that novel forms of urban civic-green communities are currently emerging, weaving together practices of everyday vegetal care with a public search for new visions of the sustainable city.

GEOFFREY C. BOWKER is Professor at the School of Information and Computer Science, University of California at Irvine, where he directs the Evoke Laboratory, which explores new forms of knowledge expression. Recent positions include Professor of and Senior Scholar in Cyberscholarship at the University of Pittsburgh iSchool and Executive Director, Center for Science, Technology and Society, Santa Clara. Together with Leigh Star he wrote *Sorting Things Out: Classification and its Consequences*; his most recent books are *Memory Practices in the Sciences* and (with Stefan Timmermans, Adele Clarke and Ellen Balka) the edited collection, *Boundary Objects and Beyond: Working with Leigh Star*. He is currently working on big data policy and on scientific cyberinfrastructure, as well as completing a book on social readings of data and databases. He is a founding member of the Council for Big Data, Ethics and Society.

T.J. DEMOS is Professor in the Department of the History of Art and Visual Culture, University of California, Santa Cruz, and Founder and Director of its Center for Creative Ecologies. He writes widely on the intersection of contemporary art, global politics, and ecology and is the author of several books, most recently, of *Decolonizing Nature: Contemporary Art and Political Ecology* (Sternberg Press, 2016). His new book, *Against the Anthropocene: Visual Culture and Environment Today*, will soon be released by Sternberg Press.

BRUNO LATOUR is the author of *Laboratory Life* (Princeton University Press), *Science in Action*, and *The Pasteurization of France*. He also published a field study on an automatic subway system *Aramis or the love of technology* and an essay on symmetric anthropology *We have never been modern*. From 1982 to 2006, Bruno Latour was Professor at the Centre de sociologie de l'Innovation at the Ecole nationale supérieure des mines in Paris and from 2006 to 2017 at Sciences Po Paris where, from 2007 to 2013, he has been Vice President for research. While in Sciences Po, he has created the médialab to seize the chance offered to social theory by the spread of digital methods and has created, together with Valérie Pihet, a new experimental program in art and politics (SPEAP). For various periods, he has been visiting Professor at UCSD, at the London School of Economics and in the history of science department of Harvard University and is now Professor at Large at Cornell University.

NATASHA MYERS is an Associate Professor in the Department of Anthropology at York University, the convenor of the Politics of Evidence Working Group, Director of the Plant Studies Collaboratory, co-organizer of Toronto's Technoscience Salon, and co-founder of the Write2Know Project. *Rendering Life Molecular: Models, Modelers, and Excitable Matter* (Duke UP, 2015) is an ethnography of an interdisciplinary group of scientists who make living substance come to matter at the molecular scale. Myers' current projects span investigations of the arts and sciences of vegetal sensing and sentience, the politics and aesthetics of garden enclosures, and most recently, she has launched a long-term ethnography experimenting with the arts of ecological attention in an ancient oak savannah in a large urban park in Toronto.

CECILIE RUBOW is Associate Professor at Department of Anthropology, University of Copenhagen, where she is currently doing research in the interface between religion and nature ethics in a Danish/Nordic context. Since 1992, Rubow has been working with the anthropology of rituals, identity and authority in the context of the Danish state church *Folkekirken*. Fieldwork has been carried out in relation to rites of passage, everyday teology and the education of vicars. In 2005, Rubow's research interest extended to Christianity in Polynesia and broader topics in the history of anthropology in the Pacific. Based on fieldwork on Rarotonga, the main island in the Cook Islands, focus shifted in 2009 to the local responses to climate changes.

YURIKO SAITO, born and raised in Japan, received a Ph.D. in philosophy from the University of Wisconsin-Madison, USA, and is Professor of Philosophy at the Rhode Island School of Design, USA. Her research areas are everyday aesthetics, Japanese aesthetics and environmental aesthetics. She has presented her work widely, including in Finland, the Netherlands, China, and within the United States. Her writing is included in numerous journals, anthologies, and encyclopaedias. Her book *Everyday Aesthetics* was published by Oxford University Press (2007) and its sequel, *Aesthetics of the Familiar: Everyday Life and World-Making*, is forthcoming from OUP in 2017.

INGE SCHJELLERUP is Senior Fellow at the National Museum of Denmark. Since 2000, Inge Schjellerup has been project manager for interdisciplinary projects in Peru involving archaeology, anthropology, botanics, and geography. From 1994–99, Schjellerup led the anthropological program at Centre for research on cultural and biological diversity of Andean rainforests (DIVA).
Inge Schjellerup is editor and co-author of *The Chilchos Valley Revisited – Life Conditions in the Ceja de Selva, Peru* and *The Forgotten Valleys, Past and Present in the Utilization of Resources in the Ceja de Selva*. Inge Schjellerup was appointed Doctor honoris causa at Universidad Nacional de Trujillo in Peru in 2006.

LAURENT THÉVENOT is Directeur d'études (Professor) at the Ecole des Hautes Etudes en Sciences Sociales, Paris. With Luc Boltanski, he created the "Groupe de Sociologie Politique et Morale" in 1984 and co-authored *On Justification* (2006 [1991]) which analyzes the most legitimate repertoires of evaluation governing political, economic and social relationships. Laurent Thevenot co-edited with Michele Lamont *Rethinking Comparative Cultural Sociology: Repertoires of Evaluation in France and the United States*. In 2008 he published a book on the architecture of forms of life, agencies and the ways of engaging with the world: *L'action au pluriel. Sociologie des regimes d'engagement* (Paris: Editions La Decouverte). Laurent Thevenot is co-editor of the journal *Annales, Histoire, Sciences Sociales*.

LINE MARIE THORSEN is a Ph.D. Fellow at art history, Aarhus University and affiliated Ph.D. at Aarhus University Research on the Anthropocene (AURA), as well as at Changing Disasters – the UCPH Excellence Programme for Interdisciplinary Research at Copenhagen University. Thorsen has previously studied art practices in the wake of the 2011 earthquake and tsunami disaster in Japan, and since 2014 she has researched how artists across East Asia and Europe translate the notions of global climate change into their local ecological concerns.

ANNA TSING is a Professor of Anthropology at University of California, Santa Cruz, a Niels Bohr Professor at Aarhus University, and Director of Aarhus University Research on the Anthropocene (AURA). Her research and numerous publications traverse the fields of multispecies ethnography, feminist environmental anthropology, Southeast Asian studies, and postcolonial social theory. Anna Tsing is a part of The Matsutake Worlds Research Group, which documents the rich variety of cultural and ecological lifeways emerging across matsutake's path. Published titles include *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton University Press 2015) and the forthcoming anthology *Arts of Living on a Damaged Planet* (with Heather Anne Swanson, Elaine Gan and Nils Ole Bubandt, University of Minnesota Press, 2017).

ANETTE VANDSØ is Assistant Professor at Aarhus University and ARoS Aarhus Art Museum. Her current research project is on how our changing relation to nature is addressed in aesthetic practices. Most recently, she has published "Listening to the Dark Side of Nature", Lexington, 2016, "Det Danmark vi spiser", *Passage*, 31:76, 2016, and co-edited *The Garden*, peer-reviewed catalogue for ARoS, 2017.

This catalogue is published in conjunction
with the exhibition
Moving Plants

Organized and produced by
Rønnebæksholm, Næstved

Rønnebæksholm
July 1 – September 24, 2017

Concept
Line Marie Thorsen

Exhibition
Curator: Line Marie Thorsen
Co-curator: Anna Vestergaard Jørgensen

Catalogue
Editor: Line Marie Thorsen
Organisation and coordination: Anna Vestergaard Jørgensen
Proofreading: Michael Burgess
Translation from Danish: Michael Burgess
("The Magic Potato" by Inge Schjellerup)
Translation from French: Culturebites / Annemette Fogh
("Arts of replanting common-places alive" by Laurent Thévenot)
Graphic design: Jeanne Betak
Print and reproduction: Narayana Press, Odder
Typeface: Filosofia
Paper: Elefantenhaut, Prolibro Natural

ISBN: 978-87-999928-1-2

Published by

Rønnebæksholm
Rønnebæksholm 1
4700 Næstved
Denmark

Frontispiece
Koichi Watanabe: *Aalsmeer Flower Auction, North-Holland, the Netherlands*, 2009.

TOYOTA-FONDEN DENMARK

BECKETT·FONDEN

RØNNEBÆKSHOLM

DANISH ARTS FOUNDATION