

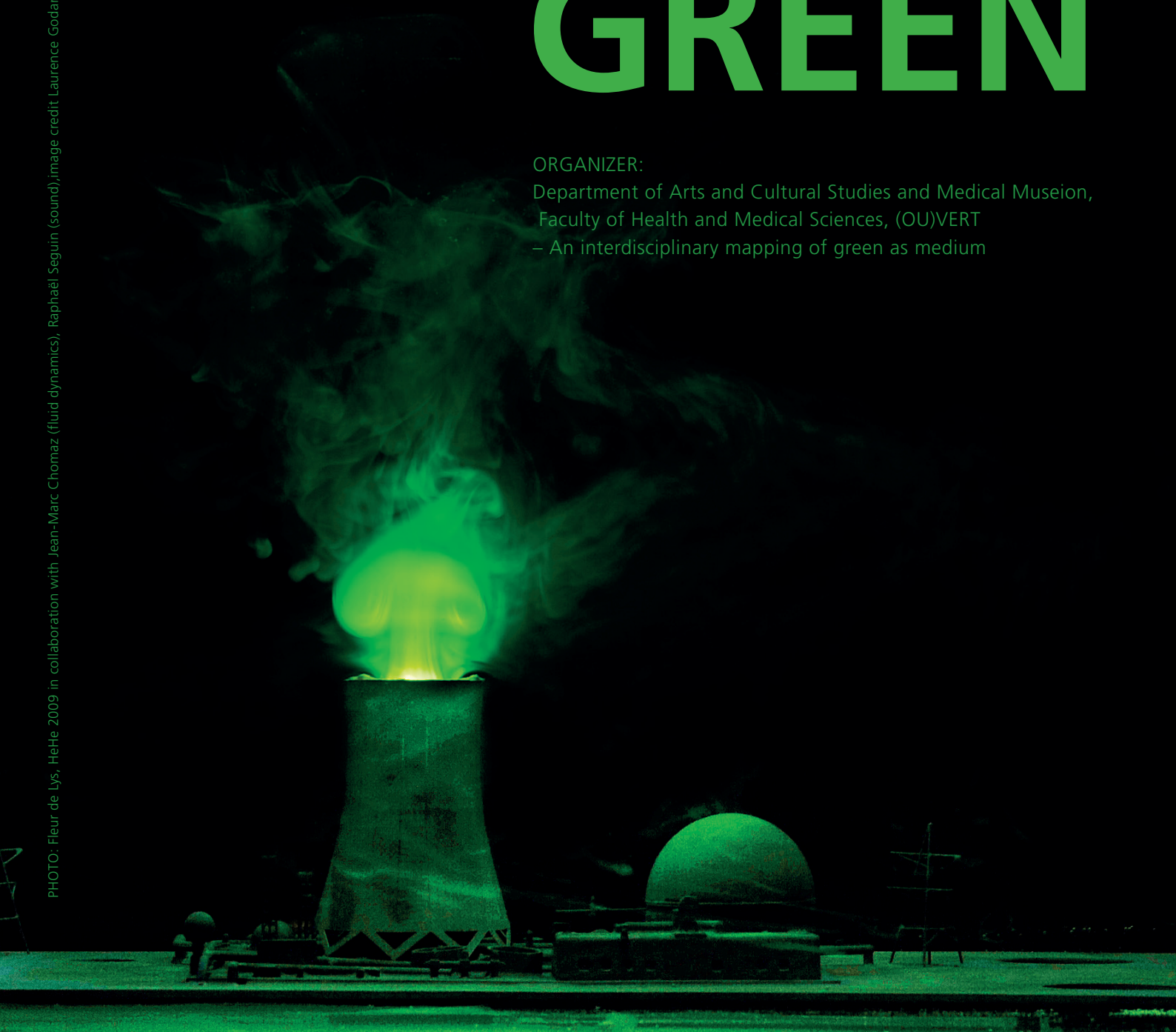
PHOTO: Fleur de Lys, HeHe 2009 in collaboration with Jean-Marc Chomaz (fluid dynamics), Raphaël Seguin (sound); image credit Laurence Godart; courtesy Aeroplastics contemporary, Bruxelles

13-16/06/2018 UNIVERSITY OF COPENHAGEN
12TH CONFERENCE OF
THE EUROPEAN SOCIETY
FOR LITERATURE, SCIENCE
AND THE ARTS

GREEN

ORGANIZER:

Department of Arts and Cultural Studies and Medical Museion,
Faculty of Health and Medical Sciences, (OU)VERT
– An interdisciplinary mapping of green as medium



General information

12th Conference of the European Society for Literature, Science and the Arts (SLSAeu)

Theme: GREEN

Host: University of Copenhagen, Denmark

Dates: 13-16/06/2018

Contact: slsa-green@hum.ku.dk

Conference Chair: Jens Hauser

Associate Chairs: Louise Whiteley, Adam Bencard

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Steering committee: Jacob Wamberg (Aarhus University), Elisabeth Friis (Lund University), Lars Tønder (University of Copenhagen), Birger Møller (University of Copenhagen), Morten Søndergaard (Aalborg University)

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Organization: SLSAeu 2018 is organized in collaboration with the University of Copenhagen, Faculty of Humanities, (OU)VERT – An interdisciplinary mapping of green as medium, and Medical Museion, Faculty of Health and Medical Sciences.

Partners & Supporters: We sincerely want to thank our partners and funders: Novo Nordisk Foundation, Carlsberg Foundation, Goethe Institut Dänemark, Institut Français, Statens Museum for Kunst, Overgaden Institute of Contemporary Art, Aarhus University, and the following research departments at the University of Copenhagen: Department of Arts and Cultural Studies, Centre for Modern European Studies (CEMES), Centre for Anthropological, Political, and Social Theory (CAPS) at the Faculty of the Social Sciences, Plant Biochemistry Laboratory at the Department of Plant and Environmental Sciences, and the Novo Nordisk Foundation Center for Basic Metabolic Research.



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Welcome

SLSA 2018: Green, Un-Green, Prismatic

We have chosen to center the SLSAeu Conference 2018 on the theme of GREEN, providing a resolutely cross-disciplinary platform to explore one of the most pervasive and broadest tropes of our times. How to define and understand greenness is an urgent political, societal, philosophical and economic question far beyond academia – yet there is much confusion about its meanings. The actual conference program reveals how much green has become pervasive across a broad range of disciplines. But far from having universal meaning, it marks a dramatic knowledge gap prone to systematic misunderstandings. The submitted proposals demonstrate a large spectral field of provocatively un-green and prismatic contributions from the most diverse academic disciplines and professional fields.

Engineers may brand ‘green technologies’ as ecologically benign, but climate researchers point to the ‘greening of the earth’ itself as the alarming effect of anthropogenic CO₂ emissions. ‘Green growth’ aims to reconcile economic and ecologically sustainable development, while in philosophy ‘prismatic ecology’ rebukes the use of green to represent binary ideas of the other-than-human world as an idealized nature. More concept than color, green is often being reduced to a mere metaphor stripped of its material, epistemological and historical referents. This confusion increasingly obstructs an interdisciplinary dialogue between the humanities and the natural sciences – a dialogue which is urgently required considering anthropogenic effects on climate and biodiversity.

The umbrella term ‘green’ opens up perspectives to interdisciplinary approaches that entangle fields such as philosophy, art theory & history, literature & poetry, political & social sciences, environmental & medical humanities, color theory, perception and cognition, anthropology & ethnography, biology, biodiversity management and landscape architecture.

We thank our SLSA members and participants for sharing their ideas, and our partner institutions and funders for their generous support.

Jens Hauser, SLSAeu chair 2018; Louise Emma Whiteley & Adam Bencard, associate chairs

Conference venues

The main conference site will be University of Copenhagen's South Campus. Other keynote lectures, workshops and art events will happen at the Medical Museion, at Statens Museum for Kunst / The National Gallery of Denmark, and Overgaden Institute of Contemporary Art.





University of Copenhagen

The main part of the SLSAeu conference will take place from June 13 to 16 in buildings 22 and 23 at the University of Copenhagen South Campus in Copenhagen Amager, located near Islands Brygge, and home to the Faculty of Humanities, the Faculty of Law, and the Faculty of Theology. Besides the keynote lectures, parallel paper sessions, semi-plenary sessions and the opening cocktail, our modern campus environment will host artistic panels and screenings, and an art exhibition curated by the Laboratory of Aesthetics and Ecology with contributions from our SLSA contributors. A more detailed art program is published separately, containing events at our partner institutions as well.

Address: Njalsgade 120,
2300 Copenhagen S

Directions: If you travel by metro, the campus is close to the station Islands Brygge on Metro line M1 (direction Vestamager). Metro line M1 connects to Nørreport and Kongens Nytorv, central hubs in Copenhagen city center (ca. 5-10'), as well as to Copenhagen Airport Kastrup (Metro line M2, change at Christianshavn station. ca. 15').





Medical Museion

Our evening event on **June 14 from 19h** on will take place at Medical Museion, a combined museum and research unit at the University of Copenhagen. The museum is located in the former Royal Academy of Surgeons from 1787 and has one of the biggest and richest historical collections of medical artifacts in Europe.

At the occasion of the SLSAeu conference on GREEN, the Medical Museion stages a specially curated exhibition by our artistic keynote speaker **Thomas Feuerstein**: His exhibition **Stofskifter - Metabolic Machines** consists of algae and bacteria based biotechnological artwork. Through his biological sculptures, paintings and drawings, Feuerstein explores the generative and transformative processes of life. He creates artistic narratives, revolving around mythological themes, visions of possible futures, and the complicated relationships between our bodies and technology.

Address: Bredgade 62, 1260 Copenhagen K

Directions: Medical Museion can be easily reached from our main conference site by public transportation (metro & bus) or bike within 20-25 minutes. It is located a 10 minutes walk from metro station Kongens Nytorv (2 stations by metro from Islands Brygge).

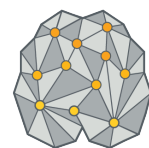
- Walk to Islands Brygge (Metro)
- Take M1 towards Vanløse
- Exit at Kongens Nytorv
- Take bus 1A which stops right in front of Medical Museion, or walk for about 10 minutes

About Leonardo

Leonardo/The International Society for the Arts, Sciences and Technology (Leonardo/ ISAST) is a non-governmental organization that serves a global network of distinguished scholars, artists, scientists, researchers and thinkers through our programs focused on interdisciplinary innovation in the arts, sciences and technology.

From Leonardo's beginnings in 1968, the organization has served as THE virtual community for purposes of networking, resource-sharing, best practices, research, documentation and events in art, science and technology.

50 YEARS



LEONARDO

WHERE IDEAS
DON'T TAKE SIDES

STOFSKIFTER / METABOLIC MACHINES by Thomas Feuerstein

The exhibition **Metabolic Machines** is centered on two of Feuerstein's paradoxical sculptural machines in which microscopic life literally carries out processes of transformation. These machines also provide raw materials for further artist's work, in which matter transforms into art: sugar becomes sculptures and algae become paintings.

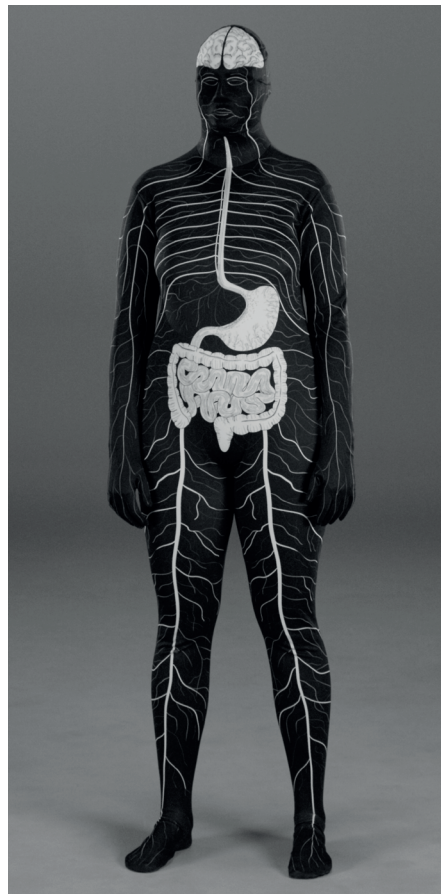
The two glowing **MANNA-MACHINES** and their roots of plastic tubing are filled with the green algae *chlorella vulgaris*, fuelled by light and air – almost like manna falling from heaven. Feuerstein harvests the algae and uses them as a pigment in his paintings, and also ferments them into spirits. The sculptures are incarnations of a machine able to nourish the artist's life - both poetically and physiologically.

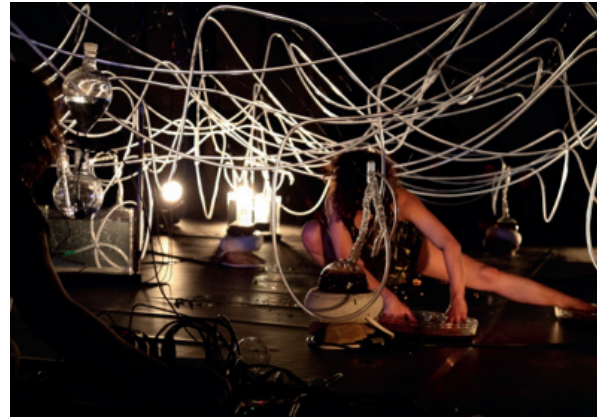
PANCREAS emphasizes that glucose is the universal fuel of life; all cells can consume sugar. **PANCREAS** uses glucose as its artistic material, transforming books into sugar that then feeds human brain cells. The cells grow into the tubes of a sculpture that literally constitutes a brain-in-the-vat. The connected bioreactor is populated by transgenic bacteria, and acts like an artificial intestine. The bacteria break down paper that has been shredded and soaked in water, but not just any paper: The feeding of the artificial brain follows a strict diet: the brain food consists exclusively of glucose produced from pages taken from the German philosopher Hegel's *Phenomenology of Spirit* (1807). Food for thought becomes thought for food! **PANCREAS** thus playfully translates language into matter; symbols into flesh.

You can also experience parts of the human specimen collection in the exhibition **The Body Collected** and explore the complex relationship between mind and gut through a thought-provoking blend of science, art and history in the exhibition **Mind the Gut**. Medical Museion's historical auditorium will also be the stage for additional artists talks, for a celebration of **50 years of Leonardo**, the International Society for the Arts, Sciences and Technology, and for eco-poetry readings by Danish writer **Ursula Andkjær Olsen**.

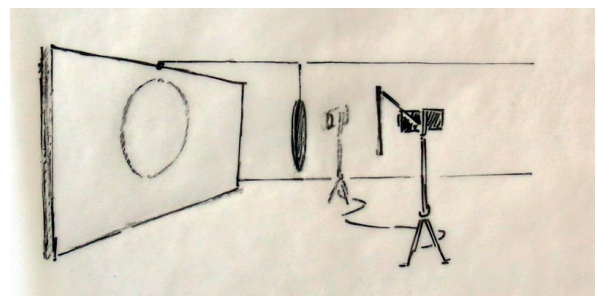
Ursula Andkjær Olsen

The poetry of Danish writer Ursula Andkjær Olsen is a compelling example of contemporary Nordic literature's attempt to un-green ecological thought founded as it is in the body's dark entanglement with bios. When her book *Third-Millennium Heart* came out in the US in 2017 one critic wrote: "Her syntax sprouts with mutant possibility, one nimbly conveyed by translator Jensen's flexible touch. From the darkness of this "comajubilation," in a stutter-step of declarations and retractions, *Third-Millennium Heart* is a work of radical re-conjuration: "Together we will beat/in the great DELTA."





Basic Transmutation / Alien Migration - Aniara Rodado & Jean-Marc Chomaz



Light experiment by Olaf Müller and Hubert Schmidleitner

Statens Museum for Kunst / The National Gallery of Denmark

On **June 15 from 16-22h**, we will move over to SMK (Statens Museum for Kunst), the National Gallery of Art, our partner for a rich program of six hours that we co-curate with SLSA artists, within the framework of the museum's extremely popular Friday events. **"Det er ikke alt grønt, der gror... - All that grows is not green"** is the motto of this **exceptional collaboration with SMK**: Keynote speaker **Olaf Müller** will reflect on Goethe's experiments to explore the phenomena of colored shadows, while a light experiment of artist Hubert Schmidleitner creates green shadows live. Our SLSA artists will dance with, and even for plants, stage 'stone as the new green', propose sound walks and bars for insects, serve algae cocktails, and question allegedly 'green' motifs and materials in subversive guided tours.

The SMK is the largest art museum in the country. No other museum in Denmark shows such a rich and varied selection of art – from the European classics of the Renaissance to the overwhelming diversity of modern and contemporary art.

The SMK is especially famous for its beautiful collection of Danish Golden Age art, the country's most comprehensive collection of Danish contemporary art – and one of the world's best Matisse collections.

The SMK Fridays events are informal art experiences outside the usual museum opening hours, with a blend of art, music, art talks, film screenings – and drinks and street food served in a friendly atmosphere.

Address: Sølvgade 48-50, 1307 Copenhagen K

Directions: UCPH - National Gallery of Denmark

- Walk to Islands Brygge (Metro)
- Take M1 towards Vanløse
- Exit at Nørreport (Metro)
- Walk 750 m OR take bus 6A in direction H.C. Andersens Boulevard and exit at Georg Brandes Plads, Parkmuseerne



INSTITUT
FRANÇAIS



UNIVERSITY OF COPENHAGEN
CENTRE FOR MODERN EUROPEAN
STUDIES (CEMES)

The keynote lecture by Olaf Müller is organized in collaboration with the Centre for Modern European Studies (CEMES) And Goethe Institut Dänemark. The performance by Aniara Rodado and Jean-Marc Chomaz is supported by Institut Français.



Overgaden Institute of Contemporary Art

To conclude the conference programme, on **Saturday evening from 19.30h** on, the Laboratory for Aesthetics and Ecology and the Multispecies Salon invite us to an evening of (self-)experimental artistic strategies for queer becoming-with nonhuman others. Performance collective Quimera Rosa will present their work on human-plant hybridity in an open chlorophyll tattoo session. Artist Mary Maggic's work deals with micro-colonization of bodies, and proposes tools for hormone-hacking. The following conversation on the future of (non)humans will be moderated by multispecies ethnographer Eben Kirksey from the Multispecies Salon.

The Overgaden Institute of Contemporary Art has existed since 1986 and is one of Denmark's most important and experimental exhibition spaces for contemporary art. Overgaden presents exhibitions of new Danish and international contemporary art, most often newly produced contemporary art projects crossing media and generations. An important part of Overgaden's profile also consists of experimenting with exhibition formats and the relationship between artists, art institution, and audience.

Address: Overgaden Neden Vandet 17, 1414 Copenhagen K

Directions: UCPH - National Gallery of Denmark (30min)

- Walk to Islands Brygge (Metro)
- Take M1 towards Vanløse
- Exit at Christianshavn (Metro), the art center is located just 50 meters from the exit
- Or: Overgaden can also be reached by a beautiful walk over Stadsgraven (the canal which separates Christianshavn from the rest of Amager) within 20 minutes.



PHD masterclass

International PhD and Postdoc Master Class: Deconstructing green

The European Society of Literature, Science and the Arts is committed to supporting young talents. 28 PhD students and younger postdocs from 15 different countries have been selected to participate in the interdisciplinary and international master class 'deconstructing green.' Participants will present their research projects and get feedback from SLSA's keynote speakers Anna Lowenhaupt Tsing (University of California Santa Cruz & Aarhus University), Brigitte Luis Guillermo Baptiste (Alexander von Humboldt Biological Resources Research Institute Bogotá), Natasha Myers (York University Toronto) Olaf L. Müller (Humboldt University Berlin), and, in addition, Gareth Doherty (Harvard University).


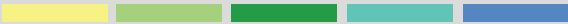








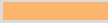



This workshop takes place on June 13 from 9-15h at UCPH's South Campus, and on June 17 from 12-17h at Medical Museion, facilitated by Jens Hauser (University of Copenhagen) and Jacob Wamberg (Aarhus University)

'Deconstructing green' is made possible through the generous support of the Carlsberg Foundation, the doctoral schools of the University of Copenhagen and Aarhus University, and further funding by the Faculty of Humanities, Faculty of Social Sciences, Medical Museion/Faculty of Health and Medical Sciences, and the Department of Plant and Environmental Sciences of the University of Copenhagen.

SLSA Green Conference Program

Beverages and a lunch buffet will be provided during the breaks.
The sessions run in parallel in five seminar halls.

In order to include the greenest and freshest conference schedule, the schedule overview is printed separately.

13/6	14.00-15.30 Registration	
	15.30-16.30 Welcome & Introduction	
	16.30-18.00 Keynote Natasha Myers	
	18.00-20.30 Opening Cocktail	
	UCPH's South Humanities Campus	
14/6	08.30-10.30 Parallel Sessions 1	
	11.00-12.30 Artist keynote Thomas Feuerstein	
	13.30-15.30 Parallel Sessions 2	
	16.00-18.00 Parallel Sessions 3	
	UCPH's South Humanities Campus	
	19.00-22.00 Exhibition, art events, cocktail Medical Museion (20-25' by public transportation)	
15/6	08.30-10.30 Parallel Sessions 4	
	11.00-12.30 Keynote Brigitte Luis Guillermo Baptiste	
	13.30-15.30 Parallel Sessions 5	
	UCPH's South Humanities Campus	
	16.00-22.00 'Green Friday': Art Events & Talks, Street Food & Drinks	
	17.00-18.15 Keynote Olaf Müller Statens Museum for Kunst (National Gallery of Denmark) (25-30' by public transportation)	
16/6	08.30-10.30 Parallel Sessions 6	
	11.00-12.30 Keynote Anna Tsing	
	13.30-15.30 Parallel Sessions 7	
	16.00-17.30 Semi-plenary Sessions: Bruce Clarke & Tyler Volk / Birger L. Møller & Gareth Doherty	 
	17.30-18.00 Concluding Remarks	
	UCPH's South Humanities Campus	
	19.30-21.30 'Multispecies' Art Event Overgaden Institute of Contemporary Art (15-20' by public transportation, or walk)	

Keynote: 

Parallel Sessions: 

Semi-plenary Sessions: 





Keynote speakers

Anna Lowenhaupt Tsing

University of California Santa Cruz & Aarhus University, professor
Coat of Many Colors: The More-than-Green in Green
Lecture Hall A, 23.0.50 / Saturday 16.6. / 11.00 – 12.30

Why is “green” considered a single color and not a coming together of many colors? Consider trees, a quintessential site for the imagination of green. There are multiple colors in a tree—especially when considered seasonally or underground. Furthermore, the colors expand exponentially once one considers trees as holobionts, that is, within the mutualistic life forms, from fungi to birds, involved in making trees possible. As a singular color contrasting with all other colors, “green” might not do its best work for thinking about trees. In this talk, field-based observations echo back and forth with the inspiration of cultural parables, from the Bible to anime, that urge us to see the multiplicity in green. There is something here to celebrate, even in the terrors of our times.

There is also something to think about involving the work of scholars. How can we as scholars notice the green world ourselves—even as we take into account the perspectives and politics of others? The stories in this talk include both mine and others’. This technique expands the repertoire of cultural studies beyond its still most commonly practiced genre, critique. Instead of provoking scholarly position statements, popular culture and political mobilizations can inspire the curiosity for research as we reconnect with observation as a technique.

During my fieldwork with Meratus Dayaks in Indonesian Borneo, I learned that “green” might not be the most useful way to describe the leaves of trees. How might others too observe the many colors in green?

Anna Tsing is Professor of Anthropology at the University of California, Santa Cruz, and a Niels Bohr Professor at Aarhus University, where she co-directs Aarhus University Research on the Anthropocene (AURA) with Nils Bubandt. AURA works to form connections across the humanities and natural sciences based on overlapping forms of curiosity and field-based observation. Between 2013-2017, AURA team members conducted research on the landscape dynamics of a former brown-coal mine in central Jutland; a special section of *Journal of Ethnobiology* on this fieldwork has just been published (2018). Working with AURA team members Jennifer Deger and Alder Kelerman, Tsing is currently working on a digital media project, *Feral Atlas*, which shows the world-dripping ecological consequences of imperial and industrial infrastructures. Tsing's most recent books are *The mushroom at the end of the world: on the possibility of life in capitalist ruins* (Princeton University Press, 2015) and *Arts of living on a damaged planet* (co-edited with Heather Swanson, Elaine Gan, and Nils Bubandt, University of Minnesota Press, 2017). Tsing is also the author of *Friction: An Ethnography of Global Connection* (Princeton University Press, 2005), which has become a standard text in geography, sociology, critical theory, feminist studies, environmental studies, and political economy. She also coedited five anthologies, including *Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management* (with J. Peter Brosius and Charles Zerner, Altamira Press, 2005), and, more recently, *Words in Motion: Towards a Global Lexicon* (with Carol Gluck, Duke UP, 2009). anthropocene.au.dk



Brigitte Luis Guillermo Baptiste

Alexander von Humboldt Biological Resources Research Institute Bogotá, director
Queering ecology in TransColombia

Lecture Hall A, 23.0.50 / Friday 15.6. / 11.00 – 12.30

The cultural interpretation of biological facts is complicated: genes, organisms, species, biological communities and ecosystems are complex entities built by human societies over the last centuries, but most often without acknowledging the previous millions of years of evolution. In that process we have created the idea of nature as something external, stable, as a gem only waiting for us to become a jewel.

Colombia is betting for a transition towards sustainability, but has to face its dependence on oil, coal and other extractive ways of production, which even include agribusiness and tourism when based just on commercial purposes. The idea of transition is to define a horizon for change, or a threshold to change trajectories, and the discussion goes on how to link or to break ties with the past. The system resists by creating a strong narrative of respecting nature and including it in the green economy project, in a process that may end up freezing it in the territory, even detaching biology from life. Cultural diversity and social evolution show that identities aren't stable, and that they are built as a way to reduce its evolutionary and autonomous capacities for change. Therefore we have to be aware of the limits of our heuristic tools to bring meaning to material life. In the middle of total deconstruction and stone-carving of identities there is much to be explored. Political implications emerge behind the end of our idea of environmental stability and require a revision of the living pieces of the world and the ways we use them to assemble novelty adding layers of meaning. A queer perspective of those entities may help us to inject a bit of flexibility into our vision of ecology, to create cultural room for understanding and promoting adaptation, and to shed light on the hidden capacities of life, now including ours, to keep evolving.



Brigitte was born in 1963 in Bogotá, Colombia, and born again in 1998, after 35 years of living as Luis Guillermo. By then she was already a biologist and scholar working on biodiversity management by local communities in her country, and held a MA in Latin American Studies from the University of Florida. Married to Adriana, she lives as a couple with two girls aged 16 and 14, who do not make a big deal of the gender trouble of their parents. As a professor in landscape ecology at the Bogotá Jesuits University, Brigitte has contributed for many years to the creation of its faculty for environmental and rural studies, and brought voice to the idea of both biological and cultural diversity to her classes in architecture, design and science. Despite her failure to complete a PhD in environmental economics at the Autonomous University of Barcelona, in 2009 she was appointed general director of the Alexander von Humboldt Biological Resources Research Institute, the national facility for biodiversity research in Colombia, supposedly the country with the richest biodiversity in the world. As such, she has been developing environmental policies for Colombia's post-conflict areas, raising awareness that cultural diversity is part of nature's diversity. The author of 15 books, a popular TV series, and regular newspaper columns on fashion, economics and ecological thought, as well as a social media activist, Baptiste is a much-respected figure throughout Latin America whose innovative research and alternative narratives have eroded prejudice, built bridges and generated social change. At the same time a scientist, an advocate of gender diversity and an inspiring public intellectual, she was awarded the Prince Claus Fund for culture and development prize in 2017.

humboldt.org.com

Natasha Myers

York University Toronto, associate professor

Seeding Plant/People Conspiracies to Root into the Planthropocene: Ten no-so-easy steps for growing livable worlds

Lecture Hall A, 23.0.50 / Wednesday 16.6. / 16.30 – 18.00

An experiment with hypnogogic incantation, this talk seeks to break the spell of capitalisms' green dreams in order to cast a new one. It asserts that there is no way to mitigate anthropogenic violence using Anthropocene logics. Green-washed designs are precisely the technological fixes that will keep us locked into the same rhythms of extraction and dispossession that got us into this mess. It is time to refuse designs for the Anthropocene, to refuse those capital- and labourintensive infrastructures that exquisitely expose the ruse of sustainability as an aesthetic maneuver grounded in Edenic visions of nature. This is not the kind of green that will save us.

There is, however, another kind of green that will save us, but this green must first be disentangled from the violences of colonialism and extractive capital. Green beings like cyanobacteria, algae, terrestrial plants and trees can no longer be seen as natural capital, as the fuel that feeds the growth of green economies. Pulling matter out of thin air, plants must be understood as conjurers, as world-makers. More powerful than any industrial plant, communities of photosynthetic creatures rearrange the elements on a planetary scale. They know how to compose livable, breathable, and nourishing worlds. They are cosmic agents of earthly rearrangement, agents with whom we must learn how to conspire.

Our worlds will only be livable when we realize that we are of the plants, and that our futures are bound to theirs. Displacing the self-aggrandizing Anthropos with the strangely hybrid figure of the Planthropos, the Planthropocene names an aspirational episteme, not a time-bound era, one that invites us to stage new scenes and new ways to see and seed plant/people conspiracies in the here and now, not some distant future. Rooting into the Planthropocene demands that we learn how to conspire with the plants as if our lives depend on disrupting with dissensus the colonial and capitalist common sense that would leave us all to die in the Anthropocene.

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. Her book *Rendering Life Molecular: Models, Modelers, and Excitable Matter* (Duke UP, 2015) won the 2016 Robert K. Merton Prize from the American Sociological Association's Science, Knowledge, and Technology Section. It 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 plant-people conspiracies in a range of contexts, including studies on the arts and sciences of vegetal sensing and sentience, the politics and aesthetics of garden enclosures in a time of climate change. Most recently, she has launched a longterm ethnography on restoration ecology and enduring colonial violence in Toronto's High Park oak savannahs. Myers is also experimenting with the arts of ecological attention through a research-creation project with award winning filmmaker and dancer Ayelen Liberona. *Becoming Sensor* engages art and anthropology to design protocols for an "ungrid-able ecology" grounded in decolonial feminist praxis. natashamyers.org & becomingsensor.com



Photo: Laura Sniderman

Olaf L. Müller

Humboldt University Berlin, professor

Green Shadows: Goethe, Ritter and Ørsted on the Polarity of Green and Purple

Statens Museum for Kunst (National Gallery of Denmark) / Friday 15.6. / 17.00 – 18.15

December 10th, 1777. Goethe descends a snow-covered mountain in the purple light of the sunset. He can hardly believe his eyes. As in a psychedelic dream, all shadows shine in jade green although no such color is objectively present. This striking experience is the beginning of a lifelong obsession. Goethe set up systematic experiments to explore the phenomena of colored shadows and he pursued the complementary structures discovered there far into theoretical physics. As his experiments demonstrated, Newton's famous light spectrum with its green center has a complementary counterpart with a purple center. Moreover, for each optical experiment of Newton's there is a complementary inversion.

Goethe and his scientific partners were convinced that the polar interplay between green and purple, light and dark, warm and cold etc. organizes the entire nature, creating a deep connection of all phenomena. When Wilhelm Herschel discovered infrared light in 1800, for reasons of symmetry invisible radiation was to be expected at the opposite end of the spectrum. Thus in 1801 Johann Ritter discovered UV light with Goethe's method. Another 20 years later, and with the very same method of polarity, a student and friend of Ritter's made his greatest discovery: Ørsted's electromagnetism is the interaction between the polarities of electricity and magnetism; its discovery constitutes both the conclusion and climax of Goethean thought.

The keynote by Olaf Müller is accompanied by an art intervention by Hubert Schmidleitner.



Photo: Matthias Heyde

Olaf L. Müller studied philosophy, mathematics, computer science, and economics in Göttingen (Germany) and Los Angeles (UCLA). In 1996, he was a research fellow at Jagiellonian University (Kraków), in 1997 at Harvard University. Since 2003, he holds the chair for philosophy of science at Humboldt University (Berlin). On invitation of the Japanese Society for Goethean Natural Science, he worked as a guest professor at Keio University (Tokyo). In his books, he argues against skepticism à la Matrix (2003); in favour of good old metaphysics (2003); in favour of moral observation (2008); and in favour of Goethe's attack on Newton's optics (2015); at present he is writing a book about the role of beauty in physics (2019). In his papers, he defends freedom against the neurosciences, pacifism against adherents of just war, individual justice in climate ethics against Western egoism, and mind/body-dualism against materialism. His main concern is a humanistic interpretation of modern science and technology: Both ought to be achievements of humans for humans. farbenstreit.de

Thomas Feuerstein

Artist, Vienna

Green Unicorns

Lecture Hall A, 23.0.50 / Thursday 14.6. / 11.00 – 12.30

A flowerpot, a petri dish or a bioreactor are all small types of a hortus conclusus, the enclosed paradisiac green garden. Medieval representations of the hortus conclusus often contain a unicorn that stands in as a symbol for the maiden and pure nature. The “new unicorns” growing in laboratories are not only immaterial imaginations. They constitute the real matter of incarnated ideas. “Unicorns” are still fabulous objects but they awake to life. But a “unicorn” isn’t a mere metaphor or allegory in art any longer. And art isn’t any longer a semiotic system only. Art becomes a metabolic system. This is the crucial point: It has the capacity to make fine art contemporary and specific. Metabolisms enable art to enter reality; they connect artworks with processes in nature and society, and our daily life. An artwork is a clash of the symbolic realm and the realm of the real. Only the transformations and translations between those spheres bring an artwork into the world. Therefore, green has to be considered as a “metabol,” not just as a color. It involves metabolic processes and becomes a universal topic ranging from thermodynamics to global economics and the processes in our brain. In art history, green was a symbol, now it becomes a “metabol”.

Thomas Feuerstein is a Vienna based artist and writer whose work oscillates between the fields of fine art and media art. Born in 1968 in Innsbruck, he studied art history and philosophy at the University of Innsbruck, and obtained his doctoral degree in 1995. In 1992 he founded the office for intermedia communication transfer and the association Medien. Kunst.Tirol, and was the co-editor of the magazine Medien.Kunst.Passagen from 1992 to 1994. After research commissions from the Austrian Ministry of Science on art in electronic space and art and architecture in 1992 and 1993, he has been a regular lecturer and visiting professor at numerous universities and art academies. As an artist, Feuerstein bridges the interface of applied and theoretical science. His projects combine complex bodies of knowledge from philosophy, art history and literature, to biotechnology, economics and politics. His artistic narratives examine the interplay between individuality and sociality, and aesthetically translate research into molecular sculptures, and the aesthetics of entropy. His artworks comprise the most diverse media, including installations, drawings, paintings, sculptures, photography, radio plays, net and biological art. Feuerstein focuses particularly on the interplay between verbal and visual elements, the unearthing of latent connections between fact and fiction, as well as on the interaction between art and science. At the core of his practice is an artistic method he calls “conceptual narration.”



Photo: Swarovski

BAILES, Melissa, Tulane University

On the green margin': Science, Place, and Gender in Charlotte Smith's 'Flora'

In *Conversations Introducing Poetry: Chiefly on Subjects of Natural History* (1804), Charlotte Smith exemplifies the sea as a space of natural liminalities lacking categorization within the order of nature. Her poem, "Studies by the Sea," presents the ocean as a force that "tears down... bounds" and displays "innumerable changes," harboring "endless swarms of creatures" in "unfathom'd waves." In the final poem of *Conversations*, "Flora," she more closely explores the sea's borderlands and borderlives, such as zoophytes, that straddle different kingdoms of nature, and "plants of the class cryptogamia," referencing vegetation in which the reproductive organs are not easily visible, making classification through usual Linnaean methods difficult, if not impossible. In this way, the sea represents one of several instances in which Smith reveals layers of cultural meaning, with implications for gender, class, and nation, associated with a particular "place." Describing the poem as a revision of Darwin's *The Loves of the Plants* (1789), which she admires and defends in its propriety, Smith claims that "Flora" acclimates young women to Darwin's poetic structure and didactic style. However, Smith's poem also creates a separate agenda through its depictions of various locations, containing epistemological challenges.

Juxtaposing different ideas of place, Smith's "Flora" traces a trajectory from the literary tradition of the classifiable and playfully feminized garden, into "wild uncultured," and, finally, "unknown" scenes, thereby also moving away from the location, form, and ideology set forth in Darwin's scientifically assured poem, undergirded by informative footnotes. In addition to unsettling and reworking Darwin's approach to nature, Smith also here parodies the conventional placements of contemporary (male) poets who, in her portrayal, stand at lofty heights and channel all their mental powers to squint into an abstract distance, too absorbed in some distant idea to notice the intricacies of their natural environment. Referencing specific places associated with her personal history, she depicts such masculine oversights as often having disastrous consequences for femininely-portrayed natural objects. In the poem's penultimate stanza, Smith examines how particular locations can highlight the struggle of taxonomic systems to place ambiguity. "From [the] depths" of the sea, knowledge undergoes crisis, stymied by uncertainties. Smith exposes liminalities straddling between kingdoms, classes, orders, or species that set taxonomists on edge and alter her own claims to scientific knowledge as well. Ultimately, in the poem, she abandons taxonomy and retains only natural history's emphasis on observation. Revising the role of the poet-naturalist, Smith's sea exploration celebrates nature in the absence of strict placement within taxonomic orders, sympathetically identifying with the unidentifiable, whose very existence retrospectively destabilizes her early confidence in the poem's classifications. Through both her interrogations of male naturalists' assertions and her efforts to relate feminine forms of political "power" as well as

poetic creativity, Smith's emphasis on place suggests positive potential for revealing material mysteries within specific locations of the natural environment.

**BENCKE, Ida, Laboratory for
Aesthetics and Ecology**

M/others and Future Kin: Reproduction and Care in Biotechnological Speculation

Our current epoch seems to dwell in a dialectics between (over)production and extinction. Defining the necro-patriarchal power regime as monopoly over violence in the fathers right to 'give death' to women, children and ecospheres alike, philosopher Paul B. Preciado points towards how necropolitics seep through all layers of society as 'extractivism in relation to natural resources, as *occupation* in relation to territory, as *domination* in relation to the social sphere, and as *rape* in relation to sexuality.' Taking Preciado's clue in accounting for how *reproductive* strategies and biotechnological invention sustain hetero-normative regimes of power and come to shape techno-political speculative futures, this paper looks towards theoretical and aesthetic renegotiations of the maternal in an expanded field of queer libidinal economies (Preciado), subversive strategies of care (Puig de la Bellacasa) and multispecies kin-making (Haraway). On the cellular level feto-maternal micro-chimerism reveals the presence of cells from the fetus in the mother's body even decades after giving birth, rendering the Mother a pregnant (!) morphology to think through matters of identity and embedment. In this, the Mother does not merely hallmark hetero-normative reproduction, but challenges liberal philosophies based on individuality and opens up towards crucial questions of how to care for future kin.

Gene editing tools, IVF practices, robotic prosthetics, epigenetic reprogramming initiatives, micro-biopolitical circuits, digital algorithms, and sperm banks are remaking germ plasma and reconfiguring horizons of desire, procreation and reproduction for the human species. The work of insemination, pregnancy, delivery, and care of the newborn is now being changed by new techno-scientific prosthetics and contractual arrangements, offering 'unprecedented opportunities to exercise control over, to exclude, and to exterminate other human and nonhuman living beings' (Preciado), while also providing ethico-political potential for reconfiguring divisions of techno-reproductive and techno-gestational labor. By placing motherhood in a speculative framework of post-gendered and trans-corporeal reproductions of kin beyond genealogy, speciesism and sexual divisions, the paper will look at deconstructive aesthetic experimentations with, and theoretical uprootings of 'patriarchal motherhood' as that which is at once contaminated (blood, milk) and natural (preparing the exploitative grounds for a 'Mother Nature').

BENZ, Stefan, University of Mannheim

Whiteheadian 'Eternality' of Color in the Poetry of Percy Bysshe Shelley

"A colour is eternal. It haunts time like a spirit. It comes and it goes. But where it comes, it is the same colour. It neither survives nor does it live. It appears when it is wanted. The mountain has to time and space a different relation from that which colour has."

(*Science and the Modern World* 87)

In his object ontology, Alfred North Whitehead identifies a fundamental difference between the ontological status of 'scientific objects' (the physical existence of objects) and 'sense-objects' such as sound or colors. He claims that, unlike a mountain, colors exist 'eternally,' defying both time and space. If geological events cause a mountain to vanish and another mountain to take its place, the second mountain cannot be identical with the first. However, the very same shade of color the first mountain bore might well appear again on the second mountain or elsewhere. Color cannot cease to exist, for it does not exist like a mountain does. As it only appears and ceases to appear on a scientific object, color features what Whitehead calls 'eternality.' Whitehead believed in a great benefit of a cooperation between philosophy and poetry, interspersing many of his works with such interdisciplinary musings. He was particularly fond of the English Romantic poets Samuel Taylor Coleridge, William Wordsworth, and Percy Bysshe Shelley. In *Science and the Modern World*, Whitehead employs the poetry of both Wordsworth and Shelley, elaborating on their criticism of empiricist approaches to science. Moreover, he uses their poems to elucidate his concept of 'eternality' from both an abstract, philosophical as well as from the intuitive and concrete perspective of poetry, the latter of which is capable of portraying the 'eternality' of color in its concrete, perceptive context, i.e. its appearance on a 'scientific object.'

This talk will pick up where earlier studies on Whitehead's dialogue with literature have left off, supplying a comprehensive literary analysis of Shelley's lyrical portrayal of 'eternality' and color in "Ode to the West Wind." It will be assessed in how far Shelley delivers an account of the concrete, individual experience of 'eternality' embedded in the context of its perceptual environment, explicative of and complementary to Whitehead's philosophical abstractions. Investigations into this matter are relevant as they disclose new perspectives not only on Whitehead's object ontology and poetics, but also on the conceptualization of nature in the work of the English Romantic poets as well as of American poets of the 1950s and 60s, most notably Beat poets such as Philip Whalen, Michael McClure, and Gary Snyder.

BONNEVAL, Karine, Artist & Claire Damesin, Université Paris-Sud, supported by Diagonale Paris-Saclay

Dendromacy: Intimacy with tree

How to regain empathy towards the non-human? Karine Bonneval and Claire Damesin investigate this question by mixing art and ecology science. Since they met in 2014 at Paris Sud University, they have been developing a joint work about plant-human interactions coupling their practices. Claire Damesin studies plant eco-physiology, dendroecology and tree responses to climate variations, especially by examining carbon flux. Karine Bonneval work focuses on the plant otherness, and the complex and specific interactions that link human and plants. Her pieces explore the possible links between vernacular and technologies.

Both of them conduct experimental studies on invisible exchanges between plants and/or humans with their environment but from clear different point of view, either matter flux or sensitive feelings. Here, they decided to mix their approaches by focusing on the respiration of the tree, its perception and interaction with the human one. This work was supported by Diagonale Paris-Saclay and lead to a movie named Dendromacy.

Dendromacy aims to connect the breathing of a tree with that one of a human body. The unique character of the film derives from both the process method between the artist and the scientific and the use of a recent technical device. The film was directly shot in the field, in Barbeau Forest (<http://www.barbeau.u-psud.fr/>). A chamber inspired by gas exchange chamber used for scientific CO2 efflux measurements was built around the trunk of an almost centennial oak tree. This chamber was an invitation for the human to share intimacy with the tree, keeping in touch with the whole forest as the chamber was transparent. Contrary to the human breathing which is highly concentrated through mouth and nose, that of the tree one is characterized by a low CO2 efflux over its whole surface. The latest was concentrated in a small plastic flexible chamber hermetically sealed to the bark hours before the experiment in order to reach a threshold detectable by a cooled infrared camera. This camera (FLIR GF 343), recently developed for the detection of gas leaks in industries, was used for the first time in a forest. This original protocol allowed us to gently catch the breath of the tree, and to film our crossed invisible breaths. These moments are fleeting and show the fragility and preciousness of the interactions. During the making of the film, spontaneous feelings and ideas were expressed like a dance of back and forth between artistic and scientific sides. Therefore, a sensitive relationship was emerging between the tree and the human transforming the scientific-inspired experiment into a sensual and poetic experience.

BORKFELT, Sune, Aarhus University

Behind the Green Veil: Slaughterhouses and Nonhuman Animals in the Fiction of (Post)Modernity

While farmed animals tend to be connected to green fields and countryside ideals in imaginary and commercial culture, actual contemporary practices in animal agriculture are, for the vast majority of these animals, very far from the idyllic country life so often imagined. As such, most animals bred for meat or other animal products are neither able to live their lives in green landscapes, nor available for viewing by average citizens, whose idealized imaginings can hence remain relatively undisturbed. The factory farm and the slaughterhouse exist as what Michel Foucault called heterotopias – places of death and violence removed from common discourse, and where access is restricted, in such a way that we need rarely confront their realities.

Yet we may encounter such closed spaces of violence to non-human animals in fiction, which uneasily negotiates the relationship between the idealized visions found in our cultures and the realities behind the production of animal products. Drawing on a number of contemporary works of literary fiction, this paper explores the uneasy ways in which authors approach the subject of animals slaughtered for food, and of slaughterhouses specifically, as beings and spaces conceptualized as somewhere in between the green countryside and the realities of urban, industrialized modernity.

BORUM, Peter, University of Copenhagen

Artefactual seriality between animal and plants

Whereas animal morphogenesis takes the form of an initial differentiation, followed by a continuous organogenesis of the differentiated parts (including, in some cases, metamorphosis), vegetal morphogenesis rapidly becomes a matter of sequential repetition – a growth we might almost term 'gnomonic' –, even though the direction of growth in each specimen depends (among other things) upon the architecture of the species. This paper will seek to investigate the possible implications of taking vegetal morphogenesis as a conceptual point of departure for the aesthetic understanding of seriality in artefacts. In for instance Gilles Deleuze and Félix Guattari's *Mille plateaux* (1980), the (vegetal) tree-structure is explicitly not posed as heir to the notions of repetition and seriality put forth in Deleuze's earlier *Différence et répétition* (1968) and *Logique du sens* (1969) – but viewed from the perspective of morphogenesis, this relation is inverted. Likewise, Gilbert Simondon's notion of the technological tendency towards concretion (*Du mode d'existence des objets techniques*, 1958) seems indebted to the implicit model of animal structural and metabolic unity, and mobility (which, being valid for protoplasm, is of course primordial to the living). But instead of having the choice between referring to inorganic (crystalline) and animal organic organisation, the aesthetics of the artefact may also turn to the organisation of plants (as well of course as, by extension, to that of fungi).

BRADSTREET, Tom, University of Oslo

Diagnosing the Diagnosis: Towards a 'Green Reading' of/in Jeffrey Eugenides's *Middlesex*

The last decade has witnessed a renaissance of discussions regarding the methodological norms of critical practice within literary studies, and specifically regarding the hegemony of what Paul Ricœur dubbed the 'hermeneutics of suspicion': a mode of critique that excavates a given text in order to recover and explicate its hidden, 'repressed' meaning. Also known as 'symptomatic reading', this approach implies the existence of an 'illness' that must be diagnosed within the 'body' of the text. In this presentation I argue that Jeffrey Eugenides's *Middlesex* can be read as an 'allegory of symptomatic reading' which stages the interpretative encounter between the novel's intersex protagonist and his non-normative corporeal form. I argue that Cal's reading of his 'extraordinary body' effectively leads him to diagnose himself as 'disabled', and thus to idealise – and pursue – a problematically normative embodiment. This begs the question of how *else* Cal might read his body – and with what consequences? I identify answers in non-symptomatic reading practices such as those theorised by Derek Attridge, Eve Sedgwick, and Heather Love. Stephen Best and Sharon Marcus have corralled these alternative modes of reading under the aegis of 'surface reading' – a critical sensibility that attends to what the text *presents*, rather than what it supposedly *represents* – but I prefer the term 'green reading', with its connotations of flourishing and immaturity. As naïve as it may initially seem, I suggest that a 'green' approach represents a fresh paradigm for an ethical encounter with the (textual) Other, in which a partial, vulnerable subject reads a singular, irreducible object that refuses to be flattened into a *condition* that it is 'supposed' to exemplify. This resistance, I argue, gestures towards the possibility of a universal exceptionalism that is also the grounds for the kind of 'affirmative biopolitics' theorised by Roberto Esposito.

BROWN, Adam, Michigan State University

Bioremediating Greenness - Rethinking Human Exceptionalism

The Industrial Revolution, of the 18th and 19th centuries gave rise to modern cities removing humans from an entangled connection with nature. A growing body of genetic, physiological and psychological evidence suggests that humans have evolved biologically and culturally to be attracted to greenness. It seems that our need for "green" was so strong that during the height of the Industrial Revolution we mass-produced arsenic laden synthetic green pigments that were used by artists, in garments, in printed wall paper and even as a colorant for candy. One of the most popular green pigments was invented in 1775 by the Swedish chemist Carl Scheele. Like many of the new synthetic pigments, "Scheele's green", as it was known, was composed of heavy metals that turned out to be highly toxic. Thus, the human drive to recreate greenness within cities led to a series of paradoxes and contradictions. The very chemical processes

artificially employed to bring greenness back into people's lives helped to contribute to the Anthropogenic destruction of the environment. Painters, such as the Impressionists, used these mass-produced toxic pigments to portray the very nature that the Industrial Revolution was eroding. And ironically, while these industrialized paints allowed painters to get more "in touch" with nature by painting *en plein air* for the first time, artists simultaneously lost touch with the materiality of producing their own paints. The further we removed ourselves from nature the more we tried to connect with it and the more our means of connecting led to its destruction. These speculations and scientific inquiries into humankind's drive to artificially reconnect with 'green' are transposed into a series of artworks and experiments that investigate the various indexical relationships embedded in the production and use of Scheele's green. I recreate the chemical processes by which the pigment is produced and transformed into paint, re-establishing the connection to materiality that industrialized tube paints destroyed. I produce Scheele green wallpaper and recreate the moist conditions under which the paper becomes infested with fungus that breaks down the pigment into the gaseous arsenic compounds that poisoned Victorian households. I experiment with various bacterial ecologies that can metabolize and remediate the arsenic and transform it into safer compounds that can then be recycled with less toxicity thereby enlisting nature to rectify the very factors that threaten it. And, in the ultimate irony, I plan to collaborate with the great forger Wolfgang Beltracchi to produce an "Impressionist" painting that is then bio-augmented by microbes that will simultaneously "destroy" the painting while making it safe, revealing the double Anthropogenic lie at the heart of the art, which is that the green is deadly and the art fake.

BRUHN, Jørgen, Linnaeus University & Anne GJELSVIK, Norwegian University of Science and Technology

Turning Green Black: Mediation of the Anthropocene in Zhao Liang's *Behemoth* (2016)

The Anthropocene (aka the Capitaloscene, or Plantationoscene) is a temporal concept marking out a new geological epoch on planetary scale, with a number of characteristics, including climate change and decreasing biodiversity. It is a scientifically defined epochal limit on the one hand, and an existential experience of loss, Angst and nostalgia on the other. Literary scholar and writer Robert McFarlane has argued that making people understand the implications of the Anthropocene fall short for two reasons: 1) it is difficult to articulate the Anthropocene, and 2) it is difficult to shock people in our current media situation. Accordingly, McFarlane calls for new ways of articulating the Anthropocene, either by way of new technologies or a new sensorium. In this paper we will demonstrate how Zhao Liang's activist documentary/cinematic poem *Behemoth* (2016) combines under cover depictions of the miner area in inner Mongolia and China's ghost town with Dante's *Divine Comedy*. By combining medial elements and expanding the documentary

genre *Behemoth* visualizes the Anthropocene in a shocking new sensorial way. The Anthropocene, as manifested in *Behemoth*, basically laments the loss of "green".

BUCKLEY, Cali, Independent Scholar Studying Ivory in the Twenty-First Century: The Preservation of Objects and the Conservation of Elephants in Context

It is easy to point out today that elephant ivory is an inherent artifact of anthropocentric violence. Nonetheless, the increasing—and increasingly necessary—steps being taken to squash the trade in illegal modern ivory have also had an impact on the transportation, display, and preservation of historical ivories. Historians of material culture must consider not only how to talk about the origins of ivory, but how to plan its future as an extant material quickly fading from view. In our current era, many are beginning to realize that efforts must be taken to preserve the wildlife that humanity has been decimating for centuries. Ivory is an easy target for change—it must be taken with force from one of the largest land-dwelling creatures on the planet. Through colonial times, entire herds of elephants were slaughtered simply for their tusks to be made into other objects. As a society, there is a general agreement that such poaching must be stopped. The way to do so, however, is something I ask us to consider carefully. The most extreme measures put forth to decrease the illicit market in ivory include the destruction of all ivory. Public crushings and burnings of confiscated ivory occurred in the United States, the Philippines, Kenya, and Gabon. Even Prince William suggested that all of the ivory objects in Buckingham Palace be destroyed, despite their historical origins. Such efforts have garnered praise for attacking the supply for a booming market as well as sending a symbolic message. For a historian, these events do bring to light one particular problem with ivory: the inability to distinguish historical ivories from modern ones. The historicity of an object relies on it having a clear provenance. It is possible to differentiate between ivory and non-ivory as well as between different types of ivory (i.e. elephant, walrus, narwhal), but no scientific measurements have provided unquestionable proof regarding the age of ivories.

Even with a clear historical origin, some objects may not be able to travel. Within the last few years, the United States issued a near-ban on ivory objects. This has impacted not only the trade of objects between museums, but the travel of personal objects such as instruments if the holder does not have proof of their origins. The British Museum famously ran into problems loaning a Byzantine work of art to an American institution. Despite such radical changes in the transmission of ivories—and the lack of consideration for historical artifacts—few have offered statements of public dissent. In light of recent discussions on the destruction of both contemporary and historical ivory objects, it is crucial to discuss and create a framework for the conservation of both the material as it exists in historical objects as well as the elephant, the survival of which has been—and is—greatly impacted by the wealth of its tusks.

CEDEÑO MONTAÑA, Ricardo,
Universidad de Antioquia Medellín

Encoding Green: between signs and filters

RGB (red, green, and blue) is the most popular colour model and constitutes one of the building blocks of visual digital culture. This model is the site where colour science becomes everyday knowledge and constitutes a crucial source for the study of visual media, its aesthetics, and the practices of green mixing and synthesis. A colour encoding model describes the transposition of the visible light spectrum into colour data, i.e. signals, code words, and algorithms. This paper presents a media archaeology on the colour science behind the encoding of the green portion of the electromagnetic visible spectrum in the RGB model and its systematic application for synthesizing green in electronic visual media. The paper opens with the colour-matching functions established during the 1920s to fix the trichromatic theory in a specification in which three discrete stimuli are mixed to produce any colour in electronic media. The second section focuses on the the encoding algorithms used in digital video to express in symbols the values of green as a set of luminance and chrominance signals. The last section describes the Bayer Colour Filter Array (CFA) used widely in imaging sensors such as CCD and CMOS. This physical array privileges green over the other two components on the principle that such arrangement mimics the human eye perception of colours. On the one hand, this paper addresses the question of how during the 20th century the knowledge about the green portion of the visible electromagnetic spectrum has been standardized, encoded, and physically implemented in imaging sensors. On the other hand, the focus on the green part of the RGB encoding model focuses on how during the 20th century our perception of green has been affected by the implementation of the scientific knowledge of colour in electronic visual media.

CHOMAZ, Jean-Marc, LadHyX,
CNRS-École polytechnique

Soleil vert, Speculative epistemology of an Alien

I'm an alien, I'm a scientist alien, I'm an Alpha Lyraen on the Earth. I'm missing the warm ultra blue of my star, Alpha Lyra or Vega, the Sun here is cold and green. In the sky of my origin, your Sun appears as an insignificant dull star of magnitude 4.3, 25 light years away in the constellation of the Colomba (using the human designations). Of course the Sun is but twice smaller and forty times darker, its temperature being only 5800K instead of 9600 K. My eyes see from hard ultra-violet at 0.1mm to infrared 1mm. The living on my planet has to stay in the shadows to survive the burn, and plants and animals diffuse the stiffer Vega' rays, their appear ultra-violet in my eyes and would be deep blue for humans. In the small part of the light spectrum that I share with the humans, my eyes have only two types of photosensitive cell whereas humans usually have three. For them I am just a colour-blind person and I cannot tell them about the

thousand shades of ultraviolet colours I may distinguish to identify my native flora. As them, my vision has been designed by evolution to "see" the part of the electromagnetic wave spectrum where my native star is the brightest and to perceive the superposition of all the photons emitted by the star as white, the perfect diffused colour. But I am not lured and I know this is just a perception not a fact, a limitation of my ability to see the infinite colours space. I have only ten different types of photosensitive cell and each single wavelength of the spectrum visible to me, will trigger a response of at least two types of my vision cells, the sum of this signal giving the intensity of the light and the nine independent ratios of one amplitude to the sum will define nine angles spanning the colour space. Of course nine angles is nothing compare to the infinitely many values contain in a spectrum of a particular star. This vision of the colours is crude and misleading since the superposition of two monochromatic lights may trigger the same signal as a single monochromatic light but the revers is not true and usually the vision signal the superposition produces cannot be generated by a single monochromatic wave. Thus if my vision indeed, as for humans or colour-blind humans, sees, identifies and names separately all the monochromatic lights of the visible spectrum (different for me or humans), it sees many other colours, not in the monochromatic light spectrum, lying in a colorimetric space of nine dimensions for me, two for the humans and one for the colour-blind humans.

True colours of stars are then, their specific spectrum, an infinitely corrugated discontinuous function of the light amplitudes versus the wavelength of the photon. The spectrum print of stars is the analogue of the DNA print of livings but it is far more complex and mutating, its maximum is given by the temperature of the star through the black body formula, the ultra-violet 0.2mm for Alpha Lyra and the green 0.5mm for the Sun. But as an alien scientist imbedded among the human scientific community I am missing why not naming the Sun and all the stars of the same portion of the main sequence green stars as defined by their most intense radiation. Why using the anthropocentric concept of white? Why facts as the colour of a star, its gender, should be as perceived by the human eye and not absolute. "It takes a man to suffer ignorance and smile" and scientists should be themselves no matter what they say and declare the Sun green, le soleil vert!

CIELEMECKA, Olga, University of Linköping

Green, white, red. Environmental politics and protests in the Białowieża Primeval Forest in Poland

Forests often seem to be imagined as a pristine and timeless space untouched by human presence. Consider Alan Weisman's post-apocalyptic *The World Without Us*, in which he envisages the world after the ecological catastrophe and the disappearance of the human. In the book, the Białowieża Forest – a huge woodland that straddles the border between Poland and Belarus and includes the last and largest remaining parts of primeval forest in Europe – prefigures both the pre-historic past and this posthuman future of Earth. In my

paper, the forest is recognized as a certain material, botanical fabric and an ecological system as much as it is a discursively saturated and biopolitically regulated site (in a classic Foucauldian sense, as a place of intervention of power regimes deciding on life and death). In other words, it is what feminist technoscience scholar Donna Haraway (2003) would call a “natureculture.”

I turn to the ongoing massive logging project at the UNESCO-protected Białowieża ecosystem, considered Europe’s last ancient forest, to look into temporalities of the forest, questions of extinction, and possibilities of survival “on a damaged planet” (Tsing et al. 2017). In March 2016, the Polish Ministry of Environment adopted a decision allowing for a three-fold increase in logging operations in the forest, including in strictly protected areas, invoking a bark beetle outbreak as justification. This decision provoked a vehement protest on the part of environmental advocates, citizens, and the European Union institutions. While the bark beetle infestation supposedly calls for an immediate action in a form of destruction of infected trees, discourse used by the officials reasserts the “politics of purity” (Ah-King and Hayward 2013) and intersects with nationalist and right-wing narratives around migration, refugee crisis, “the future of the country,” and national security. In my presentation, I look into “green” and “white-and-red” (the colours of the Polish national flag) “forest discourses” to understand what kind of concepts of the future emerge from them. In the times marked by a global environmental crisis, species extinction, loss of habitat, and climate change, as well as political instability, the questions of survival and future become omnipresent (see: e.g. Bird Rose et al. 2017). By looking at Białowieża, I juxtapose white-and-red reproductive futurity with imaginaries and promises that Białowieża carries as a place that needs to be saved for our own earthy survival. I venture into territories of environmental and plant humanities, queer ecologies, and multispecies studies to further problematize these questions.

CLARKE, Bruce & VOLK, Tyler

Semi-Plenary: Biospheres and Technospheres

In a 2010 address entitled “How Big is Big?” delivered to the Collegium International—an international body dedicated to institutional preparations for a world government, composed of statespersons, philosophers, scientists, and academics including Henri Atlan, Manuel Castells, Jürgen Habermas, Vaclav Havel, Edgar Morin, Mary Robinson, Joseph Stiglitz, and Paul Virilio—the German philosopher and aesthetician Peter Sloterdijk stated that “we are justified in transposing Spinoza’s famous adage that no one has to date determined what the body is capable of (and he referred to the human body) onto the Earth. No one has to date found out of what the Earth’s body is capable. We do not yet know what development will become possible if the geosphere and biosphere are advanced by an intelligent technosphere and the noosphere.”

In this panel we approach the Earth’s body from historical, systems-theoretical, and futurological perspectives to think about what know-ledges need to be called upon to cultivate the Earth systems intelligently for the long term.

Gaia beyond Green: Autopoiesis and Technology Bruce Clarke, Texas Tech University

The Anthropocene stratum of humanity’s residual works and effects as well as the increasingly acidic oceans and atmosphere: are all of these components now not Gaia, too? Does the boundary between the biosphere and the technosphere lie within Gaia or without? Gaia’s ongoing thought must concern itself with these forms of closure of the planetary system. In the 1980s the evolutionary thinker and Gaia theorist Lynn Margulis began to think Gaia in relation to the fate of technology through the concept of autopoiesis. We will look at a key article co-written with Dorion Sagan, “Gaia and the Evolution of Machines,” in which Margulis couples the technosphere to the operations of the Gaian system. Following Margulis, we can say that Gaia’s responsiveness propagates from both its biotic and metabiotic components. But it does so only because its own autopoiesis continues to emerge from deep integrations of the autopoietic closures of its living subsystems. For all the transformative interchange, uptake, and outflow between organisms and their environments, the operational distinction between life and non-life must not be erased from our conceptualizations of the technosphere. The question I will explore in this talk concerns where the Gaian system’s *metabiotic* boundary may lie in particular regard to the built technological infrastructures of its immediate Anthropocenic environment.

Global Prosperity: A Positive Vision Tyler Volk, New York University

In “How Big is Big,” Peter Sloterdijk has portrayed global forces in play like mythic “titans.” He writes, “We will see the struggle between expansionism and minimalism. We will be expected to choose between the ethics of fireworks and the ethics of asceticism.” Here I attempt to provide a biogeochemical foundation for those who side with fireworks and expansionism. This exercise is particularly relevant to the circumstance that most of us have at least implicitly assumed the continuation of affluence via lifestyles that are significantly above the global average. Specifically, I will dig into the planetary potential of renewable energies, water, metals and minerals, and land. For example, analyses have shown that we should be able to double food supply with no additional deforestation. The challenges to reaching this proposed global prosperity are enormous, and almost certainly will require changes in world politics, economics, technology, and personal consciousness. All this hopefully will progress in a way we billions collectively, consciously choose. Solving climate change has to go along with achieving global prosperity. And so does a secure solution for world peace. I will argue that it would be a great benefit if all people shared a vision for a future in which all can thrive.

COSTANTINI, Giovanna, N/A

The Green Line – Color as Social Construct among the Parisian Avant-garde

The painting *Madame Matisse, La raie verte/ Portrait of Madame Matisse, The Green Line* (Copenhagen, Statens Museum for Kunst/National Gallery of Denmark), a portrait of Matisse's wife of 1905, is considered one of the most famous paintings of 20th century portraiture yet some critics have found its unorthodox use of color indicative of underlying tension, personal disaffection, an attack on artistic convention and an exaggerated assault on an individual such as to compromise personal identity. But during the first decade of the twentieth century, certain colors came to characterize the palette of many modernists such as Picasso during his Blue and Rose periods, whereby specific colors accessed wide-ranging literary and allegorical associations, wordplay and *argot*. For some artists, including Matisse, the color green featured in many artworks in ways that suggest meanings extending beyond the emotive, expressive qualities long attributed to Fauvism. This paper will explore the proliferation of green tonalities in paintings produced in Paris during the first decade of the 20th century among a group of closely related artists that attests to an expanded repertory of semiotic meanings and poetic resonances assigned to the color green by artists attuned to modernist essentialism. It will investigate not only subjective aspects of color composition, color contrast and value, but also formal and iconographic relationships identified with social edification that involve contemporaneous architectural referents, planarity, tectonic construction, verticality, materiality and effects of applied brushwork. It seeks to demonstrate the manner in which luminosity and equilibrium resulting from pure color harmonies attest to an engagement of color as a metonym for painting itself.

DOHERTY, Gareth, & MØLLER, Birger Lindberg

Semi-Plenary: Paradoxes of Green Landscapes of Bahrain

Doherty, Gareth, Harvard University

The presence of green in cities is often not very green from an environmental point of view. In fact, the provision of greenery in urban areas, with few exceptions, bears significant environmental costs in terms of the resources required to maintain it. To have and to be green is often presented as a moral imperative, yet the provision of urban greenery can be morally questionable, especially in arid environments such as Bahrain. Urban green regularly takes the form of "landscape" or "landscape architecture," a particularly refined or imagined form of landscape. Landscape alludes to many typologies: gardens, parks, cemeteries, and so on, expanding in scale to "the object spread out beneath an airplane window" and beyond. This understanding of landscape might include desert, cities, and green space. When I began

my fieldwork, I was interested in the hard and soft infrastructures that sustained varied landscapes at a range of scales—and in their relationships with the land, one another, and people: the urbanism of landscape. Landscape, in Bahrain, as I came to understand, is a word mostly associated with the contrast of constructed green to an indigenous arid environment. Perhaps this is because the word's closest Arabic equivalent is *manz.ar tabi't-*, which translates literally as "natural scenery," but has the connotation of "beautiful scenery." During my year of fieldwork, I noticed different understandings of the word among my Bahraini interlocutors than my British Isles and North American training had led me to expect. Often people I talked with referred to *al-khudra*, or "greenery," more often than not describing the lush, tropical-style, carefully tended gardens full of foliage that compete with one another for the Bahrain Gardening Club prize. I was interested not just in these verdant, curated landscapes of the elites but in the ordinary landscapes where everyday life is lived, as well as in the larger matrix of infrastructures that holds them all together. In an attempt to better communicate with my interlocutors in Bahrain and engage in a conversation on the "urbanism of landscape," I began to focus my fieldwork on concepts of "green" in an arid urban environment. In doing so, I adopted my interlocutors' category for landscape, taking into account green's spatially and culturally varied referents. This presentation will be based on an ethnographic account of a year I spent in Bahrain, walking through its landscapes, talking to people, and interpreting the various values attached to greenery. Through vignettes from my fieldwork, the talk will address why an understanding of green as a color is fundamental to understanding the landscapes not just of Bahrain, but of cities and settlements around the world. My aim is to demonstrate, through the lens of green, that landscape is not just central to the political, economic and social life of Bahrain, but that that green landscape is instrumental in shaping that political, social and economic life too.

Birger Lindberg Møller, Center for Synthetic Biology, University of Copenhagen

The ultimate way to "Go Green": Channeled light-driven production of valued compounds

Plants and other photosynthetic organisms are the organic chemists par excellence in nature. Combined with their ability to carry out photosynthesis based on the use of solar energy and carbon dioxide from the air, photosynthetic organisms are the power houses of the future. In addition to serve as our main food source, they are a rich source of medicinal compounds, colorants and flavors. The latter types of compounds are typically produced in minute amounts, just enough to meet the demands of the host organism. The structural complexity renders the compounds difficult to prepare from fossil resources using organic chemical synthesis. In our efforts to move towards a bio-based society, sustainable biological production of these compounds could pave the way.

In our research we study how plants manage to synthesize these costly and structurally complex compounds. Many biosynthetic pathways are built of functional modules and we identify the modules, their input and outputs. We can also alter the localization of the modules within the cell. A major goal has been to move entire biosynthetic pathways into the chloroplasts. This is where the reducing power of the photosynthetic cell is generated and this power may be directly used to drive increased formation of valued compounds. By collaborating with nature and using the approaches of synthetic biology for combinatorial biosynthesis, the functional modules may be assembled in new combinations to expand the landscape of structural diversity into new-to-nature structures. In this manner, we can obtain new valued plant constituents. In the lecture formation of the high value medicinal compound forskolin, the flavor compound vanillin and the red pigment carmine will be outlined.

DRAYSON, Hannah, University of Plymouth
Colour perception and the ‘language stance’; reconnecting hypnotic suggestion to ecological consciousness.

This paper reflects on the role of language in the social shaping of perception by exploring the ‘plasticity’ of colour perception. While illusions such as the Cornsweet illusion demonstrate the considerable extent to which colour perception is modulated by the perceived environmental context of a visual stimulus – and expectations of shape and form influence perceived brightness and colour values -, this paper considers the social dimensions of colour perception and the way they may be mediated by language. Through a long history of experiment and debate it has been established that the ability to ‘see’ and differentiate certain colours that seem given, is a cultural skill – often developed through parental prompting and immersion in particular visual cultures and habits (Deutscher, 2011, pp.70-1). In adulthood, colour sensitivity and detection has been shown to be open to influence through hypnotic suggestion, an effect that is neurologically as well as phenomenologically detectable (Kosslyn et. al. 2000). What these examples seem to promise is an indication of how language may be understood to literally change what and how we see, a process which, this paper will argue, may be better conceptualized by attending to the somewhat overlooked concept of ‘suggestion’. The notion of hypnotic suggestion may be useful for a number of reasons. The various healing and psychotherapeutic practices that have been historically connected to it mean that it offers to reinvigorate readings of bodily and linguistic ontology. Encapsulated by the concept of suggestion is an apparent potency of language which may be better thought not as a set of linguistic codes, but as actions, a perspective explored by Stephen Cowley’s

(2011) “language stance”. For Cowley, acts of “linguaging” are understood as ecological – socially engaged, bodily, and worldly. In this sense ‘doing things’ with words (Austin, 1955) involves an understanding of utterances as physically and socially situated and directed acts, which arguably, in some cases involve performances that direct and share attention, to point to and produce resonances. By considering a broad reading of suggestion within Cowley’s language stance approach, this paper offers a way to think about further about language’s relation as a continuum of embodied and social perceptual practices, an observation which has particular resonance for contemporary theoretical movements concerned with themes of resonance, media and social contagion such as affect studies. Drawing particular attention to the ecological embeddedness of languaging updates and reinvigorates a reading of the meaning of delivering hypnotic suggestion as a social and linguistic phenomena, and as a medium, and contributes to broader understandings of the potency of language within the continuum of embodiment, perception and experience.

DRUM, Meredith, Arizona State University
**Virtual Violence,
Virtual Compassion**

The blockbuster simulations of AAA games represent and produce social-economic relationships full of power, violence, inequity and desire – virtual worlds in flux with the more-than-human realms necessary for production. With this paper, I am pursuing a path begun by Harun Farocki, before his untimely death. With his *Parallel I-IV* (2012-2014) he traced the history of imaging technologies from celluloid to CGI. Like Farocki, I am examining the processes of production in order to expose the gendered, economic and environmental conditions that spawn these virtual icon-ideals. As an artist, I have manifested my critique in a series of digital animations, which follow the rotation of pleasure and anxiety through the emotional terrain of computational models to investigate possible impacts on the social imaginary. My aim is to contribute to processes begun by my heroes and expanded by my peers – the assemblage of a vision for a more symbiotic and compassionate future.

DUFF, Tagny, Concordia University
Wastelands: Towards a dirty future

Bacteria and their companions, bacteriophages (viruses that target bacteria), are the workhorses of biotechnology today. When harvested and bioengineered from waste products, microbes are used to produce so called “green” and “clean” energy”, medicine and food nutrients to support the human race. The technoscientific manipulation of microbes is intended to create sustainable and renewable energy for life on the planet. The bioengineering of microbes may also generate new micro-ecologies that endanger living organisms and create unforeseen and dangerous consequences that are anything but “clean” and “green”. How can humans re-vision our physical, societal and aesthetic relationship with microbes to communicate more complexity with our microbial

kin and selves beyond notions of purity and cleanliness? What might a world in a post-fossil fuel era powered by microbes and waste look like 500 years in the future? This paper explores the previously mentioned questions while reflecting on the research creation of Wastelands, an interdisciplinary art project by Duff. The project features a series of small scale living biogas fermentation sculptures powered by methane generating bacteria, waste and controlled by phages. The project was researched and produced during a series of research residencies including The George Eliava Institute of Bacteriophage, Microbiology and Virology (Tbilisi Georgia), The Sylvain Moineau lab at the University of Laval, (Quebec, Canada) and the Bridge Residency Program at Michigan State University in collaboration with the Anaerobic Digestion Research and Education Centre and Dr. Dana Kirk (Michigan, USA).

ERLANSON, Erik, Lund University

The Politics of Conservation: On the Preservation of Linnaeus' Ash and Other Surviving Life Forms

In the year of 1741, Swedish botanist and zoologist Carl Linnaeus made a few notes concerning an ash tree on Stora Karlsö, a small island in the Baltic Sea. Since then, the ash is known as Linnaeus' ash. In 1938, an enterprise formed in the 19th-century for the preservation of the natural values of the island realized that the ash was dying due to a hole in its trunk. The enterprise disinfected the tree with sulfur, filled the hole with concrete and Linnaeus' ash survived. This paper is an analysis of the discursive conditions that makes such conservation practices reasonable, even necessary. Drawing on recent work on biopolitics, I argue that the fate of Linnaeus' ash may serve as a paradigm for the understanding of green politics in general and of our relationship to other life forms threatened by extinction and that have lost their immediate use—the ash was once an important navigation mark in the Baltic—and are threatened by extinction. Most importantly, it highlights certain determining features of the cultural politics of the modern European welfare state that would otherwise remain in the dark. The investigation of the fate of Linnaeus' ash and the discursive conditions that made its survival possible is informed by the work of Jean-François Lyotard and Jane Bennett. Departing from such a theoretical framework, I have the intention to account for what may be termed the discursive force of the ash tree and, *mutatis mutandi*, of the modern artist that the cultural politics of the modern European welfare state preserve.

FAUBERT, Michelle, University of Manitoba and Northumbria University

A Natural Death? The Greening of Suicide in Romantic-era Literature

Some of the most famous images of the Romantic period are by John Martin, whose massive canvases of apocalyptic landscapes capture the taste for the sublime so popular in artistic productions of the time – what William Hazlitt would call the “spirit of the age” – although in a negative iteration

that echoes through such literary productions as Lord Byron's “Darkness,” Mary Shelley's *The Last Man*, and John Clare's “An Invite to Eternity.” Significantly, all of these works depict the Romantics' beloved nature in a state of spectacular collapse, offering visions of eco-apocalypse that Romantic criticism, such as that by Morton Paley and Timothy Morton, is only now beginning to recognize as a corrective to the more familiar celebrations of the durability and vivaciousness of nature in Romantic-era art. What has not been examined, however, is the relation of the all-important Romantic “self” to the concept of eco-apocalypse. The highly individuated, autonomous self of Romantic-era literature is frequently viewed as the child of Jean-Jacques Rousseau, who claimed that humans can achieve their truest and best selves in a state of nature, where he is not perverted by the strictures and class-system of society. Living in the rural idyll of Grasmere, William Wordsworth and S. T. Coleridge made this adage the basis of their personal and literary philosophies, wherein the natural environment nurtures the formation of the Romantic self. But if nature may crumble, may the Romantic self not do the same? In this paper, I will explore depictions of literary characters committing suicide in a natural setting as illustrations of the dissolution of the typical Rousseauvian, Romantic self. While the medical and legal view of suicide in the period proclaimed the act perverse and unnatural, characters in Mary Shelley's *Mathilda* and “The 2 Mourner,” Wordsworth's “The Complaint of the Forsaken Indian Woman” and “The Mad Mother” demonstrate their alliance with nature in their suicidality, suggesting that if nature may self-destruct, so, too, may the self.

**FEDOROVA, Natalia,
Saint Petersburg State University**

Everything that lives should also write: a posthuman reading of pastoral literature in Christian Bok's *Xenotext*

Prismatic critiques of current green paradigms of ecology suggest moving beyond near-to-hand pastoral locales and other anthro-scenic views. The paper is focused on a prismatic reading of *Xenotext* by Christian Bok as an anti-bucolic text written within a genome of *Deinococcus radiodurans*. Human protagonists, Orpheus and Virgil, alongside the corollary of nonhuman agents allow Bok to hack the life-death dichotomy and reverse engineer the linearity of death. The nature of writing within the bacteria, as well as the intrusive nature of the protagonist's behavior, contribute to rethinking of the notions natural, alien, and foreign. Christian Bök has encoded a poem (called ‘Orpheus’) into the genome of a germ so that, in reply, the cell builds a protein that encodes yet another poem (called ‘Eurydice’). Bök changes the nature of interactivity to the possibility of communication with the posthuman half-live entity. *Xenotext* involves creation of a monster, a composite unity assembled from parts of different creatures, i.e. Homer's Chimera. Monster points to limits of an antropocentrist imagination and equals it to permutation of elements. Recalling of the figure of the monster also contributes to analyzing the fear of the

unknown composed of the parts of known. In case of the living matter a possibility of destructive properties of the new organism (deadly virus, or an unpredictable mutation) always remains present. It presents the double-edged threat of biohacking and the possibility of a permutation that not only didn't previously exist, but also didn't need to exist on any «biological» basis; the unwelcome daemon in the DNA or deus ex ibid. Reading in this case implies an ingredient of cautionary surveillance as well as de-coding.

The host for the collection of poems is a bacteria form, *Deinococcus radiodurans*, meaning «surviving radiation» (and dehydration as well as extreme temperatures). Christian Bök strives for a robust and durable writing system, an archive for the future, a pyramid with indecipherable hieroglyphs, physically present, testifying to the legacy of our civilization. This he proposes to achieve through a biocode - assigning a short, unique sequence of nucleotides to each letter of the alphabet. Xenotext involves creating conceptualist work using a biological material as a form of inscription, creating biological form with words. The interpretations of this fact seem to be even more fascinating than the possibilities of reading written in flesh. It is an appropriation of divine creation, and taking a possibility of meaning making from a biological act. This shift to new materialisms requires critical approaches of reading as monitoring and deciphering, on one hand, and reading as co-presence on the other.

FINN, Maria, Department of Geosciences and Natural Resource Management (IGN), University of Copenhagen
“News from Ecotopia”

William Morris, designer, and founder of the Arts & Crafts movement, wrote his tale “News from Nowhere” as a series for the British socialist newspaper “Commonweal” in 1890, which later was published as a book. This story takes place in a future society where competition is replaced with content, where work is pleasure and where the big cities have crumbled. People now live in smaller villages in the country, in a world where nature is enjoyed and appreciated. Morris was involved in the socialist movement and believed in reforms to create better living conditions for the working classes. Ernest Callenbach, writer, and editor at the University of California Press, published his novel “Ecotopia” in 1975 where he describes a state which is governed after an ecological model. This state, “Ecotopia”, (consisting of northern California, Oregon and Washington) used to be a part of the United States, but is now a sovereign country which few Americans dare to visit. But an urge to find out more about this self-sufficient state, and the living conditions for its inhabitants, gives the president of the United States the idea to send a journalist there to make a report. This report describes a place that has some similarities to Morris ideal society, although these stories have been written in different centuries. My paper will make a comparative reading of these utopian societies where green issues play a prominent role. I will also focus on how ideas developed in these books influence what we today consider green initiatives for a more sustainable society.

FRANTZEN, Mikkel Krause, Aalborg University

The hyperobject – a conceptual polemic towards another end of the world

In the spring of 2015, Danish poet Theis Ørntoft travelled to the tundra of Siberia. Staying with the Nenets people on the Yamal Peninsula, he is one day suddenly confronted with a mysterious, gigantic permafrost hole. “The craters we saw on the Siberian tundra”, the poet notes in the text “Journey to Yamal” in which he recounts his experience, “made me think of Julie Kristeva and her concept of the abject. The abject, which includes all the body’s secretions—skin flakes, urine, scat, semen, cut-off nails, menstrual blood—phenomena which exist in a zone of signification between the body and its surroundings, between subject and object, and thus confront us with our own liquid-like lack of borders. The craters on the tundra were such abjects, just in a larger scale, in a higher, planetary sense. They are hyper-abstracts. Geological events caused by man’s warming of the planet. The same can be said about the giant islands of plastic which are starting to form in the world’s oceans . . . a whole new planetary geography produced by the human civilization and its unfathomable monstrosity” (Ørntoft 2016: 52). Taking my cue from Ørntoft’s text, this paper seeks to develop a concept – an aesthetics and a politics – of the hyperobject. Theoretically the term *hyperobject* would seem to be a synthesis of Timothy Morton’s concept of hyperobjects and Julia Kristeva’s concept of abjection, to which Ørntoft explicitly refers. Massively “distributed in time and space relative to humans”, hyperobjects have, according to Morton, “already had a significant impact on human social and psychic space. Hyperobjects are directly responsible for what I call the end of the world” (Morton 2013: 1-2). However, one of the, admittedly somewhat polemical, aims of this paper is to argue that the very concept of the hyperobject crystallizes quite a few emblematic – theoretical as well as practical – problems in the ecological thought of Morton so much in vogue within academic circles these days. Calling global warming a hyperobject, for instance, is at best a clear case of obscurantism, obscuring what is undoubtedly the most pressing problem today, while also rendering any question of responsibility and agency impossible to begin with. Challenging the hyperobject in its ethico-political and historico-environmental consequences is what necessitates the concept of the hyperobject.

Tentatively, the hyperobject can be defined as a planetary infrastructure of waste that comes in all sizes. It is an infinite waste land of decommissioned ships or an infinitesimal, barely discernable piece of microplastic. At the same time the hyperobject traces the temporality of a feedbackloop. Having been discarded, junked and excreted in in the everlasting process of capitalist production and consumption, the hyperobject at some point returns with a vengeance: Humans consume fish that have consumed the plastic that the humans themselves once discarded. We emit stuff and stuff comes back to us in a process that we are both the subjects and, to a certain extent, the objects of – though this should not lead us to overestimate the agency of the hyperobject, as various brands of New Materialism, Latourian hybridism and object-oriented ontology would have it. As Andreas Malm

poignantly writes: "The only sensible thing to do now is to put a stop to the extension of agency" (Malm 2018: 112.). My hypothesis is, in other words, that the hyperobject is a more beneficial term than Morton's hyperobject both in terms of *conceptualizing* some critical aspects of climate change today and of *analyzing* contemporary literature. The concept of the hyperobject is thus not only a conceptual contribution to interdisciplinary studies of global warming but also to literary studies of ecocritical poetry. In the last part of the paper I seek to substantiate the second claim by reading Ørntoft's own poetry as well as a couple of poems by American poet Juliana Spahr.

FRAUNHOFER, Hedwig, Georgia College

Bios/Zoe: "Nature" and Matter from Biopolitics to Eco(philosophy)

My paper takes the conference theme, "green," as an entry point into a new materialist problematization of ecology, defined not only in terms of naturalization, one of the structural others of western philosophy and culture all the way through postmodernism, but as a larger, cosmic ecology – or ecologies – of human and more-than-human life, natural-biological and more-than-biological life. Whether biological or not, what is at stake in new materialism (and what differentiates it from the Cartesian, rationalist tradition) is the dynamic unpredictability of an excessive materiality that is live and self-organizing, agential and productive. Rather than in terms of linearity and a telos that sees death as the end point of life, new materialism views life as co-constituted by diverse, organic and inorganic, bounded and non-bounded entities that do not precede their contingent relations (and are thus, in Karen Barad's words, "intra-active" rather than interactive). The contemporary posthumanist philosopher Rosi Braidotti calls this generative life force *zoe*. The starting point for my paper is Aristotle's distinction between *zoe* and *bios politikos* – the binary distinction between two kinds of life: the natural life shared by animals, women, slaves, humans, and gods on the one hand and, on the other hand, the political life specific to certain qualified humans based on language – a distinction expanded upon by Foucault's work on biopolitics and by Agamben's theory of bare life. In contrast to a negative biopolitics or thanato-politics (a politics of death) ultimately associated with totalitarianism that uses exclusion or death to protect or immunize life, the Italian philosopher Roberto Esposito proposes an affirmative biopolitics that abolishes the distinction between *zōē* and *bios*. Esposito argues that all life is formed life (*bios*) from the beginning, that there is no such thing as a simple, bare life. Instead, every life is pushed by something beyond itself, following its own possibilities of development. While Esposito proposes extending the concept of *bios* to all life forms, Braidotti has chosen *zoe* – "life itself" (N. Rose) rather than *bios* and its associated rhetoric of rights – as the basis of a new, post-anthropocentric world view. In preparation for a contribution to a special edition of the journal *Philosophy Today* on "New Materialist Concepts," I am curious to explore Braidotti's affirmative feminist move beyond the philosophical tradition, as well as other scholars' critical engagements with her conceptualization of *zoe*. Since Braidotti speaks of the

politically and ethically transformative capacities of matter as *potentia*, I am interested in the relationship between ontological questions centrally posed by new materialist and posthumanist scholars and questions of political, ethical, and ecological urgency.

FREEMAN, Lindsey, Simon Fraser University

Glowing Green: Memories of the Atomic City

My grandfather was an atomic courier. He drove secret materials for the first uranium-powered atomic bomb from the Manhattan Project city of Oak Ridge, Tennessee, to various locations across the country. He liked it well enough to keep driving through the Cold War for the Atomic Energy Commission. My grandmother was a bowling enthusiast and donut-making Cemesto homemaker. My mother and uncle went to high school in a red brick building adorned with a giant atomic symbol with an acorn as its nucleus. The atom-acorn assemblage is the totemic emblem of the town. It is not only the ubiquitous symbol of atomic Appalachia, but as it links the community together symbolically; it also marks a shared culture and sweeps us up materially in its substance. For those of us in its orbit, its spinning is our spinning, its hard acorn body, always already full of future potential is our collective body as well, as we embody culture and place. The atom-acorn is a concentration of all the Oak Ridges that have happened, never happened, might happen, and are happening combined with the ways in which we have made sense of these happenings. Oak Ridge gathers itself together inside concrete laboratory buildings in lush, green valleys. The city spins itself together inside the glowing, Cerenkov blue radioactive pools, where millions of billions of neutrons are produced in a second, making heavy isotopes for the creation of elements like: californium, curium, and plutonium. Oak Ridge keeps itself together by crafting elements to propel nuclear bombs, cause and cure cancers, and spin satellites and shuttles deep into outer space. The city brings itself together in secret, spinning a delicate balance between explosion and implosion—fission and fusion—through a mysterious substance called fogbank. Oak Ridge hurls itself together in public in its museum with its story of atomic prophecy, wartime secrecy, and patriotic sacrifice. The city steels itself together with its little atoms and acorns affixed to laboratories, high schools, and pawnshops, like rivets in denim, reinforcing areas of high tension. Oak Ridge throws itself together in the whirl of the atom and the acorn, like Mondrian dancing with Peggy Guggenheim, or, like a wolf circling before sleep. The images of my atomic childhood in Oak Ridge are vividly rendered in primary colors, which are occasionally taken over by the glowing green that seems to always represent radioactivity. Aristotle and Plato conceived of color as a kind of drug, a *pharmakon*. Walter Benjamin thought that children were particularly sensitive to color, and that when they engaged with their books boundaries between themselves and the colorful texts dissolved—they found themselves inside the pictures. In *Chromophobia*, David Batchelor describes color as "a loss of consciousness, a kind of blindness," that results in a temporary "loss of focus or identity, of self." Color is orienting and disorienting by turns.

With this paper, I am working towards a way of writing that takes emotions, senses, colors, and microclimates seriously.

FRIEDRICH, Kathrin,
Humboldt University Berlin

Adaptive Living – Technologies of Remote Sensing in Precision Livestock Farming

Media technologies increasingly enable and determine ideas and practices of precision livestock farming (PLF). PLF is “defined as the management of livestock production using the principles and technology of process engineering. (...) PLF (...) relies upon automatic monitoring of livestock and related physical processes (and it) treats livestock production as a set of interlinked processes, which act together in a complex network.”ⁱ With the aim of ‘optimizing’ the resources provided by, for example, cows, PLF employs remote sensing technologies such as wearable sensors that should detect vital parameters like temperature and heart rate. The data is transferred and visualised to provide farmers with information about the health status of their herds and to anticipate possible disturbances in milk or meat production. The farmers do not need to rely on their trained eyes and embodied knowledge anymore but delegate the detection of an upcoming illness and the decision for further actions to sensor technologies and their interfaces. Therefore, ‘smart cows’ are prognostically and remotely controlled and, ideally, treatable if their data heralds malfunctions or illnesses. But how are highly technological and distributed systems of PLF installed and what kind of conditions do they entail to farming practices and decisions as well as human-animal relations? The presentation will map an exemplary scenario of remote sensing in PLF with a focus on the architecture of sensor-based networks and visual interfaces. Thereby it will examine how humans and animals are mutually adapted to each

FRIIS, Elisabeth, Lund University
Darkness on the Edge of Town
– Un-greening Eco-poetics via
Astroecology

Since Timothy Morton’s introduction of the concept of *Dark Ecology* it has been clear that eco-criticism and eco-poetics need to turn their attention away from dichotomy and often anthropocentric Nature Writing. Our perspective needs to change, our sensibility needs to be awakened and refined so that the invisible, ungraspable, uncomfortable and uneasy sides of the environment can inform a new kind of eco-poetics – or in other words: a new kind of ecological writing. But how? The concrete poetic strategies of dark ecology are still a less explored field of investigation, not least when it comes to Morton’s own work, which often deals with a rather traditional type of eco-mimesis. It could of course be argued

that a great deal of “traditional” poetry about nature could be re-read as “dark”. But in contemporary works of eco-mimesis the knowledge of global warming is a *sine qua non*, and this knowledge unavoidably informs the aesthetic strategies they put to use. An interesting work in this context is Johannes Heldens mixed-media book of poetry *Astroecology* (2017) which is at its core a sci-fi tale, but it also reveals a deep engagement with the virtual (in the Deleuzian sense) force of poetry. Ursula le Guin writes the following on Heldens work: “I turn to Astroecology and its Encyclopedia when the weight of the actual world grows heavy, and I need to be surprised, or puzzled, or refreshed”. And in this, indeed refreshing, encyclopedia of *Astroecology*, poetry is for instance re-defined as *a genre that deals with science fiction*. This definition seems to stress the virtual potential of poetic constellations, and *Astroecology* is situated exactly in the darkness on the edge of town, where the stars (just as Mallarmé’s “catastrophe from the stars”) are pregnant with new possibilities in the aftermath of some kind of environmental breakdown. *Astroecology*’s poetic form explores both the poetic potentiality of Carl Sagan’s *directed panspermia* and Ursula le Guin’s fantasy politics of non-dichotomy, and I shall try to outline how this might help us in determining what might be vital, formal components in a hopeful, but nonetheless dark, eco-poetics.

GAUZENTE, Claire, University of Nantes
Greenness and Degrowth – A Sensitive and Subjective Exploration of
Sounds, Images, Texts, Objects

This research is situated at the crossroad of different disciplines and approaches: economics, ecology, sociology, material culture, practice-led research and scientific study of subjectivity. It aims at identifying the different possible inter-subjective views of degrowth in western societies and, more specifically, in France. To do so, our research team first reviewed the literature pertaining to recent academic developments in degrowth theory. Then, an empirical investigation based on sounds, images, texts and objects was designed and conducted. As recalled by Demaria *et alii* (2013) degrowth is the English translation for the French term *dé-croissance* initially coined in 2001. It corresponds to an alternative way of thinking about economic growth and social organisation that contests neo-liberal capitalism and advocates instead for a voluntary shrinking of both consumption and production so that social, ecological and environmental sustainability become genuine priorities. Sekulova *et alii* in their introduction to their special issue (2013) underline the notion of sufficiency in place of conventional efficiency. While criticisms have been expressed against degrowth principles, Kallis & March (2015) argue that it is purposively subversive concept and that it sets a basis for debate and change. Because the concept of degrowth is holistic, it permeates all dimensions of human life including sensory ones. In order to investigate how degrowth expresses through senses we developed four types of corpus and consolidate a set of 25 sounds, 45 images, 37 texts (in the form of short sentences) and 27 objects that can possibly echo/embody degrowth (and growth, its contrary). Each sub-set is

treated separately and then conjointly interpreted and discussed. The empirical exploration uses Q-method, a methodological approach invented by psychologist Stephenson (1935, 1953) that helps to capture and represent human subjectivity and inter-subjectivity. Based on the ranking by different participants of the four different sub-sets' items, the q-factor analysis helps to identify different sensibilities or subjective views of degrowth and ecology. Each of them are characterized by emblematic sounds (such as water drops, bird songs, advertising jingles...), images (such as isolated habitat in the woods, green towns, black Friday pictures...), texts (such as "inevitable choice for us to survive", "back to stone age", "enhanced democracy") and objects (such as wind turbines, rechargeable batteries, consumer magazines...). These objects, sounds, images, statements are rearranged differently depending on participants' subjective vision. We end with distinguishing inter-subjective views such as (1) realistic autonomy, (2) political engagement and activism, (3) responsible consumption, (4) green idealism, (5) pragmatic recycling... While this empirical study is not exempt from methodological limitations, it represents a first step toward a sensitive approach of degrowth. The tendencies identified here help to portray a broad and nuanced picture of degrowth, its relation to greenness and to the ongoing societal debate that might, hopefully, prompt behavioural and societal changes toward a greener future.

GIESENKIRCHEN SAWYER, Michaela,
Utah Valley University

Modernism with a Green Stripe: Ecological Aesthetics in Gertrude Stein, Matisse, and Picasso

This paper takes the first part of its title from Matisse's famous 1905 portrait of his wife also known as the "Portrait with a Green Stripe," which was crucial in setting the course for the modernist turn in twentieth-century painting. Even though the movement he spearheaded was named after wild beasts, Matisse's green stripe appears in no way to be indicative of a green streak in his aesthetic; quite to the contrary, it is a famous instance of his denaturalizing color abstraction, drawing attention to the facts, forms, and processes of artistic creation. And yet, just like Picasso and Braque's Cubism, Matisse's Fauvism employed abstraction to recreate natural order beyond the appearances by which it meets the eye. The ways in which Matisse's and Picasso's figures interact with and emerge from the flat dimension and formal organization of the canvas as a whole can be interpreted as an ecological approach. When Matisse and Picasso's early sponsor and collector Gertrude Stein came under the influence of their ideas ("Portrait with a Green Stripe" adorned the Parisian living room of her brother Michael), she adapted them to her radically experimental, new literary aesthetic. Personally, scientifically, and philosophically, Stein was deeply ecologically minded. Not only was she an outdoorsy Californian and Emersonian believer in the Darwinian sublime, but a radical-empiricist scientist studying the world, both human and non-human, in terms of self-emergent organic processes, the proliferation of individual events within environments.

Stein elucidates how Matisse's and Picasso's art as well as her own can be understood as explorations of such systemic processes and organic creation in several of her writings, including her 1913 composition *G.M.P. (Matisse, Picasso, and Gertrude Stein)*.

GREGERSEN, Martin Rohr, Aalborg University **Reclaiming Green**

Were we to search for a piece of untouched nature, chances are that our searches would be in vain. We live in a time where it is virtually impossible to find a place where humans have not yet made their contaminating mark. With the ubiquitous presence of anthropogenic climate change, the planet is now as cultural as is it natural. Concerned by the impact of human activity upon the planet, scientists argue that we have entered a new geological epoch: The Anthropocene. In the Anthropocene, eco-criticism (Morton 2007, 2010, Heise 2008, Clark 2013, 2015, Cohen 2013) has turned its back on the poetry of deep ecology and eco-centrism, because today these texts seem increasingly anachronistic and escapist: Where is the global climate crisis and the pollution of plastic? Where is the uncanny, destructive, ravaged and ravaging nature? In the epoch of the Anthropocene, the desire for a 'return to nature' is as good as naïve nostalgia, for there is no nature to return to. In this paper, I attempt to adopt an alternative position in which I construe the concept of nostalgia as tied to pre-modern values of harmony, community, naturalness, and sustainability. Here, the notion of 'return to nature' comes to represent a conscious and conspicuous contrast to the contemporary obsession with speed, development, blind faith in progress, and efficiency. Nostalgic myths and imaginations have often been considered unproductive, starry-eyed, and reactionary delusions. However, when considering a range of nostalgia scholars such as Svetlana Boym's notion of "reflective nostalgia" (Boym 2001: 49-55), Peter Mortensen's defense of nostalgia (Mortensen 2008), and Jennifer K. Ladino's *Reclaiming Nostalgia* (2012), this picture of nostalgia does not seem adequate and nuanced enough to do justice to the true potential of green nostalgia. Even though there of course is some truth to the various critiques of nostalgia, nostalgia can also take forms that one might understand as reflexive or progressive.

On this basis, nostalgia and texts that imagine nature through a concept of harmony can themselves be read as subversive critiques or utopic counteractions against the contemporary conception of the world and the ways in which we find our place in it. Perceived in this manner, green nostalgia does not only look to the past, but also the future. Although the alternatives provided to us by the nostalgic imaginary might be quixotic they may still function as a catalogue of ideas of alternative pictures of the world, alternatives that despite their utopic fantasies can still prove to be productive and progressive. If eco-criticism is to be more prismatic, more colorful, as Jeffry Jerome Cohen writes in the preface to *Prismatic Ecology. Ecotheory beyond Green* (2013), it seems contradictory if such an endeavor were to actively work toward rejecting the 'green readings' of eco-critique. A truly prismatic ecology ought not move "beyond Green", but include it into its fold as one amongst many other approaches.

GUY, Nancy,
University of California San Diego

Greening Taiwan: one tune and one bag of garbage at a time

In December 2014, the *New York Times* declared "Taiwan, an Island of Green in Asia." This paper takes waste reduction as an entry point into the island's greening. Through its development of an innovative system for trash collection, Taiwan has drastically reduced household waste. Taiwanese garbage trucks are musical: Badarzewska's *Maiden's Prayer* or Beethoven's *Für Elise* announce the brigade's arrival at designated times and pick up locations. Neighbors stream into the street for a turn at depositing their presorted waste into the proper receptacles. Taiwan's semi-tropical climate combined with a densely situated human population, and the presence of well-established rat and cockroach populations, combine to make garbage management a matter of daily urgency. Garbage in Taiwan is at the center of a musical assemblage that resonates beyond the waste collection soundscape. Here, I turn to Taiwan's pop music from the early 1980s through the mid 2010s as evidence of ways in which everyday practices aimed at dealing sustainably with household waste have seeped into a wide range of sensibilities.

HANDBERG, Kristian,
University of Copenhagen &
Louisiana Museum of Modern Art

Mapping Green Spots in European Postwar Art

The postwar era of the 1950s and 1960s and the world-building after WW2 are associated with a non-green industrialism and urbane high-modernism. But a closer reading will reveal green spots in artists and exhibitions exploring alternative natures and highlighting the color of green. Through an analysis of the seminal exhibitions "Vitality in Art" (Stedelijk Museum, Palazzo Grassi, Kunsthalle Recklinghausen, Louisiana, 1959-60) and "From Nature to Art" (Stedelijk Museum, Palazzo Grassi) touring European museums of modern art in Holland, Italy, Germany and Denmark, the models for a new nature-culture relationship – and the use of green by the artists – will be identified, not least through a focus on Danish artist Asger Jorn, who acted as "shadow-curator" of "Vitality in Art". These exhibitions also give access to understandings of the trans-European postwar art scene as more based on circulations between new art centers (outside of Paris) and alternative positions to the notorious "triumph of American painting" dominating art historical writing.

HANSEN, Kathryn,
Chalmers University of Technology

Literature-Generated Empathy to Teach 'Green' Engineering Ethics

While engaging in green practices requires technical knowledge, awareness of the ethical implications of such practices is also necessary to help engineers and scientists understand sustainability as an issue with social consequences. Yet while such understanding of ethical concerns is of great importance, it is often not sufficiently addressed in engineering education. To help fill this gap, I propose activities that use literature to move students toward more personal engagement with sustainability issues. These tasks involve each student taking the perspective of a fictional character to better understand his or her views on sustainability, and it also asks students to explicitly analyze their own thinking on the subject. As an example, I use Isaac Asimov's novella *The Martian Way* (1952) as the basis for my talk. The two assignments included in my presentation capitalize on what Keith Hjortshoj isolates as the goal of writing at the university level, which is "to give individuals *more* to say, with broader perspectives and stronger voices of their own with which they can take more active, constructive roles in professions and public life." It is specifically this connection between students' personal and professional selves that my suggested fiction-based report and CV assignments are intended to foster. The two assignments each require students to write from the point of view of either Ted Long, the Martian who leads an expedition to mine ice from the rings of Saturn, or John Hilder, the citizen of Earth who mounts an "anti-Waster" campaign that would constrain the ability of Martians to engage in space flight. Water in this futuristic novella is not only necessary for sustaining human and plant life, but also for fuelling spaceships. Mars' reliance on Earth for water, therefore, carries profound implications, as does Long's retrieval of massive quantities of ice from Saturn. Writing a CV and report requires students to take the point of view of one of these ideologically opposed fictional characters. Follow-up assignments ask students to defend the choices they made in the CV and report, with particular attention paid to not only the environmental impact of the ice-mining expedition but also its socio-political implications. By having students take the point of view of a fictional character and use the ethical complexity of Asimov's "anti-waster" campaign in *The Martian Way*, this task invokes the empathy necessary to apprehend a fictional character's perspective as a springboard to cultivate students' understanding of the social implications of "green" issues, but can be adapted for other ethics-based goals.

**HARRIS, Paul, Loyola Marymount
University Los Angeles**

Lithic Life: Stone Is The New Green

This paper explores the entanglement of the lithosphere and biosphere in different contexts. The origins and evolution of life are increasingly understood in relation to geologic processes and materials. Robert Hazen's work on mineral evolution demonstrates complex ways in which "rock begets life, life begets rocks," and today this co-evolution extends to "human-mediated minerals," new geophysical materials resulting from processes including mining, shipwrecks, museum storage, and industrial manufacturing. Conceptually, the 'geologic turn' marks a mapping of anthropic memory, a figuring of human history and identity that shifts from the frame of reference from biological evolution, the neo-Darwinian synthesis, and biopolitics, to geos understood in terms of 1) planet as organism/system (Gaia); 2) the non-living or lithic component of the earth; 3) ancestral reality or origin prior to terrestrial life (Elizabeth Provinelli). The geologic turn may be understood as initiating a fundamental shift in the model of time and history within which contemporary human life is envisioned: a shift from the linear, biological, evolution-of-complexity-driven notion of Big History as a series of emergences, to a cyclical, geologic sequence of explosions and extinctions. Inscribing human history in this archive uncannily confronts humans with their own extinction (Clarie Colebrook, Dana Luciano), introducing a narrative temporal mode I have called "prolepretrosis": humanity's post-apocalyptic future is 'a story that can only be told in the past' (Gilles Deleuze). Critically, this re-grounding of life in rocks finds expression in treating stone as "lively matter" (Jeffrey Jerome Cohen). Affective relations to the lithosphere surface as geophilia, a love of stone apparent in practices including viewing stones (Chinese scholar rocks, Japanese Suiseki, and emerging viewing stone communities around the world) and across a range of contemporary art dedicated to stone and earth.

HEDIN, Gry, Faaborg Museum

Industrialists going green? Collecting and exhibiting landscape paintings in Denmark 1897-1915

In Denmark, the country's greatest industrialists established museums with collections of landscape paintings, and in my paper I discuss the connection between landscape painting and industry. Ny Carlsberg Glyptotek, Nivaagaards Malerisamling and Faaborg Museum arose on the basis of industrialists who founded their museums using funds from refined nature-based products such as beer, agricultural products, bricks and canned food. The three founders Carl Jacobsen, Johannes Hage, and Mads Rasmussen used the latest science-based technologies for their nature-based products and were engaged with the most recent notion of dynamic nature in science. Carl Jacobsen worked closely with scientists in the Carlsberg Laboratory developing his brewing. Johannes

Hage operated Nivaagaard as a modern farm specializing in cattle and dairy products, and Mads Rasmussen introduced the latest conservation techniques in Denmark in his production of canned food. Research has focused on their activities as art collectors as independent from their professions and as guided by other ideals, but the means by which they bought art and constructed museum buildings were conditioned on their success in agriculture and food industry. At the same time, they included landscape paintings in various numbers and exhibited them in museum buildings that have the temple as an important architectural reference. My paper explores the strange relation between the science-based view of nature that they were engaged in as industrialists and the view of nature that they preferred when the acquired art works. When collecting art they appear to cherish pastoral scenes and natural sceneries with only little human impact, excluding works by contemporary artists dealing with industrialized landscapes. When dealing with art they thus appear to engage with a very different notion of nature than when producing goods – maybe this discrepancy is an early example on the difficulties in expanding businesses depending on natural resources while cherishing nature as something different from the human?

HEIL, Johanna, Philipps-Universität Marburg

Haunted Heritage: Ancestral Landscapes in Nathaniel Hawthorne and Martha Graham

In Nathaniel Hawthorne's unpublished romance "The Ancestral Footstep," the American traveler Middleton follows "green English lanes" in anticipation of finding answers to his family's secrets, its estate and its land, which his ancestor had fled two-hundred years ago after a violent fight with his older brother. While the freshness of the green meadows initially symbolizes his hope for the "glorious possibilities of happiness" that he ascribes to the land, he soon understands that the vibrant greens might only superficially cover up the wrong-doings of his ancestor. Although never published, Hawthorne's image of the "ancestral footstep" traveled a more or less unlikely journey: via H.P. Lovecraft's essay "Supernatural Horror in Literature," it came to the attention of the modernist choreographer Martha Graham. Hawthorne's romance is deeply connected to the English soil, on which a crime was committed; and the sound of the characters' footsteps on the ground shape the story. In Graham's choreography, the ancestral footsteps take shape in their own right, pursuing Graham's goal to "make visible the interior landscape," the geographies of body and soul (Graham quoted in Polcari 3). Thus, in an article in *Dance Magazine* (Sept. 1977), Rob Baker suggests in an offhand remark that the "phrase [ancestral footsteps] indicat[es] a kind of link between movement and memory that has always characterized Graham's dances" (51). This link between Graham's stark, angular, and seemingly tense movements and the hauntedness of Anglo-American landscapes often challenge(d) audiences. Moving beyond the Jungian interpretations of *Dark Meadow*, which concentrate on Graham's enactment of archetypes, I want to read the inner geography of Martha Graham's *Dark Meadow* vis a vis Hawthorne's "The Ancestral

Footstep” to explore the kind of traces that the footsteps in Hawthorne’s tale and Graham’s choreography leave on the memory of the land and its travelers.

HENNING, Peter, Lund University
**When did Keats stop Being Green?
Eco-Critical Concerns in the
Reception of his Poems**

While the British Romantic movement has garnered substantial interest from eco-critical scholars, the poetic work of John Keats (1795–1821) tends to be associated with an escape from materiality in favor of imagination’s artificial blessings. However, the idea that Keats’s lyrical work belongs to the sphere of pure aesthetics is introduced relatively late, related to the New Critics and their approach to the romantic era. Since then, several attempts have been made to challenge the notion of Keats’s poetic autonomy – most notably from political and gender theoretical perspectives – while, strangely enough, the aestheticist position has remained intact within eco-critical discourse. Thus, Keats still belongs to the periphery of so called “green romanticism”, overshadowed by names such as Wordsworth and John Clare. A single text by Keats, his ode “To Autumn” (1819), has garnered any serious response from eco-critical scholars – a fact that further emphasizes the paradoxical consonance between eco-critics and formalists, the latter for whom the late Keats has been considered an aesthetic ideal. Against this background, the paper will reconsider Keats’s relation to the natural world by way of his critical and academic reception from the 19th century and onwards. By studying the conception of “nature” as applied in the shifting characterizations of Keats, the presentation will historicize the concerns of current eco-critical theory in the field of romantic studies – arguing that a strict divide between aesthetics and ecology might in itself prove rather artificial.

HIEBERT, Ted, University of Washington
**The Color of Greener: a meditation
on the pataphysics of spectrality**

The grass may be greener on the other side but it’s not really a fair comparison since “greener” is a ghost from the future, or—more technically—a haunting of the present by a germinal hyperfuture designed with the ability to cast shadows in the mind. Aspirational spectrality. But the relationship is not only aspirational. Seen speculatively, the concept of “greener” can be thought of as a marker of germinal spectrality, the color of pataphysical manifestation. Consider the greener side of purple—the optical relationship wherein the color purple appears as such because it absorbs green light. The material vibrancy (and, one might speculate, the “vibrant materiality”) of purple is green—so green that it leaves no green to be perceived directly. Consider the greener side of genetics—transgenic organisms that emit a weird glow when the lights turn out. The color of living ghosts: a disturbed genetic presence that is greener than green but only when seen in the dark. Consider the greener

side of pataphysics—the green fairy who offers psychic enhancement in the form of absinthe cocktails. Think then about other greener states of mind, freed from logic but bound to the presence of specters as markers of speculative sustainability. Weaving together examples of technological, imaginary and environmental forms of green, this paper meditates on the color “greener” as a framework for a pataphysics of spectrality.

**HILSON, Mica,
American University of Armenia**
**Pure Green or Promiscuous Green?:
Eco-Puritanism and *The Sin of
Father Mouret***

Today, “green” is a highly marketable buzzword, and it is frequently associated with purity. Indeed, the combination of the words “pure” and “green” is used to sell everything from cold-pressed juices to antimicrobial disinfectant. As sociologist Claude Fischer notes, today’s green consumers are inheritors of a legacy of “eco-Puritanism” that stretches back to the Romantic era. In this tradition, nature is represented as a pure and clean space, an Eden that must be preserved and kept separate from the corrupted dirty spaces of human civilization. One obvious problem with this attitude is that it ignores how “clean” and “dirty” environments are all part of the same ecosystem; in the balance, fetishizing pristine nature might even do more harm than good. Furthermore, the representation of the natural world as “pure green” depends on ignoring or eliminating those plants that don’t fit that characterization. Hence, for instance, famed American naturalist John Muir rarely mentions weeds; indeed, he’s more likely to praise a landscape by noting there are “no coarse weedy plants.” In works like Francis Hodgson Burnett’s *The Secret Garden*, weeding even has mystical powers, transforming an overgrown garden into a rejuvenating Eden. In this paper, I want to contrast this Anglo-American discourse of eco-Puritanism with the representation of green space in a 19th-century French novel, Emile Zola’s *The Sin of Father Mouret*. Zola’s novel also deals with an Edenic walled garden, the green space in which upright priest Father Mouret falls in love with young Albine. As I demonstrate through an analysis of its color symbolism, the novel diverges from the discourse of eco-Puritanism by associating the word “purity” with the colors gold and white (the primary hues of the church’s Virgin Mary icons), while linking the color green with erotic temptation and transgression. Furthermore, while the Virgin is represented as “pure” gold and white, Zola emphasizes that the garden’s greenery is actually multicolored; his references to “green” plants are embedded within long, syntactically complex depictions of a many-hued ecosystem. As a counterpoint to our standard notions of *pure green*, I thus seek to recover Zola’s conception of *promiscuous green*, an erotically stimulating natural phenomenon that transgresses a variety of categories. Not only does this *promiscuous green* intermingle with other colors on the spectrum, but it is synaesthetic, with distinctively “green” smells, sounds, textures, and movements.

Furthermore, once Father Mouret and Albine are immersed in the green, boundaries between human, animal, and plant are blurred. To Zola, Father Mouret's true sin is his obsession with purity, which leads him to reject both the garden and Albine, ranting that "your garden is but a charnel-place where all rots and putrefies." Yet this decomposition and disorder is precisely what Zola finds so seductive about the promiscuous green; you might say that he puts the "rot" in "erotics." By analyzing his critique of Mouret's life-denying ideology, I thus seek to problematize contemporary eco-Puritanism's fixation on pristine inanimacy.

HOELSCHER, Jason,
Georgia Southern University

Art as information Ecology

In this paper I will resituate aspects of quantitative and qualitative information theory in order to propose a model of the art world as less a collection of given entities engaged in relations with other entities—artworks related to discourses, concepts to objects, and so on—than as a system of reciprocal and co-potentiating feedback processes that unfold across orders of magnitude. I will explore these ideas through artists and artworks that relate to Earth's ecology, ranging from the *Drop City* artist commune of the mid-1960s, to contemporary artist collectives like *PlantBot Genetics* (a participatory and distributed artwork disguised as a mobile biotechnology research center). With these examples, I will argue that artists who explore the relationship between art and ecology also explicate a mode of art as ecology—specifically, through activating (and being activated by) an ecology of differentially entwined relations. Difference is information, and information is difference—technically, information is the ingression of a difference as a particular unit of entropy drawn from a larger field of maximum potential entropy. Traditional approaches to information and difference consider differences between already-existing entities. Differences within the ecology of relations described here, however, are less *differences between entities* than they are *differences as co-constitutive of the entities differentiated*. As a simple example, consider how the identity of what constitutes abstract painting is defined in differential reciprocity with representational painting (and vice versa). So densely imbricated is their co-constitutive relation that even to describe a "representational" mode of painting is to presuppose an "abstract" mode of painting. Their differences are thus not between one mode of art and another, but rather, their identifiable modes of existence arise from their differential reciprocity in the first place. This, so far, is relatively straightforward Derridean *différance*. In this paper, however, I will amplify the idea's generative, processual and information-theoretic implications, describing art as a *différance* engine that processes differences between, across, and as the entities differentiated (in this case, works of eco-art), thus constituting the art world as an information ecology. While the term "art world" is typically used to describe the context in which artworks and galleries operate, I will show here that the art world is not merely a theater of activity, but rather an emergent outcome of entwined processes of difference. In other words, while artworks are potentiated by their artworld, it is easy to overlook that the artworld itself is potentiated as

an aggregate result of those artworks it potentiates. Artworks potentiate the art world that potentiates artworks, *ad infinitum* across scales—a processual, transversal information ecology that unfolds as an epiphenomenal result of interpenetrating and interpotentiating meshes of difference. Similar to how the green revolution prompted a turn to systems thinking, in which the individual cages of the Enlightenment zoo became seen instead as a weave of ecological entanglements, I will show here how art emerges from and within a system of feedback processes, asymmetries, disparities, and reciprocal potentiations across orders of magnitude that, in their iterative differentiations, constitute the art world as an information ecology.

ISAR, Nicoletta, Copenhagen University
The uncanny greenness

The current debates between climate researchers and engineers of green technology around the semantic of green color are symptomatic for the actual rapport of forces behind them, between the two powers: nature and technology, *physis* and *technè*. It is my contention that it is not that green as color changes its semantics in a confusing way, but it is man's position toward *physis* that changes. Man, the "place-holder" in the world, is also the "violence-doing" ("violence-doer") of *technè*, which sums up a philosophical view about the rapport between *physis* and *technè* since Sophocles. It is by virtue of this violence that man is uncanny (Heidegger). Therefore the urgent task in the humanities, at least from a philosophical perspective, might be reformulated as follows, and this is what this paper will propose for a debate: How to take action and assure the balance between those powers given to man, and keep them in reserve as saving powers? In the apparent double semantic of greenness, as good and evil, nature shows its own character as *pharmakon*, as something that could cure as well as it could exterminate, for there is no nature as such (and no universal meaning of greenness), but nature in constant transformation, and "machination" (*to machanoen*). What is at stake in ontology is the inevitable task to confront the driving forces (*polemos*) that turn cosmos in a project in constant making, of doing and undoing itself. In this project, man is invested with an awesome power (*pan-toporos aporos*). He is simultaneously being-in-truth and being-in-untruth, uncanny and homeless. Likewise, greenness as a symptom of man's action is a metaphor of both nature and nature transformed; it is also in ontic truth and untruth, where untruth is specifically associated with the uncanny. Therefore, the *uncanny greenness*. But the real task derives from man being the uncanniest creature, not only because he spends his life in the midst of the uncanny, but because he steps out of the limits of the homely (*heimischen*), he drives himself from what is homely for him.

IULI, Maria Cristina,
Università del Piemonte Orientale

Between Green Ethics and Green Politics: Paradoxes of Environmentalism in Contemporary U.S. Fiction

In Western political discourse the term “green” has named, from the mid Seventies, a wave of international environmental activism that eventually gave rise to national political parties characterized by a mix of progressive policies and oppositional stances, and by an agenda of environmental preservation and protection pitched against the rapacious interest of industrial and post-industrial capitalism. In recent years, however, the very notion of an antagonist green politics has become doubly problematic: on the one hand, the partnering of environmental NGOs with global corporations has encouraged a legitimization rather than a questioning of the rule of the market in the management of environmental resources, thus progressively diminishing the pragmatic efficacy of “green politics” and nullifying its ideological premises as well as its political bite; on the other (and conceptually more relevant) hand, the ontological separation between political agency and environmental subjection implied in the oppositional structure of an authentic, “green”, and perhaps once again revolutionary, politics looks increasingly untenable in the face of the entangled networks of institutional, technical and biological materialities that shape the world(s) in which we live. To use Donna Haraway’s terminology, these networks are *reworlding* our environments and demand new schemas for conceptualizing the human in all its capacities, including its political capacities. I will discuss the tensions and contradictions arising from residual and emergent notions of “green” politics by focusing on T.C. Boyle’s novels, *When the Killing’s Done* and *A Friend of the Earth* in order to explore the strategies that the novels mobilize to address the conflict between the ethical impulse toward the preservation of the environment as such and the contingent, political commitments to the different materialities and the multiple divides that define our species’ relation to life and death.

JAHRMANN, Margarete, University of Applied Arts Vienna & Stefan GLASAUER, Ludwig-Maximilian University Munich

BOLD G/Flow: A game experiment on a speculative flow model of the brain

The measurement of blood-oxygen concentrations in order to analyze thinking nourished our new speculative *green* model for the understanding of brain functions as biochemical flow of neurotransmitters and ions, similar to the flow of blood — instead of the electro-centric metaphor about the “firing” of neurons. Rather than sparks, flashes and discharges in electric circuits, a metaphor influenced by pioneering work at the end of the 19th century, brain function can be understood as flow, a metaphor influenced by 20th century psychology and 21st century game design. The

interplay and functioning of neurons consists of diffusion and absorption, it is an exchange of liquids and solvents, currents flowing through ion channels, transmitter molecules diffusing into inter-neuronal space. The flow model of the brain can be considered a *green* metaphor, borrowing from botany much more than from electrical signal processing, from the vascular transport of nutrients in plants more than from information transmission in telegraphic networks or computers. Learning is growth of neuronal connections; the central nervous system is a forest of intertwined dendritic trees and axonal branches; synaptic spines collect and distribute neurotransmitters in a continuous process of cross-fertilization leading to perception, action and thought. Correspondingly we present a speculative art game design “BOLD G” (for Blood Oxygen Level Dependent Green) that uses a green screen interface to display an optic flow of particles in and out of the screen, letting the player deciding on the global direction of flow. The green control panel serves at the same time as reminiscence of oscilloscopes as media-archeological source of all game screens, which was also used in early EEG brain measurements live on stage as element of performances. It also represents the navigational screen of the Space war program, the circular radar screen controlled with the SAGE light gun, waiting for potential fire commands, again alluding to the firing of neurons, or to outer space aliens with green blood — also evoking the flow of green blood used in video games in Germany to circumvent censorship. Structurally the suggested lecture performance is coupled with the discussion of neurobiological experiments, performative arts experiments with BOLD brain data on the “inner space” and spatial representations of sensorimotor brain anatomy through green fluorescent protein (GFP) marker as element of a meta-game of science and artifact. The Song of Neurons will appear as green stream of thought prediction and decision making representation on a classical hacker green screen in the form of an executed software poetry, comparable to the classical genre of Perl poetry — appearing as green data rain on stage.

JIMENÉZ BORJA Verónica,
Universidad San Francisco de Quito

Invisible: When Plastic Meets the Atmosphere

During her recent keynote speech for the Knowledge/Culture/Ecologies conference (2017), Prof. Gay Hawkings pointed out that plastic had become ambient. Recent studies showing that micro-plastics have invaded the world’s tap water, that plastic particles have taken to the air and now travel the planet’s atmosphere falling back to earth through rainwater, only to be consumed by marine life and breathed in by unsuspecting human lungs, speak of a world where plastic has become eco-systemic -both infrastructural and mundane. Thinking through material entanglements in airy and protean matters disrupts divisions between human and non-human worlds. It offers a means of thinking about relations and flows between places, people, things and scales beyond the usual discourses of particularity and universality. How do these encounters challenge taxonomical distinctions

between the realms of nature and culture? When we make invisible the complex material flows of which our worlds are composed, we risk believing in an idealized form of stable nature removed from our lived spaces. Indeed, the flows of people and goods as told by globalization and “one world” environmental discourses alike posit nature as fundamentally “staying put.” Neither discourse can speak to the ways in which plastic is being remade by worlds as much as it is re-making worlds. This paper traces the different discourses and representations through which plastic consumption is made invisible in everyday life both during its shelf-life and its atmospheric alter-life. The author analyses the pervasive ways in which material relations with both plastic and atmosphere have been repeatedly made invisible and refractory to human apprehension: a material medium for some other relations.

Thinking with plastic atmospheric matters is particularly interesting because the atmosphere is itself an invisible scale, seemingly refractory to human perception and fundamentally excluded from pervasively territorial and sedentary notions of place. Indeed, the atmosphere sits uneasily on either side of the nature/culture taxonomy. What can be made of this atmospheric plastic alter-life? What particular environmental ethics do these protean entanglements offer? Finally, I look at Pinar Yoldas’ 2014 project *Ecosystems of Excess*. The work is a critique of excessive consumption and a monument to global plastic waste. Yet, it does not posit the problem between the nature/culture divide: neither apocalyptic nor celebratory, it examines the kinds of life that emerge in the spaces where taxonomic assumptions around which we have erected our discourses about self and life fall apart.

JOHNSON & Osuna & Sakrison & Thomas PANEL: I Remember it Being Much Greener: Memory-Based Tactics for Becoming Ecological

Organized by the Post-Human Network (PHuN), Arizona State University

“We must . . . reject the framework of “pure green” environmentalism, focusing instead on symptomatic issues at the nexus of hybrid concerns in culture: political economy, ecology, gender, and nationalism.” – Kavita Phillips, “Producing Transnational Knowledge, Neoliberal Identities, and Techno-scientific Practice in India” in *Tactical Biopolitics: Art, Activism, and Technoscience* (Cambridge: MIT Press, 2008) Setting aside what Phillips calls a “deceptively simple” “pure green” approach, we turn towards the cultural and ecological matters that animate environmentalism’s wicked problems. We assess traditional notions equating nature with all that is green and instead suggest that if, as Bergson states, consciousness is memory, then any type of “green-consciousness” that has been problematically forged is inherently reliant in part on memory and imagination. We enlist memory and imagination as tactics for our encounters with landscapes ravished by climate change, economic disparities of scarcity logic, and anthropocentric conceptions of nature. In the spirit of *Frankenstein*’s bicentennial, we grapple with modern monsters (the Anthropocene, debt crises) and old zombies (landscape, economics, Nature). In each of

these studies, we take “greenness” as a problematic starting point and strike speculative new paths which reject, reimagine, or re-remember greenness through lived experience, thinking-with fiction, or enacted in experimentation. Informed by the process philosophies of Bergson, Whitehead, Deleuze, and Guattari, this panel provides a transdisciplinary approach to greenness and the ungreen that illustrates how to use memory and imagination to push past sometimes stale or static ecological thought and discussion to imagine constructive, propositional, and collaborative ways of becoming ecological.

Greenbacks Fade to Black: Experimental, Experiential Economics and the Transfiguration of Debt

Garrett Laroy Johnson, Arizona State University

“The richer rule over the poor and the borrower is slave to the lender.” (NIV, Proverbs 22:7) Modern financial capitalism retains this ancient function of debt as a violent mechanism of enslavement and exploitation (Marazzi, 2011; Lazarato, 2011, 2015). Universal debt amnesty stands among the battle cry of many anarcho-communist movements, but there may be no forgetting; economic bondage may too be deeply entwined with the history of money (Graeber, 2011) or too deeply ingrained in our memory (Atwood, 2007) for insurrectionary tactics like the propaganda of the deed. How might we, instead, transfigure debt into a collectively beneficial institution? What are the tactics for reclaiming debt as a constructive force benefiting communities rather than finance capital? What insights could empirical approaches to research-creation yield? Following the world-building spirit of Guattari’s *Three Ecologies* (1992), Kropotkin’s *Mutual Aid* (1902), and Murray Bookchin’s social ecology (1982), I pursue this reclaimed notion of debt in the design of an experimental and experiential immersive media environment called *Mutual Space*. *Mutual Space* responds through floor projection, multi-channel sound, dynamic lighting and other physical-digital assemblages to bodily gesture sensed using computer vision and signal processing techniques. Bodies sensed by camera deform a fluid simulation (projected onto the floor). Actions like moving, speaking, sitting, napping etc. in this environment effect forces in the fluid system, which carries clusters of colored particles projections across the floor. The fluid system and these particles act as a “prototypical” non-discretized ledger. For example, if reading light is needed, we may gesture to push the illumination particles over the reader. Our gestures in turn create new particles for other uses, like powering a cooling fan or watering a plant. Without predefined actors, ensembles of fleshy bodies and media transact and exchange *continuously*. Rebuking the quantization of value and debt as obligation, this experimental work explores an embodied post-scarcity economics in which collectives are strengthened by accumulation of heterogeneous mutual indebtedness.

Rowboat Phenomenology: Non-Guided Detours of a Ruined Landscape

Angelina Sakrison, Arizona State University

The rowboat phenomenology project speculates how the subject becomes anew in perceiving a ruined environment. Algal blooms, dead fish, brown frothy slicks of scum and

sludge bump up against my rowboat and against my memories of this landscape as a green, vibrant, thriving place. I cannot encounter climate change without my memory of the ecosystem. This recognition of alteration in the state of greenness is based on encounter with difference, and resonates with Whitehead's philosophical investigation of attention. This interplay between memory, attention, and landscape allows the rowboat to become a vessel for thought. Once I put the oars up and float freely with the currents, the rowboat allows me to enter the landscape differently and adds to practices for building, or staging, posthuman encounters for thinking with the nonhuman and nonhuman temporalities. You enter tide time. The moon dictates your progress. You melt a bit into the water, sink into movement and flow. There is an entering. The body still feels motion, and rhythm, but it is not the familiar cadence of a gait. How do we move through the world in memory-based ways that limit or prohibit the world from entering us? It is important to practice new forms of movement in the Anthropocene in order to encounter climate change on the ecosystem's terms. These types of landscape encounters (what I call non-guided detours) serve as exercises in releasing control and resisting the desire for domination of an environment. They subvert intentional navigation of space in a way that both de-centers and disempowers the human and the human sense of time, progress, greenness, and memory. This abandonment of control, or even agency, is an important exercise rooted in posthumanism that resonates with larger concerns around the control society and late neoliberal technocapitalism.

Exploring the Un-Green: Prismatic Place and Memory in Silko's *Gardens in the Dunes*

Celina Osuna, Arizona State University

Leslie Marmon Silko's novel *Gardens in the Dunes* (1999) demonstrates the power of memory to transform and create place, highlighting the role of color in this process. In the novel, Indigo, a young, indigenous girl from the fictional Sand Lizard tribe, experiences color and creates place as she travels beyond her native Colorado River region and heads east to Europe. Set in the 19th century, *Gardens* is often analyzed in terms of a positive greenness; it is lush with the vegetal and addresses issues of environmental justice and bio-piracy—there is even a monkey named Linnaeus. However, it is Indigo's attunement to the intensity of color itself that pushes ecological significance beyond attention to green, and illustrates the necessity of blues, browns, reds, and white: a full prismatic spectrum of environmental engagement, and therefore a more robust relationship to place. Her home, in desert dunes, is golden brown, not the forest greens of New England or England, and, because she is able to appreciate these differences, Indigo is a catalyst for readers to understand the importance of the un-green. Whether through her imagination, artwork, or gardening, Indigo's memories, triggered by color, affect each other constantly and provide a more dynamic way of relating to 'nature'—itself a problematic term closely bound to greenness. Silko's novel contributes opportunities for the environmental humanities to explore the un-green, and to decenter the discussion that places green on a pedestal at the cost of a more complete, more real experience of place.

Agential Ecologies of Thought: Remembering and Rethinking Nature in Mary Shelley's *Frankenstein*

Zachary Thomas, Arizona State University

On the upcoming 200th anniversary of *Frankenstein* it is imperative to think-with Shelley's speculative fiction toward an understanding of the nonhuman, the human and the inhuman as always already intertwined in complex, heterogeneous ways. Progress at any cost must be rethought: responsibility and care now call for us to slow down and take account of the way imagined distinct categories of nature/culture and human/nonhuman are interconnected in immanent, precarious ways. In this presentation, I will show how the theme of separation in the novel—as a way of conceiving nature via the attempt to dominate or control it—effects destruction through commitments to transcendence and idealism, isolation and alienation. Conversely, the theme of connectivity—as a way of remembering, conceiving, and rethinking nature via cooperation with it—effects an affirmative constructivity through commitments to immanence, community and the importance of communication. In contrast to ontological control, Shelley avers, we would do well to loosen our grip a bit and open ourselves to affective and positive connective connections, and in being responsive to the powerful (if invisible, extracognizable or noumenal) forces of nature with and within which we are imbricated: ultimately working to highlight the agential, productive (and destructive) power of conceptualizations. Thinking and rethinking the concepts of nature, society and technology in multi-natural terms is critical; thinking-with means abandoning and guarding against notions of nature that seek to separate it, like an integer, from society and culture: at this point thinking-with means existing in and beyond the here and now.

**KHINTIRIAN, Oana & SHA Xin Wei,
Synthesis Center Arizona State University**

Vegetal Life

Core question: How can we understand vegetative life on its own terms, not that which is "brain-less", "movement-less"...? How can one 'translate' plant movement, which is alien to us, using primarily, but not exclusively cinematic tools? How can this 'translation' be made to convey an understanding of vegetal life in its own terms? In this research-creation project I study plant intelligence, and vegetal agency in order to reveal a non-anthropocentric way of being. To generate novel insight my encounter with plant life calls for a re-evaluation of the notion of 'vegetal' and 'vegetatif' which relegates plants on the lower rungs of evolution, and calls for an ethical consideration of non-humans together with humans. Intertwining this conceptual exploration with empirical work, my research-creation project proposes the building of vegetal "lenses" and "apparatuses for sites of encounter" that would make legible the activity of plants respecting the complexity of plant behavior in their environment. To be clear, although my project is informed by botany I do not aim to explain how plants move the way they do -- the province of science -- by why, aiming at a true "cross-cultural" approach between humans and plants. I will

work towards a “vegetal ethology,” establishing a novel methodology informed by decades of experience as a documentary filmmaker, sensitive to how instruments and techniques co-construct the phenomena that they reveal. ‘Translation’ of the non-human for the human : my documentary filmmaking expertise will guide my steps in the attempt of building a one on one relationship with the plants as subjects and establish a vegetal ethology. Most observations of plant movement study plants in isolation, or even at the micrographic scale. By staging ensembles of plants using various cinematic techniques, I made legible fascinating group relations that have no direct correlate to human interaction, and yet could be interpreted as behavior. Here, understanding the enormously complex behavior of ensembles of plants becomes an opportunity to think translation far from anthropocentric conventions of social dynamics and interaction. More than human filmmaking will require an unprecedented understanding of the why behind the plants ‘barely perceptible movement’. Just as animal studies was motivated by enlarging Enlightenment notions of relations of ethics, politics and power to include non-human agents (animals, machines, social objects that are not persons but collectives, etc.), vegetal studies provide an even greater parallax. With this greater parallax we may also gain greater purchase on the urgent question of not “What is human” but “How to human”, non-anthropocentrically.

KIRKSEY, Eben, Deakin University

CRISPR Trans-Migrations: Gene Editing and Consumer Choices

A fast and cheap genetic engineering tool, called CRISPR-Cas9, could produce new choices for consumers. While attending the Human Gene Editing Summit in Washington D.C., in December 2015, I chronicled reflections on what life *might* or *could* be like if this molecular tool travels forth to engender new choices in the birth clinic or cosmetic surgery salon. Speculation about the possibilities opened up by gene editing is simultaneously undermining claims about genetic determinism and reanimating stories of hope and hype centered on DNA. Consuming the genes of others could become a new mode of asserting power and privilege. Bodily traits once taken to be biologically given—like the color of one’s eyes, hair, and skin—could soon become the focus of self-conscious genetic choices. Ethnographic research at the National Institutes of Health campus revealed that laboratory technicians have already used CRISPR to produce a multitude of genetically modified animals. Creatures with engineered resistance to disease and enhanced muscles are living figures of possible human futures. Queer activists, who demanded access to experimental treatments for HIV in the 1980s, set the stage for the first gene editing clinical trials in humans. If deemed safe and effective in these trials, a queer and crip politics of engaging with the biological sciences could guide radical and democratic uses of CRISPR. This molecular tool could produce trans-migrations—disrupting existing racial categories and unsettling species boundaries.

KOSKI, Kaisu, University of Tampere

Vaccine-hesitancy and a ‘natural way of living’

Vaccine-hesitancy and a ‘natural way of living’ This project explores vaccine-hesitancy through an artist-scientist collaboration. It aims to create better understanding of vaccine hesitant parents’ health beliefs and how these influence their vaccine-critical decisions. The project interviews vaccine-hesitant parents in the Netherlands and Finland, and develops experimental visual-narrative means to analyse the interview data. Vaccine-hesitant parents’ health beliefs are, in this study, expressed through stories, and they are paralleled with so-called illness narratives. The study explores the following four main health beliefs originating from the parents’ interviews: 1. Perceived benefits of illness, 2. Belief in the body’s intelligence and self-healing capacity, 3. Beliefs about the ‘inside-outside’ flow of substances in the body, 4. View of death as a natural part of life. These beliefs are interpreted through arts-based diagrammatic representations. These diagrams, merging multiple aspects of the parents’ narratives, are subsequently used in a collaborative meaning-making dialogue between the artist and the scientist. One of the project’s methodological aims is to experiment with the role of arts-based diagrams in data analysis and knowledge transfer. In the collaborative meaning-making, the diagrams were presented simultaneously with the parents’ arguments. Recurring questions in the authors’ talks were: what is the relationship between scientific facts and artistic ambiguity, and is an illustration of a “false” belief dangerous? All the health beliefs discussed in this project can be connected to one underlying aim: “a natural way of living.” One of the major hurdles in understanding and working with vaccine-hesitancy is communication with the parents. While it has been suggested that public health institutes should continue to communicate about the severity and susceptibility of vaccine-preventable diseases, the interviews here however indicate that fear-inducing communication may not cause the desired response in this particular group of vaccine hesitant parents. While the parents do lack elaborate and balanced information about the pros and cons of vaccines, the perceived natural way of living is paramount to most of these parents. This study suggests that it may be useful to consider whether vaccines could be discussed further in this particular context, as well.

KRZYKAWSKI, Michał, University of Silesia Katowice

Why Does Libido Have to Go Green? Bernard Stiegler’s Ecology of the Mind and Spirit

One of the most remarkable insights of Bernard Stiegler’s wide project of the critique of political economy is that what Freud referred to as libido is hence industrially exploited on a planetary scale. However, if libido has become the principle reserve of energy for the consumerist capitalism, this reserve—like coal and oil deposits—is not unlimited. From this perspective, what we refer to as an ecological crisis

should be linked to the crisis of mind and spirit [*crise de l'esprit*] and to the systemic and systematic annihilation of the noetic life. In this paper I will attempt to show that one of the most demanding *political* challenge of our times is to un-chain what Stiegler, in the wake of Freud, refers to as libidinal economy and to learn how to *manage* our libidos in the new technological milieu and beyond the managerial systems of what Gilles Deleuze called "societies of control." Libido, I claim, goes definitely green if it works properly.

LASZLO & Lundin & Blixt

PANEL: Green Flusser

With this panel we want to highlight a not so well-explored aspect of Vilém Flusser's philosophy, which we find of special interest to the conference theme "Green", and use this as a starting point for our own reflections. We are a trans-disciplinary group based in Gothenburg, consisting of Kennet Lundin, marine biologist at the Gothenburg Natural History Museum, Karin Blixt director and play-writer for Theatre Trixter, Peter Carlstedt visual artist and dancer, and Fröydi Laszlo visual artist and editor of 284 Publishers. We have since 2016 engaged in a trans-disciplinary collaboration with the base in Flusser's scientific fable "Vampyrotheutes Infernalis". This collaboration has engaged both theoretical discussion, workshops in art and marine ecology, dance and media performances, and the writing of a theatre play for Theatre Trixter. Although Flusser is best known as a critic of media and technology, works like "Vampyrotheutes Infernalis" and "Natural: Mind" show that his philosophy of nature/culture and non-human others is relevant even to the "green" post-humanist and new-materialist thinking of today. The green of plants is a sign of ongoing process, not a surface property of a leaf. In the darkness of the abyss, it is even easier to comprehend how colour is actively produced as inter- and intra-species communication, deception or camouflage. This shows us the intermingling of chemical, semi-otic and emotional signalling and response. When we speak of "Green Flusser" we, like Flusser himself, constantly switch perspectives, and confront both theoretical and artistic difficulties of writing as or for "the non-human other". Seen in the context of eco-criticism or as a practical challenge in eco-poetry/eco storytelling, these problems concern the artist and the biologist both, although in different ways.

The colour green in the abyss

Kennet Lundin, Theatre Trixter, Gothenburg Museum of Natural History

A marine biologist's reflections on perception and identity, from Vilém Flusser's vampire squid (also found in a jar at the Copenhagen zoological museum) and via nudibranchs and paradox worms to us. How do these creatures perceive their world compared to ours, and how does our perception of them change by giving them an identity through names and descriptions? Will the ocean thus be greener?

Encounters with the antipodal

Karin Blixt, Theatre Trixter, Gothenburg Museum of Natural History

Flusser's scientific fable "Vampyrotheutes Infernalis" points us towards the possibility of identification with the perceived non-human. Our antipode. Can new models for identification lead us to new myths and models for dramaturgy, choreography, and new ways of relating to our environment? Karin Blixt describes her own encounter with Flusser's Vampire squid, and how the squid inspires and influences artistic collaborations.

Philosophy, art, biology and storytelling

Fröydi Laszlo, Theatre Trixter, Gothenburg Museum of Natural History

Vampyrotheutes Infernalis and Natural: Mind. How Flusser elaborates with different perspectives of observation, and the use of fantasy and poetry in his philosophy. Some thoughts on the inspiration from Flusser's philosophy to environmental thinking, eco-poetry and visual art.

LINDAHL, Eva Marie, Edge Hill University

The Green Feathers of Statens Museum for Kunst

For this conference, I suggest both a paper presentation and a presentation at the intersection of guided tour and lecture performance. The purpose of my proposal is to bring the experiences of non-human animals, portrayed with the help of green pigments and populating the walls of Statens Museum for Kunst, to the centre. The presentations stem from my ongoing doctoral project *Re-Framing the Non-Human Animal in Art Production* which is a practice based art project within the field of critical animal studies.

In art history we are used to see non-human animals depicted through paintings from the beginning of humankind to today. They are mostly present to tell the story of one or several humans. Horses fight our wars, lions are placed in the centre of menagerie paintings, dogs sit on the lap of their queen. But it is not only the visual animals that play an important part in the history of art telling the story of humans. The invisible ones are hidden within the foundation of art making when slaughtered and picked apart to become brushes, pigment and glue. The non-human animals are present in every part of the artistic process. Yet at the same time very much silenced. During my performative presentation I will break this silence at SMK while re-telling the history of artworks from the perspective of the non-human animals that inhabits them. This will be done by using anthropomorphism as a method for "reading" the paintings and the experiences of the non-human lives depicted in green, and with the help of Lori Gruen's *entangled empathy* and Saidiya Hartman's *critical fabulation*. I would like to use the painting *Mendel Levin Nathansons ældste døtre, Bella og Hanna* as a starting point for the presentation focusing on the green feathers of the parrot and the green dress of Hanna before moving on to other paintings portraying non-humans.

In my paper presentation I discuss the artworks and methods of my practice based doctoral project *Re-Framing the Non-Human Animal in Art Production*. The intention of the research project is to put the non-human animal at the centre of art production by investigating the consequences that artistic process and production can have on the lives of non-human animals forced into the system of art. I will present some of the large scale graphite drawings that are the foundation of my research as well as the performative presentations. This presentation will also start with a specific focus on *Mendel Levin Nathansons ældste døtre, Bella og Hanna* while arguing that we as humans are suffering of *anthropodenial*, explained by Frans de Waal as a "blindness to the humanlike characteristics of animals, or the animal-like characteristics of ourselves."³, and that anthropomorphism might be the way to save us, both human and non-human, from the everyday violence of art production.

MACKENNY, Virginia,
University of Cape Town

Greening/Keening the Edge

This paper/presentation explores the use of green in the Virginia MacKenny's exhibition 'Sand's Edge' held last November at Barnard Gallery, Cape Town – an exhibition that re-engages the tradition of landscape painting in South Africa at a time of environmental duress and socio-political uncertainty. The works on show are dominated by the colour green, but the green in *Sand's Edge* is not a natural tree-and-hills kind of green. It's a highly synthetic green. Phthalocyanine Green, Viridian, Winsor and Hooker's Green predominate and are used because they deviate from the reassuring comfort of natural greens – they are artificial, 'off', they're skew. Phthalocyanine Green in particular, is a fairly new green to artists' palettes. Introduced in 1938 it is a synthetic organic and in its pure form is a startlingly translucent, almost fluorescent green. As background, as object, as aura, these greens detach, glow, irradiate the forms. They evoke the green of night vision goggles. Landscapes in the dark. Landscape as contested terrain. Landscape as ungrounded. The poet Peter Anderson has described the exhibition as a "photosynthetic" one, given its environmental concerns. Informed by the particularities of landscapes in South Africa's Western Cape and those of Limousin in central France, both regions under climatic stress, the exhibition also engages green's pitch as an alarm. The drought in central France has affected the river levels and produced algae which is discerned colouring the waterline at the sand's edge in a band of toxic green prohibiting swimming in summer. In this time of rapid climate change the more ominous implications of green are often manifest in liminal margins that carry markers of environmental duress. The paper will be accompanied by images of the exhibition and an analysis of some of the paintings.

MARK, Katarina & ARMAN, Maria
Karolinska Institute

Complementary and Alternative treatment of Multiple Sclerosis - A case study of three cases

People suffering from Multiple Sclerosis (MS) commonly use Complementary and Alternative Medicine (CAM) due to the partial efficacy of conventional treatment, the chronic aspect of MS, the impact of pain and the side effects of medication. An exploratory descriptive case study consisting of three cases was performed to document and analyze patient experience of Applied Kinesiological (AK) treatment of patients suffering from MS. Qualitative interviews were conducted with three patients who had been diagnosed with MS at a neurology department and who had simultaneously sought CAM-treatment from a kinesiologist. The interviews were open-ended and semi-structured. A second interview was conducted for validation. The interviews produced texts that were analyzed through phenomenological-hermeneutic text analysis. The three case studies amounted in a cross-case synthesis. Themes that emerged from the interviews where: *having hope, trusting the kinesiologist, diet changes essential, losing trust in the health care system, feeling confused and getting better*. The experience of AK treatment gave the informants a sense of hope, trust and increased health. During comprehensive understanding it was found that the patients experienced being able to *make changes for life, getting past their diagnosis of MS* and being able to *experience increased health through AK treatment*. The interviews comprise phenomenological-hermeneutic narratives of health, and of the becoming of one-self in the body. The AK treatments assisted the patients into a home-likeness of being-in-the-world, an experience of becoming whole, repaired rather than damaged. Parallel to this the patients experienced their MRIs stabilizing during the AK treatment period. They experienced transcending their MS diagnose.

MASKIT, Jonathan, Denison University
How Green is My Bicycle?

"One thing is sure, if the great transition to a low-carbon, high-wellbeing future for all is to happen, it will arrive riding a bicycle."¹ It is at this point a truism that the bicycle is *the* transportation technology of the future. There is simply no more energy efficient way to get from A to B than riding a bike and that energy is, to twist Foucault's word, biopower, i.e., human (animal) energy derived from recently living carbon life rather than the long-dead life in the oil, coal, and gas that powers most transit. However, while bicycling may be *greener* than other forms of transit, is it environmentally benign? While bicycles are far greener than cars, we should not let bicyclic romanticism blind us to the technology's impacts. First, bicycles themselves, like all goods, require materials and energy for their manufacture, although far less than do automobiles or trains. And, because they end up in catastrophic collisions far less frequently than do cars, well

cared for (and even not so well cared for) bikes can last for decades. Other than high-end carbon-fiber frames and components, bicycles are made primarily of steel and aluminum, both easily recycled materials. This impact, thus, seems minimal. Second, bicycles, like all technologies, do not exist in a vacuum; they require an integrated technical system composed of manufacturing, repair, production of replacement parts, etc. More importantly, most bicycles (other than mountain bikes) require relatively smooth surfaces, usually made of asphalt, concrete, or compacted gravel, all of which are energy-intensive industrial products. While the most efficient way (economically and environmentally) to provide such a surface is to have cyclists “share the road” with motorists, this solution is frustrating to both motorists and cyclists as well as unpleasant or often downright dangerous for cyclists. So long as there are motorists on the roads, the safest (and most pleasant) option is to provide cyclists with their own, separate infrastructure, which requires substantial energy and material inputs (although less massive than those needed for motorized transit infrastructure). Finally, since longer distances require more muscle energy expenditure, cycling as transit works best where things are compact. The bicycle thus seems both to encourage and depend upon urban density, just as public transit does. Density in cities is, in general, more resource efficient than sprawl, particularly if people live in (smaller) apartments rather than (larger) single-family houses. E-bikes, however, change this picture. By permitting cyclists to cover far greater distances with less effort, E-bikes both enable sprawl (although not as much as cars do) while also requiring electricity.

MATHAROO, Sean, University of California & Universiteit Gent

Nature Unbound: Toward the Inhuman Memory of Etel Adnan’s *L’Apocalypse arabe*

This paper is a critique of the universalizing humanism evoked by the Anthropocene and the post-humanist philosophy of speculative realism. The concept of the Anthropocene challenges the way that humanists view the nature/culture divide (Timothy Morton) insofar as “the human” may now be understood to exert a geological force over physical processes (Paul Crutzen). Furthermore, the Anthropocene destabilizes linear temporality and historical sensibility (Dipesh Chakrabarty). The future is cast beyond historical sensibility, giving rise to a speculative-fictional sensibility that shares isomorphism with contemporary post-apocalyptic visions of ecological catastrophe in literary and cinematic works. Similarly, speculative realism takes seriously non-anthropocentric thought and the speculations to which it gives rise (Ray Brassier, Quentin Meillassoux, Reza Negarestani), making it useful when confronting the thought of a mind-independent future devastated by anthropogenic climate change. But, to think such a future, some strands of the Anthropocene discourse and speculative realism insist that we must be able to think it as a human collectivity, thereby neglecting histories of global human inequality, as evidenced by the environmental effects of Western industrialization and colonial expansion. The first part of this paper

elaborates its critique by drawing on interventions made in postcolonial studies (Edward Said, Lisa Lowe) and black studies (Sylvia Wynter, Denise Ferreira da Silva). It provides a reading of the Cartesian humanism catalyzed by the Anthropocene as a continuation of the colonial-imperial modernity grounded in *racial* difference. The second part contends that the study of what I call “speculative poetics” may allow for the articulation of more just alternatives to humanism by estranging thought, being, and time so that one might see them differently. I find an example of such poetics in Lebanese-American poet Etel Adnan’s *L’Apocalypse arabe* (1989): an attempt at remembering the Lebanese Civil War and the massacres of Palestinian refugees at Tall al-Za‘tar and Quarantina as an ecological crisis signaled in the text by a dying sun. I argue that the ontological extinction rendered by Adnan’s haunting and surrealistic poem performs the violence of a nature unbound from the correlation between nature and culture, thinking, in advance, the trauma of an ad-equation between racialization and naturalization. Such a poetics sidesteps the structural remapping of colonial-imperial divisions by uncovering, in an inhuman memory, the traumas of the Lebanese Civil War, Tall al-Za‘tar, and Quarantina. The guilt of amnesia to which *L’Apocalypse arabe* makes an appeal, I suggest, is generative when developing an ethics appropriate to the Anthropocene.

MEILVANG, Emil Leth, University of Oslo

Intransitive biology, or the dissolution of the organism

In the interwar period, continental Europe was flooded with a rejuvenated pre-occupation with life and the organic. Such biological thinking—frequently tied to reactionary ideas of the reenchantment of the body and the soil—quickly descended into fascist politics, as seen in Germany, Italy, and France (convincingly mapped out by both Anne Harrington and Romy Golan). This paper investigates a counter model to such narratives. It examines the life philosophy of Roger Caillois, and it fleshes out how Caillois in the 30s developed a radical understanding of biology precisely to counter the regressive politics of organicism which swamped the continent. To Caillois, one could not get around or simply sidestep biology. Rather, the critique of fascist organicism went *through* the biological. From such a conviction, Caillois sought to broach life through death. By moving into the closest proximity of death—stilling all movement, permeating the membrane of the organism— one became *exposed to life* and from such exteriority to life a critical biology became possible. It is this intransitive notion of biology that I wish to trace in the paper. As will be seen, this also amounts to a surrealist critique of certain naive affirmations of all things natural, of life, basically of the stereotypical *greenness* of natural philosophy.

**MEYER-BRANDIS, Agnes, FFUR,
Institute for Art and Subjective Science**

Walking Trees

The presentation will focus on my artistic research taking place at various climate and forest research stations in Europe over the course of the past couple of years. It will focus on migratory trees and other wandering green species due to climate change. Trees are 'rooted'. Though long term observations have shown, that forests actually do move throughout the landscape and regions, just very, very slow and over decades. Climate change appears to happen faster than the trees can escape to more suitable areas in order to survive. Scientists are discussing "assisted migration" in order to help speeding up the process of tree adaption. However, trying to save the trees (and our species on the way) we first need to gain a better understanding what a forest is and does. But the things to observe are either too tiny or too large to simply be looked at. They are very slow, and they are as well as severely volatile. This paper looks into the methods that are invented to do so, along with some new ones invented by the "FFUR Institute for Art and Subjective Science" in the fields of climate research, environmental studies, meteorology synthetic and artistic biology.

**MÜLLER-WILLE, Staffan &
Elena Isayev, University of Exeter**

Travel and Translation: Linnaeus in Lapland

In the summer of 1732, the Swedish botanist and physician Carl Linnaeus journeyed through Lapland. His travel account is not only often cited as the earliest first-hand account of Lapland by a naturalist and ethnographer, but also known as a founding piece of Swedish literature. We approach the journal from yet another angle. Linnaeus's travel diary offers an excellent opportunity to explore how knowledge was created in translation, that is, in encounters with people who, like Linnaeus, were mostly on the move and spoke more than one language: guides and servants, settlers, soldiers, priests, traders, reindeer herders. Linnaeus himself already promoted the idea that Lapland was "entirely foreign"—as stagnant as it was remote—in order to bolster his credentials as an objective naturalist and to project his own visions of a bright economic future onto the marshes and highlands of Lapland. Yet a close reading of his journal reveals that he was on a guided tour, eagerly collecting information provided by people that helped him find his way through what was, after all, not a green empty space, but a dynamic meshwork: the product of intersections and interactions through which the North, its nature, and its inhabitants were constructed.

Our paper aims to present first reflections on travel, translation and transculturation by looking at a famous episode from Linnaeus's journal: his encounter in Lycksele lappmark with a Sami women, and the ensuing literary processing of this, and other, experiences of encounters "in the wild" through "fictive" and "true" representations of plants and animals. We see our presentation also as a chance to

network with colleagues for a planned research project that consists of two intertwined elements: a new English online edition of the journal and a re-enactment of the journey. While the new edition is intended to meet the standards of a scholarly translation, it will not be prepared in isolation but will be created in the course of two field-trips that follow Linnaeus's footsteps. Raw translations, as well as first drafts of comments to be included in the critical apparatus, will be produced on-site, presented to and discussed with local audiences and experts at museums, associations and educational institutions. The website will include an interactive record of these gatherings, as well as events, exhibitions, artistic or political creations and reflections created through the intersections of our new journey along the route that Linnaeus followed. It will also provide space for invited comments from individuals with special expertise on the places and regions Linnaeus visited: scholars, scientists and museum curators, poets and artists, amateur naturalists and historians, stakeholders of various kinds, e.g. representatives of local residents, indigenous rights activists, environmentalists, local business representatives etc. Edition and journey are supposed to work in tandem, acting as a platform and catalyst for a contemporary public discourse that spans time and space through stories that continue to be told and landscapes that continue to be traversed.

**MURPHY, Kieran,
University of Colorado at Boulder**

White Coal and the Undead

The first promoters of hydroelectricity invented the expression "white coal" to market this new source of energy as "green" and renewable. Yet, hydroelectric energy has come at the price of dire human, animal, and environmental losses that have often remained hidden from view, submerged in the dam's water reservoir. The relation between hydroelectric energy and hidden losses has recently come back to the surface thanks to novels and TV shows featuring the undead. In this paper, I will explore how renowned Haitian author René Depestre mobilized this relation in his novel *The Festival of the Greasy Pole* (1979) to examine how Duvalier's dictatorship, which associated its power with that generated by the Péligre dam, practiced a kind of necromancy that turned Haitians into "zombies." I will then contrast Depestre's novel with the critically acclaimed French series *Les Revenants* (2012 to present), which portrays a community struggling to cope with the return of their dead loved ones, who tragically perished in catastrophes closely associated with a nearby dam. I will show how, in both stories, the dead fail to stay dead due to an uncanny link between how a hydroelectric dam and mourning work.

**NACHER, Anna, Jagiellonian
University Krakow**

"Graying" the green

I would like to employ the notion of "grayness" (Goffey and Fuller 2012) to analyze the increasingly media saturated contemporary forest management practices, with the particular interest in sensor based visual monitoring systems (mostly

camera trapping). My analysis will be based on the examples of sensor based visual monitoring systems implemented by Polish State Forests to prevent the illegal wood cutting and disposal of waste. The similar systems are also used by General Director for National Roads and Motorways to monitor the passages for animals on the highways. Following the Goffey and Fuller's observation that "grayness is a quality, that is easily overlooked" (2012, p. 12) which often unremarkably and non-enticingly operates in the background I am also going to draw upon the infrastructure studies. According to Susan Leigh Star, her research on infrastructure was "a call to study boring things" (Star 1999, p. 377). Such a call strongly reverberates today in research on the various types of code/spaces (Kitchin and Dodge 2011), where data processing infrastructures constitute the very backbone of our everyday activities. Media technologies traditionally perceived as urban phenomenon are increasingly spreading outside the already information dense city spaces into what used to be regarded as "wilderness". Various forms of "the becoming environmental of computation" (Gabrys 2016, loc. 368), including sensor-based communication, contribute to the process of "graying" the green. Or maybe, following the history of telemetry, camera trapping and other sensor-based environmental monitoring technologies, the greenness "out there in the woods" has never been as pure green as we wanted it to be in the first place. Hence my analysis will be based on the concept of "graying" the green as the metaphor of mutual co-evolution and co-emergence of natural and technical grounded in the processual philosophy of Gilbert Simondon (Simondon 2017; Barthélémy 2015), human and nonhuman, boring infrastructure and exciting adventure.

PAUL, Sharad,
Auckland University of Technology
"Can Medicine Be Green?"

The word 'green' is used to mean various things, environment-friendliness, sustainability, organic produce etc. but can medicine or healthcare be green? At present, medicine with its illness model, and guild-like behaviour is not truly democratic. And this can affect the way we incorporate science into our daily practice. For example, when it comes to bags, everyone assumes paper is better than plastic, but is this the case? Overall it is better to prevent waste or illness, than clean up the mess afterwards. But that's what we seem to be doing. With the advent of genome sequencing, there has been a rise in debates and studies regarding the use of genetics to treat diseases or diagnose them early. But is it worth testing for diseases that we cannot cure? Instead should we be using genomics to personalize healthcare and "democratize" medicine? Drawing from my book, 'The Genetics of Health,' the lecture will present a brief look at genes, germs and geography – and how our diets and actions have shaped the human genome. The lecture also discusses some well-known artworks and how art can sometimes imitate science (or vice versa). In a world where no healthcare model is able to cope with rising costs, I present the argument that medicine can never be "green" in an "illness model." Ultimately, this ends up a lecture exploring the daily narrative in medicine and how learning the art of story-telling can help medical practice.

PITETTI, Connor, Ruhr-Universität Bochum
Visions of a Green City

The "green city" is a common trope in contemporary environmentalism and urban planning, where it functions as both an idealized symbol and as a concrete objective. The tree lined boulevards and plant-bedecked skyscrapers that literally color an urban landscape green are often used as a visual shorthand for the sustainable technologies and innovations through which urban planners and civil engineers seek to respond to contemporary environmental crises, as well as for a whole range of discursive attempts to reimagine the ways in which humanity occupies the world. As a utopian landscape in which human and nonhuman beings co-exist holistically and sustainably, this green city is widely celebrated as a way in which humanity might succeed at bringing sustainable order to a destabilized world. Another and very different "green city" appears frequently in contemporary fiction and cinema. Here, landscapes in which the lines between urban and rural or human and nonhuman have become blurred has an emotional and conceptual valence starkly at odds with the utopian city just discussed. The weed-splintered streets, overgrown facades, and animal-haunted interiors of this green city also act as a visual shorthand, conjuring up a complex of fears and anxieties involving post-industrial decline, the breakdown of modern culture, and, more generally, humanity's failure or inability to control the environments in which we dwell. As a dystopian landscape from which humanity has been driven by resurgent non-human forces, this green city is widely deployed as a spectacular warning about the costs and consequences of humanity's failures. Examining images of green cities from a range of sources—including religious texts, works of fiction, and the writings of architects—this paper explores the relationship between these two visions. It argues that both versions of the green city trope are implicitly hostile to the idea of ecological difference; the ruined city presents the intrusion of non-human forces into human worlds as a disaster and the utopian city celebrates the synthesis of human and nonhuman worlds, but both seek to avoid acknowledging that humanity must share the landscapes we inhabit with beings and forces we can neither disown entirely nor unproblematically integrate into ourselves. The paper ends by identifying a third, more ecologically rigorous version of the green city, one that takes seriously the proposition that multiple, non-coordinated agential forces are responsible for shaping urban landscapes, and that pushes audiences to see that the appropriate alternative to destructive, anthropocentric dwelling practices is not the dream of technologically-coordinated green sustainability, but an acknowledgement of humanity's participation in wider networks of agency.

PONTÉN, Ann, Lund University
French greenery in Marcell Duchamp's art

Homonymes might lead to misunderstandings but are also part of the richness in language and allow for unexpected associations and puns. One syllable can thus generate a swarm of possible understandings. In Duchamp's case, the French homophones [vɛR] *ver*, *verre*, *vers*, *vers*, *vert* (worm,

glass, verse line, toward, green) creates a chain of meanings which all can be used in the context of his work. However, my overall aim is not to conclude that Duchamp actually used these associations but use them as a method for discovery. One obvious example is *La Mariée mise à nu par ses célibataires, même* or the *Large Glass (Grand Verre)*. It differs from more traditional paintings of females or nudes in greenery (*verdure*) such as *Nu dans la verdure*, 1887, by Pierre-Auguste Renoir or Henri Matisse's *La Verdure*. Furthermore, *verdure* can be heard as *verre dur* (hard glass) in contrast to the soft and natural greenery/*verdure*. *Vert* also means immature, sour, and indecent. The *Large Glass* has sometimes been interpreted as a rendering of a verse (*vers*) such as a sonnet with an upper/first section and a lower/last section. Finally, there is an old French expression: "*être nu comme un ver*" (to be as naked as a worm). In my paper I explore these "green" homophones but also language as generative for Duchamp's work in general, for example false etymologies and other misunderstandings.

PULLEN, Treva Michelle,
Concordia University Montréal

Curating for planetary futures: Ethics of Care in eco art

My proposed paper presentation "*Curating for planetary futures: Ethics of Care in eco art*" questions the particular modes of collecting, classifying, conserving, and curating art that are becoming necessary in the present geological era of the Anthropocene. By examining contemporary curatorial practices of eco art, my research builds on current work calling for a new *ethics of care*. Anchored in feminist media theories of affect (Ahmed 2004; Butler 2004; Cvetkovich 2012; Halpern 2014) and the politics of representation (Stuart Hall 2012; Weheliye 2014), the goal is to move away from traditional definitions of care centered around the mother/child relationship (Gilligan 1982), and rather propose an aesthetics and ethics of care based on transversal relations across human and nonhuman entities. In doing so, this research will mobilize care as pivotal in the curation of eco art and thus contributes to a new understanding of curation for and in the Anthropocene (Mollers 2013; Davis & Turpin 2015; Newll, Robin & Wehner 2017). By presenting works of eco art that actively reshape our contemporary context I will unpack the ways in which artists are reimagining our relations to ecologies of loss and precarity, and point to new futures through care and empathy. Ultimately, my research will pose the question: how can curation and eco art as 'practices of care' help to reimagine response-able (Haraway 2016) modes for living on a damaged planet? Contemporary artists working with living and lively matter as material substance are taking cues from contemporary care ethics to develop new techniques and methods. Eco artists working with microbes (Nicole Clouston, Tarsh Bates), plants (Amanda White) and animals (Kathy High, Jennifer Willett), in this new and emerging field, are developing methods for making art ethically and responsibly with care. Pointing to the multiple scales and temporalities of life for nonhuman creatures, feminist eco artists are calling for symbiosis (Margulis 1998) across

species and crafting ecological narratives for productive storytelling and fabulation (Guattari 2008). Eco artists posit that by acknowledging our deep, bodily connection with microbes, and by extension our environment, we may foster a stronger, more sustainable and empathetic relationship with our ecosystem as a whole. This figuration can allow care and empathy to transcend the museum or laboratory into a much larger networked ecology. In working across scales and times-capes (Guattari 2008) eco artists can foster productive and caring relationships that are compassionate to nonhumans experiences and forms of life (Acampora 2014). My research paper will explore the affirmative and imaginative strategies invoked by artists to salvage and remediate our damaged planet, with a focus on artistic and curatorial approaches to the Anthropocene that, in line with an 'ethics of care', celebrate resilience, provoke empathy and engage with the fluidity of human and nonhuman kin (Haraway 2016). Through an 'ethics of care,' my proposed paper will consider feminist, non-Western, and Indigenous practices of art production to curate an exhibition of eco art. More generally, my work aims to mobilize feminist eco-theorists (Haraway 2003, 2016; Tsing 2017; Guattari 2008) to continue charting a path forward for museums as powerful world-making forces that can contribute to the greater ecological good.

ROBERDEAU, Wood,
Goldsmiths University of London

Monochrome Green: On Ecoaesthetics, Reductionism and Abstraction

'Recognition is famously a passage from ignorance to knowledge. To recognize, then, is not the same as an initial introduction. Nor does recognition require an exchange of words: more often than not we recognize mutely. And to recognize is by no means to understand that which meets the eye; comprehension need play no part in a moment of recognition.'

'We are called to acknowledge that in the midst of all we cannot choose, we also make choices. And we are called into recognition: of the shimmer of life's pulses and the great patterns within which the power of life expresses itself. We are therefore called into gratitude for the fact that in the midst of terrible destruction, life finds ways to flourish, and that the shimmer of life does indeed include us.'

The Deep Ecology movement and what is currently the Green Party were founded in the early 1970s; both have argued a return to environmental monism and their green banner was primarily flown against the newly visible prevalence of global pollution. Nicolás García Urriburu even employed a green monochrome, raising eco-critical awareness through artistic activism.

This paper considers the *Zeitgeist* from an art-theoretical perspective, weighing the impact of selected works on current climate change discourse and remobilized ideologies of 'greening'. In a re-reading of James Lovelock, Bruno Latour reminds us that the 'Gaia Hypothesis' in fact 'unlocked the explanatory power of reductionism,' demonstrating a multiplicitous world rather than a monistic ecosphere. In

contemporary art, such a principle of reduction might be understood as an eco-mimetic principle, one that turns to natural phenomena and phenomenological questions of perception. I ask at what register do humans comprehend the elements and dimensions of the non-human world? How are such encounters comprehensible without reliance on the themes of repair and restoration? By exploring shifts within environmental aesthetics and politics, I argue that certain artworks establish a tension with Timothy Morton's recent critiques of Deep Ecology and that they also resonate with the materialist turn championed by Diana Coole, Samantha Frost and Jane Bennett. The intuitively experimental framings of 'nature' in selected practices inhabit the same discourse of 'reorientation' shared by these theoretical positions. Accordingly, works are analysed in relation to the nature/culture divide they attempt to bridge; the adoption of a certain environmentalism approaches the categories of 'system' and 'field' identified by Morton as holistic models that misguidedly aim to delimit subjectivity and creative impact in the world through unintentional romanticism. Nevertheless, I argue that objects and installations also speak to what Coole and Frost identify as the first theme of New Materialism; namely, a post-humanism by which 'matter itself' is 'a lively or exhibiting agency.' The paper ultimately determines how 'eco-aesthetics', akin to Deborah Bird Rose's writing on 'shimmer' and Jeffrey Jerome Cohen's conceptualization of a prismatic rainbow, continues to inform the challenge of achieving materialist proximity, direct engagement, or what Bennett calls a 'material vitalism'; one that includes subjects and nonhuman agents as co-producers or 'materialists living as earth.'

**RADOMSKA & MacCormack
& Henriksen & Mehrabi & Shildrick & Lykke**
**PANEL: Queering Ecologies
of Death**

'Green' as a concept has become a shorthand for 'ecology', understood as that which refers to 'home' or 'environment' with all their constituting relationalities. It not only evokes a reflection on or concern with human and nonhuman entities and their milieus, but also implies a set of discourses (public, political, scientific, philosophical) that focus on the climate change and contemporary ecological crises. The latter, more often than not, entail the degradation and diminution of food and water resources, which make certain habitats unlivable. Along with 'climate migration', these processes lead to the death of individual organisms, populations and species extinction, prompting us to reconsider our ways of understanding and relating to death, dying, extinction and annihilation. While bioscience and biotechnologies underline and expose interdependency, commonality and relationality as key characteristics of life shared by all organisms, Western thought and cultural imaginaries tend to draw a thick dividing line between human and nonhuman animals and other organisms, notably visible in the context of death. The interdisciplinary field of Death Studies (in its conventional form) gives precedence to the death of human individuals as its main research subject, examined primarily through psychological,

anthropological and sociological lens. Western philosophies approach death in a double way: as a process common to all organisms and an event that distinguishes the human from other creatures (e.g. Heidegger [1953] 2010; Calarco 2008). Yet, in the context of discussions on the so-called Anthropocene – a distinct geological epoch we live in, generated by 'human activities on earth and atmosphere, and at all, including global, scales' (Crutzen & Stoermer 2000, 17) – it becomes evident that the stories of species extinction, animal death and annihilation of nonhuman life, broadly speaking, are deeply entangled with the histories of colonial violence, genocide and oppression/elimination of the non-normative human other.

Environmental science and the humanities examine more-than-human death primarily in the form of species extinction, its narratives and imaginaries. Simultaneously, human death is classified, investigated and valued separately: approached through a cultural, social or biomedical lens, it appears as either 'the end' of individual's existence (in religious discourses taken as a step towards an afterlife), or as something to postpone or eliminate by medical means. However, if we look at the human corpse itself, it is an (always already) non/human assemblage of entities, materialities and processes. Against this background, what strikes is the lack of sufficient theorising of the messy intimacies between materialities of human and nonhuman kind that constitute the processes of death, dying and annihilation. In other words, our cultural understandings require conceptualisations and narratives attentive to multiplicitous relationalities and entanglements of the living and non-living, and human and non-human or, what we call, 'ecologies of death'.

This transdisciplinary panel brings together several different perspectives, encompassing such fields as philosophy, art, cultural studies, monster studies, science and technology studies, gender studies and disability studies, in order to ask what it means to *queer* ecologies of death. The speakers will not only concentrate on the processes and materialities of death and dying, and living and non-living in a more-than-human world, but also investigate how such enquiries go beyond, unsettle and subvert given norms, normativities and binaries that govern our approaches to and understandings of death, dying, extinction and annihilation. In particular, the panelists will focus on the following set of questions:

How can ecosophy (a thought informed by entangled intimacies of the living and non-living beyond green) and bio-philosophy (thinking life in its relation to that which takes it beyond itself) attend to multiplicitous difference and relationality constitutive of death and dying as well as its ontology and ethics?

Queering Ecologies of Death: Part 1

While thinking with and through the contemporary practices of eco- and bioart, **Marietta Radomska** (Linköping University) will ask how such forms of art explore and enact the relations between the human and the environment in the context of the annihilation of life on Earth resulting from human activity? How can doing biophilosophy through art contribute to a less anthropocentric, non-normative and different understanding of death? And, in return, what kinds of ethics does it mobilise?

Patricia MacCormack (Anglia Ruskin University) will focus on how abolitionism (animal rights at its extreme) can

rethink entanglement as grace through a leaving be, while also opening the ecosophical world to freedoms unperceived by anthropocentric apprehension. Furthermore, she will ask how human extinction through a cessation of reproduction or advocacy of anti-natalism could further abolition to become a form of queer death activism that is both vitalistic and caring, creative and jubilant?

Line Henriksen (University of Copenhagen) will look at the ways contemporary ecocritical discourses bring forward the questions of disappearance, absence, annihilation, trace and void. More specifically, if ecology is a home/household (oikos) – she asks – is it haunted? By bringing together hauntology and ecotheory, she will discuss what it means to think spectrality as part of ecological systems, thereby delving into the transparency of the apparition as much as the traditional 'green' of ecology.

Queering Ecologies of Death: Part 2

Drawing on her ethnographic work in a *Drosophila Melanogaster* laboratory, **Tara Mehrabi** (Linköping University/Karlstad University) will explore how, in the context of contemporary bioscience, life (e.g. of animal models) – no longer scientifically 'valuable'/'useful' – becomes 'waste'. How does this particular ecology of death challenge and queer the boundaries of natural/artificial, inside/outside, nature/laboratory, safe/hazardous and living/non-living beyond green? How does it problematise human exceptionalism and binary logic?

Margrit Shildrick (Stockholm University/University of Toronto) will enquire about death (organic/cellular/singular/species) in the context of the research on microchimerism beyond the human. She will anchor these questions in the problematics around the 'greening' of the gut and eradication therapy.

Finally, **Nina Lykke** (Linköping University) will concentrate on how human death and the human corpse can be rethought from the perspective of inhuman forces, understood in an immanence philosophical sense, and redefined against the background of its transcorporeal belonging to a queer planetary kinship of vulnerable more-than-human-bodies. What are the eco-ethical implications of such a redefinition?

RÜHSE, Viola, Danube University Krems Facebook's green headquarter MPK20 by Frank Gehry

Facebook engaged renowned architect Frank Gehry for the design of a new headquarter building in Silicon Valley in 2012 that was completed in 2015. The 40,000 sqm large office building called MPK20 (short for Menlo Park building 20) demonstrates a special architectural restraint. Facebook's MPK20 is even difficult to notice for external visitors because the architecture is almost entirely covered by a 3.6 ha roof garden. Facebook's headquarters received a great deal of press attention and was often uncritically lauded as the workplace of the future. There were only a few critical voices. I want to deepen and expand a critical view on MPK20 with special consideration of its green and eco-

friendly aesthetic. I take an interdisciplinary approach that combines the history of (corporate) architecture and culture with those of economics, human resources management and critical theory. I will analyze some new architectural trends in the tech industry that Facebook has integrated into the roof design, such as walking meetings that support a positive emotional state, reduce stress and heighten creativity. In addition, the roof fosters a green and sustainable image intended to detract from Facebook's negative aspects, for instance its "surveillance capitalism" (Jonathan Taplin). It is also helpful for recruiting specialist staff. The eco-friendly aesthetic of MPK20 shows certain enlightening parallels with the Apple and Google headquarters, which also gives evidence of the fierce competition between these companies. A critical view of the often overlooked function of the roof garden as a green camouflage over a car park leads to more general aspects, such as the suburban location of MPK20 and its severe ecological and social consequences.

**SANDS, Danielle, Royal Holloway,
University of London**

Gendering the Anthropocene: Deconstructing 'Gaia Politics' from Latour to Stengers

In 2017, Bruce Clarke proposed that the figure of Gaia, originating in the 1970s with James Lovelock and Lynn Margulis and re-birthed for the twenty-first century by Bruno Latour and Isabelle Stengers, is a vital resource in the cultivation of a "planetary imaginary" which is attentive to "our systemic entanglements" (Clarke 2017, 23). Contemporary forms of Gaia discourse, Clarke argues, are "fit for communicative efficacy in the so-called Anthropocene epoch" (Clarke 2017, 3). In this talk, referring to Latour and Stengers, I shall counter Clarke's claim, arguing instead that the gendered figure of Gaia is a reminder of the tendency of Anthropocene discourse towards political conservatism. For Latour, Gaia, a mythological goddess reinvented by Lovelock as a scientific metaphor, embodies the collision between discourses, "this mix up of science and politics" (Latour 2011, 8) which the "postnatural" (Latour 2011, 9) world, represents. In its deviation from benevolent images of Mother Nature, Gaia provides an alternative account of the human relationship with the natural world, one which implies that our response to the Anthropocene crisis should not derive from a solely scientific framework. Latour seizes upon the image of Gaia with fervour, celebrating 'her' not only as an assemblage of different discourses, but, in 'her' disunity and non-sovereignty, as an alternative political paradigm. Of less political interest for Latour is the gendering of Gaia; like Lovelock before him, Latour regards the feminising of Gaia as an affective metaphorical device and not a political issue. The Anthropocene compels us to question the literal and metaphorical place of the human. In projecting human maternity onto the Earth, the figure of Gaia and that of Mother Earth before her restrict thought to an immobile narcissism; accordingly, I locate Gaia in relation to an apocalyptic trend of Anthropocene thought which tends to re-vivify conservative frameworks in the face of crisis. Building upon earlier work on Latour (Sands 2015), in this talk I shall

extend my analysis to Stengers, whose thinking of Gaia as an “intruder” (Stengers 2014, 5), is largely uninterested in the gendering of Gaia. Despite its lengthy engagement with Donna Haraway, this work, I argue, cannot be recuperated for a “feminist politics of the earth” (Tola 2016, 17). Rather, I insist that a language genuinely responsive both to ‘our systemic entanglements’ and to the crises to which we have contributed, must resist the tendency, carefully encoded in the figure of Gaia, to reproduce existing notions of gender, power and species.

**SAUGMANN & Blaxekjær
& du Plessis & Guillaume & Vuori**

PANEL: What’s green good for, anyway? Money, order, the arctic, and international politics in colours

From the empty frenzied ‘green’ optimism of Ruby Rhod in *the Fifth Element* to street protests and changing arctic landscapes, green is a resource mobilized to do specific international political work. Through four papers on colours, green and international politics, this panel presents a series of takes on what conditions such political work and the on effects an international politics of colour.

Greening the Arctic

Lau Blaxekjær, NIAS, UCPH:

What we imagine as a “white and pristine Arctic” is on closer inspection greening in multiple ways. Climate change is melting away the whiteness of the Arctic and green seems to appear. This paper and presentation will categorise a range of examples of *Green Geopolitics of the Arctic*, such as 1) *Green Security* illustrated by the abandoned nuclear material in northern Greenland or the methane gas eruptions caused by melting permafrost; 2) *Green Diplomacy* illustrated by the Arctic appearing in the UN climate negotiations or Greenpeace’s video critique of Lego’s collaboration with Shell and Shell’s Arctic oil drilling plans; 3) *Green Economy* illustrated by the geopolitics of “sustainable green projects” versus “greedy green project” competing for limited space and resources – green and fossil energy, sea weed and algae projects, eco-tourism and mass-tourism; 4) *Green Societies* illustrated by hopes and fights for a new post-colonial future with self-sustainable societies or new farming and urban farming societies and communities. Through these categories and the prism of green, the concept of geopolitics is widened to include theoretical reflections on the *geopolitical space of colours*.

White Ecology – A chromatic analysis of Arctic geopolitics
Gitte du Plessis, University of Oulu
White Arctic ecologies are at once material realities and powerful drivers of human imaginaries. While Arctic snow and ice is indifferent to human imaginaries of white as light, order, cleanliness, purity, innocence, and surrender, their color nonetheless shapes human perspectives and actions in ways that have geopolitical impacts. Imaginaries don’t come out of nowhere: Fresh snow covers muddy tracks, and a

frozen corpse is preserved from rotting deterioration. The color of ice and snow is therefore more than an innate fact that gives rise to social constructions, but a force with efficacy. Armies who want to be camouflaged in the Arctic winter are forced by a white ecology to wear white, and even carry white machine guns, which disrupts traditional visual cues of strength and masculinity usually associated with war. Violence and cruelty have different circumstances in an ecology of frozen white silence.

In all its whiteness, the Arctic has been inhabited, protected, and its resources collected, for centuries. Contemporary western fantasies of the Arctic as a natural blank canvas that needs to be protected, put under control, or harvested, overlook how white ecologies can be old, touched, and lived in, while remaining white. Black carbon, climate change induced greening and browning of Arctic land, and the increasingly blue hues of the Arctic Ocean as the ice recedes are a war from afar, wrought by extractionist assemblages of capitalism and combustion engines that leaves corpses of starved polar bears and reindeer in its wake. Further, as the ice melts, new dangers such as anthrax and oil and gas reserves that were kept in check under it come to possess upward mobility.

Through its chromatic analysis of contemporary Arctic geopolitics, this paper asks not whether melting ice will result in resource wars between nation states, but rather how the material efficacy of the color white responds to the war that anthropogenic resonance machines of destruction are waging on white ecologies.

“Move along! There’s nothing to see here!”: A chromatological analysis of police vehicle redesign

**Xavier T. Guillaume, Rijksuniversiteit Groningen
Juha A. Vuori, University of Helsinki
Rune Saugmann, University of Tampere**

Colours are not just ornaments, they refer to a vast range of meanings. We argue that they are a window to societal understandings of what security and policing means, and, when deployed in relation to situations in which security is at stake, reflect the key issues and stakes at heart of security policies. The present contribution engages with the politics of colours and policing as represented in the redesign of Finnish police vehicles. By offering a diachronic visual semiotic analysis of colour-use in past and contemporary colour-schemes of Finnish police vehicles, we develop an understanding of colours as embedded in strategies to invoke what policing is about and show how green is gradually marginalized in favour of blue and later neon. In other words, we deploy a chromatology of security to analyse the conditions of possibility of acting in policing situations anticipated by contemporary police forces. Colours distinguish police from other security forces, produce them as authoritative yet benign, as anticipating and preventing danger. Our analysis thus engages with the manners by which colours connect to cultural modes of (pre)mediation, risk and speculation at work in police forces, and with the assumed psychological effects of colours.

SAY, Aliya, University of Aarhus
Art, Humans, and Plants:
On Corporeal Experience in the
Anthropocene

Today, there is a growing awareness that ‘human,’ as we are accustomed to conceptualize it, is an incoherent concept. My research forms a part of the recent shift in theory and thinking, away from hierarchical and anthropocentric worldviews towards posthumanist notions of cohabitation, materiality, and entanglement. In my thesis, I shall argue that plants offer a new paradigm of non-oppositional mode of thinking and being, encouraging us to abandon the structural dualisms that instigated the current environmental emergencies, and pursue instead the notions of codependency and ‘media–nature–culture’ continuum. Plants make up to 80-97,5% of the total biomass of this planet, and as recent scientific advances have demonstrated, they present us with unique and previously underestimated capacities for sensing, intelligence, memory, and communication. Triggered by these findings, my project is concerned with the interconnections between plant biology, media, and digital technology on one hand, and their parallel implications for aesthetics and politics on the other. The research is interdisciplinary in nature, drawing on contemporary art and literature, critical theory, botany, and environmental humanities. The plant is a collective being, with its body described as a rhizome that ceaselessly establishes connections. The rhizomatic life of plants provides a useful counterpoint to a notion of life housed within individual organisms, offering instead a space of distributed intelligence and conviviality. My research, therefore, will focus on human and non-human rhizomatic and relational exchanges, bodies, and matter, as addressed and expressed primarily in visual and performative art practices. Primarily, my research is concerned with a critical investigation of corporeality, embodiment and the new material turn in contemporary art, expressed through dance and performance in a gallery context, and immersive and multisensory installations. Thinking like a plant is thinking without identity – it is a continuous celebration of the restlessness of life, of movement, dynamic extension, and temporality. In my presentation, I aim to provide a brief account of contemporary art which is attentive to the agency of non-human bodies and which engages with vital materiality and the logic of plant thinking, such as in the works of John Akomfrah, Pierre Huyghe, Mira Calix, and many others.

SCHILLER, Devon, Danube University Krems
Greening face: Towards an
Embedded and Extended Cognitive-
Perceptual Ecossemiosis of Chro-
matic “In the Wild” Facial Signs

A Green-Faced Man, since the earliest mediated histories to the north, east, south, and west, is graphically and textually represented as having a chromatic or foliated mask, and with their visage immersed within branches or leaves. Innumerable occurrences encompass the mythical, folkloric,

and cultural imaginaries: the Egyptian Osiris, Sumerian Tammuz, Greek Dionysus, Celtic Viridios, Germanic Freyr, and Islamic al-Khidr, so too the fourteenth-century Gawain Poet’s Green Knight, sixteenth-century playwright William Shakespeare’s Puck, and twentieth-century novelist J.M. Barrie’s Peter Pan—and on. This Viridian One, symbolically condensed into an ontological cartography, is cross-culturally and transhistorically interpreted through varied social conventions, habits, or laws as corresponding to meanings about cyclicity, nature, and rebirth. The phenomenological similitude between “faceness” and “greenness,” or that “a human’s face is as like the earth’s substance,” post-Darwin natural and humanist science as a critical landscape populated with theories of embodiment also generally assumes to be an *a priori* truism. Yet, the study of facial signs itself—from the art of physiognomy in the humorist medicine of the Classical Age, to the science of facial expression in the digital biometrics of this Algorithmic Age—“deterretorializes” the proprioceptive face out of the body and head, as well as away from its embedded and extended cognitive-perceptual environment. In this field of inquiry, the face becomes the striated object of a distant vision, as corporeal sense is over-coded with scientific calculus, in a processual “facialization” that turns lived experience into written abstraction.

In today’s facial atmosphere or ethos, the automated Facial Expression Recognition (FER) systems that acceleratedly proliferate, and informate the environment by dataficing the face, actually rely upon a methodological procedure of “unprismatic greenlessness”—in terms of green as both color and concept. That is, to detect, extract, and classify physiological representamen and their psychological sign-objects, FER algorithmic functionality is trained using benchmark datasets of digital photographs that are principally made with: gray-scale monochromatic values rather than color polychromatic channels; data augmentation by adding the brightness, contrast, and sharpness information typical in facial behavior under natural conditions; image normalization by their alignment, cropping, and resizing with face-only no-background data; and staged expressors in a controlled laboratory but not spontaneous expressions “in the wild.” To problematize green in the semiotic niche of the human animal and the sign-systems of its facial expressivity, I posit an ecological and semiotic—or eco-semiotic—approach within an intellectual history. I probe the very relationship between “green as a concept” culturally constructed across artistic, scientific, and technological knowledges about face, and “green as a color” biologically relative through its signifying *Umwelt* of face-to-face (F2F) communication as well as mediated interactions. I present the extent to which the neurobiology of face expression, representation, and perception is in fact determined by facial chromaticity: how green spectral-range sensitivity in trichromatic vision—perhaps evolved by natural selective and sexual pressures to detect fruit or young-leaf stimuli—discriminates the degree of greenness in a face as an intraspecific signal for emotion expression, sexual fitness, and threat display. And, I propose, that “a greening of the face” is called for. In order to reconcile popular notions of the face, of a utopian panopticon transparency fetishized by the faciaphilic, and of a dystopian panopticonism technocracy feared by the faciaphobic, facial expression must be effectively recognized as a natural

element within an embedded and extended cognitive-perceptual environment. Greening face begins today in FER-systems' more robust training (for chromatic "in the wild" facial signs), and continues tomorrow into (facial expression of) emotion intelligence education.

**SCHULLER, Kyla, Rutgers University,
New Brunswick**

Sexual Climates: Susceptible Bodies and Queer Environments in the Nineteenth Century

Can sexuality be green? Before the homosexual was a species, the queer was an effect of the environment. Susceptibility—to history, to climate, to influence, to familial taint—functioned as a key concept in the precipitation of sexuality-in-formation across the nineteenth century. This paper builds on emergent frameworks in queer studies that signal the role of relationality, rather than identitarian concepts, in forging modern notions of sexuality developed by scholars such as Peter Coviello and Greta LaFleur. It argues for a biopolitical reading of the history of sexuality that positions queer as the improper mediation of object relations between self, others, and toxic environments, a phenomenon marked in nineteenth-century terms as susceptibility. It draws especially on two queer texts republished in 2016, including Theodore Winthrop's 1861 novel *Cecil Dreeme* and the anonymously-published short story "The Man Who Thought Himself a Woman," (1857) to unpack how accounts of subjectivity, self-formation, and same-sex desire materialize *vis-a-vis* states of porosity and permeability that were understood as physiological conditions of civilization. I situate queer bodies as effects of impressibility, or the capacity to be affected over time, that was considered a constitutive feature of civilization. I emphasize the Lamarckian nature of the era, in which impressions and experiences were thought to make modifications to the body and mind that were transmissible to the next generation. In this pre-genetic notion of heredity and identity, bodies were products of environments, rather than parentage. Susceptibility emerges as a naturalizing schematic that places the weight of subject formation on toxic milieus, rather than the individual. This biopolitical, versus primarily discursive, account of modern sexuality emphasizes the significance of the racial structure of civilization to the emergence of queer social formations. Overall, it suggests that the shift to genetic notions of heredity around 1900 is an overlooked, but crucial, element of the complex of "modern sexuality" emergent at the turn of the century that moved sexuality inward, into the role of an innate and immutable property of the self.

**SCOWN, Jim, Cardiff University
& University of Bristol**

"A greenness grew over those brown beds" Botanical Science and the Soils of *Jane Eyre*

This paper examines the development of 1840s botanical science, investigating the multiple evocations of 'green' and 'greenness' in *Jane Eyre* (1847) in terms of contemporary exploration into the growth and physiology of plant life. Theories concerning plant growth were diverse and varied within the British Association for the Advancement of Science, an organisation founded in York in 1831 and returning to the Yorkshire capital for the annual meeting of 1844. The dominant opinion, put forward by Justus von Liebig, held that plants derived their nutrients from the air. However, in this paper I will focus primarily on the work of James Johnston, who combined chemical and geological analysis to argue that vegetable life depended on soil for nourishment. I argue that Johnston's work influences Brontë's depiction of growth and greenery in *Jane Eyre*, in relation to both landscape and character. As 'greenness' sprouts from the 'brown beds' (90) of Lowood school gardens and 'varied shades of green' (374) suggest the fertility of northern English hills, so nearby moorland is left 'black, where the dry soil bore only heath' (380). Such land may still be productive, however, as evidenced by Jane's own desire to 'decay quietly, and mingle in peace with the soil of this wilderness' (374). The metaphorical soils of human character are imagined as similarly diverse, with Edward Rochester apparently 'green and vigorous', despite his crippled condition at the conclusion of the novel, while Miss Ingram possesses a 'heart barren by nature', imagined as a 'soil' where 'nothing bloomed spontaneously' (216).

Although Miss Ingram provides Mrs Dent with a 'discourse on botany' (201), it is through the gaze of *Jane Eyre* herself, with her remarkably scientific 'turn ... for analysis' (95), that contrasting soils and their importance for both vegetable and human growth are understood within the novel. At the heart of both Brontë's text and Johnstone's science lies an exploration of organic life's relationship to the inorganic environment – a questioning of the very origins of growth and greenness. Considering both novelistic and scientific writing together here as exploratory accounts of organic growth, I seek to provide a pertinent example of how knowledge of growth and greenness is made and challenged across 1840s Yorkshire.

**SIEMBIEDA, Danielle,
Art Inspector & Leonardo**

Saving the Earth by Changing Art

Can artists change the way they create work to make a healthier planet? I.e. Become "Green" Artists? Two creative industries have changed their standards and best practices to adopt sustainable and environmental techniques in design and production. Architecture has adopted LEED performance design into its standard practice, and industrial design

begins with thinking about the end of life of a product and how to leave the least amount of impact on the environment. But it's been a long fight for these industries. Resisters during the transformation that began in the 1970s proclaimed that they would all go out of business, that they'd be creatively strangled, that it was impossible to get all stakeholders on board. This shared history of transforming creative industry leads us to a question we are facing now within the art world: Can artists change the way they create work to make a healthier planet? I believe the answer is yes. However, we must have the inclusion of all the art world's key players, including art institutions, art media, academia, retailer/manufacturers, collectors, and artists. And what would become of such a shift in the art world? Art seeds culture and influences public behavior. If artists can change their standard of practice, then the rest of the world will follow. The Art Inspector aims at changing the art economy through creative economic principles, community organizing, and oversight. As a third-party certification agent, it examines the environmental impact of art processes and practice to realize this metamorphosis. This project employs a triangular formula including the Healthy Art Program (education), Reform (advocacy) and Green Certification (Third Party Inspections).

But how does "greening" art work? With the Green Certification by the Art Inspector at least two inspections to take place. The initial inspection starts with an intake form that asks questions to each artist about their studio environment, materials they are using, and the type of machines or equipment that use power. During this process, a series of tests are conducted using similar equipment used for energy audits in residential homes. The Art Inspector tests power outlets, lighting and occupancy, ventilation and Volatile Organic Compounds. Once the inspection process is finished The Art Inspector will write up a report based on the data collected and make suggestions for alternatives and improvements to artists studios and the working process. If the artist makes the recommended modifications, The Art Inspector will return for a re-inspection and award a Healthy Art Certification if the artist passes. Artists who fail inspection or those who are interested in diving deeper into changing their habits can join the Healthy Art Program. Various workshops ranging from green materials, sustainable wood products, energy efficiency, lighting and safety are available to artists at varying partner institutions. If the artists are supplied with resources and knowledge, they will be empowered to change. The final part of The Art Inspector is to advocate for change in policy and curriculum on both an institutional and government level. Working with academic and museum institutions to adopt new values and requirements for artworks to be created sustainably will create a shift in the resources for the production of art.

SPIESS, Klaus, Medical University Vienna & STRECKER, Lucie, University of Applied Arts Vienna

Mykovaluta

We have long been aware that industrial imperatives result in an exploitation of nature's commons, however we do not thoroughly analyse how the familiar nature-culture

dichotomy has turned into a nature-money dichotomy. As artists we are, like the consumers of our art, involved in a monetary art industry. How might we as artists use cultures' commons to reflect on an economy based on nature's commons? How might we create unexpected connections between the other-than-human and our own economic dilemma? We do artistic research on these questions creating live economic experiments with microbes from our guts. We chose gut fungi for several reasons. They are mutually accustomed to humans. They mediate between the human central nervous system and the surrounding ecosystems. Finally, bred fungi in general are sensitive to exploitative domestication: their metabolism and sexual reproduction resists industrial profitmaking. In our experiment we relate our gut fungi in real-time to the valuations of our work at the art market. First we use smear tests to harvest fungi from our gut. Fungi in an onstage breeding bioreactor are then fed by our stressed performance audience's sweat. We then interface these fungi in a loop with our market data. In switching back and forth between metabolic and sexual states, fungi make decisions with elaborate ecological risk-taking, with both the market data and the fungi exchanging information and mutually learning from each other during the performance. In order to juxtapose the complicity of classification, animation and monetary valuation in our performance, we invite a web-streamed shaman to comment on our experiment. The way she earmarks our fungi as a previously human species contrasts the informational codes assigned by us to the fungi with a spiritual essence. Her rituals restructure the dichotomy of the wild and the domesticated and cushion the pervasive danger of excluding the invaluable/unclassifiable by speciation. Through the metabolic life-and-death game, the artists gut fungi perform art valuation processes as 'second nature'. This derivative further alienates monetary valuations' alienation to natural resources, making the strangeness of life's pricing even stranger.

**STEINER, Henriette,
University of Copenhagen**

'I Never Promised you a Rose Garden...' Clashing Temporalities in Copenhagen's Urban Forest to be

This paper calls on on-site urban explorations, as well as on digital representations on Instagram, of the field of flowers which blossomed in Amager in the late summer of 2017. The flower field was planted on the site of what will become Copenhagen's so-called urban forest, a 14-hectare area with 25.000 trees situated around seven kilometres south of the inner city of Copenhagen.¹ This project constitutes the centre piece of the City of Copenhagen's strategy to introduce another 100.000 trees to the city by the year 2025, an ambitious goal to work towards literally giving the city of Copenhagen a greener appearance. The idea was to prepare the soil in a machine-free way through the roots of the flowers penetrating the ground before planting the trees. The forest will mainly contain native Danish tree species although, as a response to climate change and the anticipated higher temperatures in Denmark, new species also will be introduced to build a kind of living laboratory and test-ground for tree

species that are expected to spread in the country when temperatures rise. Finally, a part of the project is the establishment of the so-called Copenhagen Food Forest. This will be a municipal orchard where people can come to enjoy berries and fruits such as plum and blackcurrant. For free. This was foreshadowed in the flower field, although it will take longer before fruits and berries grow at this site.

This paper critically examines the different temporalities that collide in this beautiful site, seeped, as it is, in narratives of sharing, companionship and of the population of Copenhagen preparing for an uncertain although most certainly warmer future. I take as a starting point my own experience of the site as well as the way it is represented – and distributed – in digital space, e.g. through Instagram images. I discuss the way the ecological paradigm underlying the project calls on optimistic sentiments concerning our abilities to make use of nature's own forces to mitigate climate change, as well as the aggressive use of an image of 'nature as event' used as a green branding strategy by the municipality of Copenhagen in relation to this project. We may say that, inadvertently perhaps, this calls attention to a sense of what we may call Anthropocene guilt. In this way, the paper calls attention to some of the contradictions inherent in the historicism of the term the Anthropocene.

STEPHENS & Catts & Sellberg

PANEL: Life After Nature

Disembodied Greenwashing- how no-bodies biology promise to save the world.

Oron Catts, University of Western Australia

The ideas of using fragmented body parts kept alive using artificial means recently been hailed as "new green" solutions. Meat that never been in a body, leather grown as liquid collagen in industrial fermenters, rhino horns with no rhinos, milk from no tits, are all examples of the technobabble that calls itself cellular agriculture. Ideas of exploiting semi-living fragments of complex biological bodies are becoming the new wet dream of the innovation economy. With the birth of many of these projects traced back to critical art projects, one must ask whether the danger of making strange through art is just another R&D arm for the zombie industries of Silicon Valley. The semi-dead are here, what does it mean to the fully living? And how come bloodless bodies are the new promise for the clean green?

Future Remains: Reanimation and Post-Natural Biologies in Art/Science

Elizabeth Stephens, University of Queensland

Marguerite Humeau's "Opera for Prehistoric Creatures" (2013) is part of an ongoing series of sci-art projects by the artist designed to resuscitate the sound of extinct prehistoric creatures by reconstructing their vocal tracts. Sci-artworks centred on practices of reanimation are a rapidly growing field: Pinar Yoldas' "Very Loud Chamber Orchestra of Endangered Species" (2013) and Diemut Stebe's reproduction of Van Gogh's ear (2014), grown from a recovered sample of the artist's DNA, are other prominent examples. Such projects raise important questions about the status of nature and the biological, its assumed "green-ness," at the start of the

twenty-first century. One way they do this is by foregrounding pivotal differences in how practices of reanimation are framed within the spheres of art and science, drawing attention to a critical tension that is often overlooked in the hyphenation of sci-art. Scientific projects, such as the Harvard University attempt to resurrect the Woolly Mammoth in 2017, are commonly described as attempts at "de-extinction." That is, they are framed as the reanimation of past life in the present. Art projects like Humeau's, however, foreground the way such attempts involve not so much a reanimation but the speculative design and manufacture of something new: a re-engineered, synthetic or post-natural biology. Drawing on recent work in feminist science studies and critical theory, this paper will examine sci-art projects in reanimation as sites of critical intervention as well as collaboration between the arts and sciences, and as important sites of experimentation with both life and time.

Life Times: Vitalism, Change and Connection

Karin Sellberg, University of Queensland

What is 'life' and how do we define its boundaries? Is life immeasurable or are there levels of 'liveliness'? How should we relate to entities that are not technically alive at all? In a world that is becoming increasingly technologized, questions of what counts as 'life' and 'living' have attained an unprecedented focus in contemporary philosophical and arts discourse. As Mel Chen acknowledges in *Animacies*, the "continued rethinking of life and death's proper boundaries" has increasingly been recognized as a priority in twenty-first-century North American, European and Australasian contexts (2012: 1). Indeed, the question of life has arguably become *the* central problematic of recent biopolitics, alongside discussions of scientific ethics and technological/organic power relationships. This paper will investigate the ways in which contemporary feminist philosophy has dealt with the concept of life, in particular in relation to the passing of time. I will refer to the works of Elizabeth Grosz, Claire Colebrook, Jane Bennett and Anna Lowenhaupt Tsing to argue that the feminist idea of life is closely interlinked to the passing of time. Life, in feminist philosophy, is a mutable, connective force, giving a visible and tangible shape to time.

STĘPIEŃ, Justyna, Szczecin University

(Re)greening the Anthropocene in Mathew Barney's performative works

As indicated in recent theoretical insights, with the beginning of the Anthropocene epoch, politics, culture and geology have become inextricably entwined. These reconfigurations of our understanding of environmental destruction and sociocultural injustice enable new modes of navigation and vehicles for inquiry to indicate that, in fact, humans have been acting as geological agents transforming with the Earth processes thus becoming closely related to all the nonhuman organisms and forms. Even though Mathew Barney released his *Drawing Restraint 9* in 2005 just five years after the term Anthropocene was coined—without its official recognition—

by Paul Crutzen and Eugene Stoermer, the artist's film aptly re-imagines the human through biological, technological and geological processes, indicating the necessity to rework the heightened hierarchical relations of humans and its violence inflicted upon the nonhuman worldings. In fact, the bodies of the characters—both human and inhuman—in his work undergo constant morphogenesis becoming finally a complex multiplicity with multiple scales of reference far beyond the human-social paradigm. As I will indicate, referring to Felix Guattari's writings and new materialist theoretical framework, the artist's experimental film unfolds the processes of constant "bodying",

interconnections and intra-actions of different matters that produce forms of socio-cultural resistance eventually opening up possibilities of green regeneration.

THOMSEN, Torsten,
University of Southern Denmark
Neither trash nor Treasure -
towards a queer ecopoetry

Working from a theoretical framework of dark ecology, speculative realism, and vital materialism, this paper will investigate how the material and semantic surplus in the writings of Juliana Spahr and Margaret Atwood can be said to queer categories such as 'pollution' and 'resource'. It will focus on the unpractical, the nonlinear, meaningless, unproductive and un-reproductive – phenomena that do not fit into neither utilitarian nor traditional green ecological discourses but still insist with their material presence. Simultaneously, the paper will discuss the way these things are aesthetically articulated through humour and stylistic decadence. The paper will deliberate how queer materials and formal aesthetic experiments, which have been marginalised in ecological discourse due to their presumed impracticality, might challenge the vitalistic and teleological dogmas inherent to this discourse and provide a queer contribution to the notion of anthropocene aesthetics. This paper will ask how resources are constituted in these writings. How do materials undergo the transformation from inconsequential matter to priced goods? Conversely, how are these goods, their by-products or components coded as pollution and how are these discursive processes linked with consumption? On a social level, the paper will address social inequality in relation to geography, examining how resources are unequally distributed geographically (Spahr) and across class and gender divisions (Atwood) by asking what and who is a resource where and to whom. And equally important: Who and what does *not* qualify for inclusion into the stable categories but vegetate in a state between pollution and resource, trash and treasure?

THORSEN, Line Marie, Aarhus University
Monstrous greens: Itadori and
the work of Watanabe Koichi

In academic settings, 'green' is a contentious term. A contemporary history of the colour as mobilised for, first, environmental engagements and later 'green washing' to cover

up business as usual, has left a field of thinking about greenness that is somewhat over-determined by this very bifurcation. Green often ends up remaining either wonder or terror. However, 'green' is not necessarily an either-or category so what would it mean to stay productively in-between these extremities? In the terms of Anna Tsing et al. (2017), green might best be understood as a monster, whose complexity we are becoming increasingly aware of in the current whirlwind of anthropogenic ecological devastations. As beings of entanglements, monsters are *both* wonder and terror: "monsters highlight symbiosis, the enfolding of bodies within bodies in evolution and in every ecological niche." (Tsing et al. 2017) In this paper, I will be telling a story of such a green monster, via the work of Japanese artist Watanabe Koichi and his tracking and tracing of *itadori* – Japanese knotweed – across time and space. Itadori was first imported commercially to Europe in 1848 by German physician Philipp von Siebold, as an astonishingly green plant that was perfect for the garden-ideals of the mid eighteen-hundreds. It travelled via the routes of the Dutch East Indian Company, and upon its arrival in Leiden it was marketed as the most interesting perennial of the year, exhibiting "astounding vigour" and sold for enormous amounts of money. The beauty of its vibrant green leaves prompted high demand and it was sold and moved at a rapid pace via garden fairs and nursery trade (Bailey and Conolly 2000). But in the midst of new ecological, social and material circumstances, the plant changed. Beyond its native landscapes and its deep-rooted cultural significance in Japan and China, itadori's novelty quickly wore off and gardeners stopped tending to it (渡邊 2015). Rather than withering the plant thrived. In the clean-cut plains, depleted soils from monoculture farming, and waxing ruins of industrial ventures, itadori grew, hybridised and began moving on its own. By 1981 it was proscribed in the Wildlife & Countryside Act and today it is known as one of the most aggressive invasive species throughout Europe and America with entire laboratories dedicated to its eradication. In his ongoing art project *Moving Plants*, Watanabe invites us to think with the story of itadori and its entanglements. From priced perennial to monstrous pariah, the plant is thoroughly entangled with stories and histories of global capitalism, industrialisation and ecological disturbances, and as such, with the politics and poetics of 'green' in the Anthropocene (Capitalocene and Plantationocene). If 'green' is a significant trope of the Anthropocene, then the stories used to tell stories of 'greenness' matters (Haraway 2015). As a monstrous green, itadori may be a prism for seeing some of the many in-betweens of green and, I will suggest, opens a space for staying within the gaps of wonder and terror.

TURNER & Sellbach & Schrader & Yoon
PANEL: Prismatic Attention

'Color is not some intangible quality that arrives belatedly to the composition but a material impress, an agency and partner, a thing made of other things through which worlds arrive.' (Jeffrey Jerome Cohen, *Prismatic Ecology*)

Prismatic ecologies unsettle the seeming naturalness of the way that 'green' colours ecological thinking. For example,

in the 'Red' chapter of Cohen's *Prismatic Ecology* collection, Tobias Menely and Margaret Ronda turn to the vividness and disruption of red, an elemental sign of the consanguinity of living beings, and the revolutionary potential of green activism. The semiotic 'conspicuousness' is based in part on the way that 'red appears at the longest wavelength of the visible spectrum of light, and is considered the most acutely noticeable colour to those mammals and birds capable of perceiving it' (24). Yet if the spectral shift of prismatic ecologies is extended a little further as this book implies, we might consider the many animals (including some humans), who have eyes, but see neither red or green, but inhabit yellow blue worlds, or see only one colour, or shades of grey, or colours in between our colours, or look beyond our spectrum entirely. The papers in this panel look to the interweaving of disparate human and nonhuman worlds and the aesthetic means by which they come to attention - art, poetry, film and science, along with the theoretical and technical apparatuses that provoke but may also limit such attention.

Uexkull's First Colouring Book

Udine Sellbach, University of Dundee

The alterity of animal perception, its creativity exceeding a passive physiological process, and the ethical provocation this suggests, was posited in the first half of the 20th C by the biologist Jacob von Uexkull. His work has since been greatly influential in ethology, biosemiotics, systems theory, as well bio-philosophy, the posthumanities and new materialism. Rarely considered, however, is the biologist's reliance on a genre which is devoted to the playful experiments with colour - the Picture Book. It is with the aid of a Picture Book, that Uexkull first invites his readers ask how different living things might sense and interpret their environments. In order to collate his biological ideas in the form of a Picture Book, he collaborates with artists, including the German water colourist Franz Huth and the illustrator Georg Krizat, who is also acknowledged as co-author, as well as improvising with the colour theory of Goethe. In the process, the familiar world is transformed "many of its colourful features disappear, others no longer belong together but appear in new relationships." (Uexkull, *Instinctive Behaviour*, 5)

This paper explores Uexkull's *Picture Book of Invisible Worlds*, with a special focus on his experiments with, and writing on, colour in order to revisit the question of his contribution to ecological thinking, as well as further exploring what a prismatic ecology might entail.

The Colours of Seawater: Lenses and Rhythms in the Sea

Astrid Schrader,
Exeter University, University of Dundee

Colours are perceptions of different frequencies of light. Colours are therefore temporal objects. The "Violet-Black" of the deep sea that Stacy Alaimo mediates upon in *Prismatic Ecology* seems to be almost timeless. "Seawater", writes Stefan Helmreich, "prompted Boas to consider qualitative aspects of seeing". Reporting on preliminary results of a transdisciplinary conversation between a visual artist (Deborah Robinson) and a marine scientist (Simon Rundle) and myself, this paper tries to link lenses and rhythms in the

sea. We seek to draw attention to the limitations of human temporal experiences, which potentially compromise the ways in which we respond to the crisis in the sea, and ask for example how do the temporal rhythms of bodies of marine organisms, used to sensing in an aqueous world, get modified and adjusted to environmental changes? What emerges when ways of seeing become attuned to the interlocking of bio- and geo rhythms of organisms in intertidal zones and their alterations due to climate change? How do these rhythms interact with human experiences, scientific measurements and earthly cycles? For example, marine organisms inhabiting the intertidal zone adjust their body clocks to tidal cycles as well as the diurnal and seasonal cycles experienced by humans. How do the marine rhythms of life connect to planetary and terrestrial ones? Altering perceptions and cultivating new rhythms require transdisciplinary approaches and interventions. In addition to questions of time scales and interlocking of rhythms, we raise questions about lenses, literally and metaphorically. How could a prismatic ecology help to interrogate simultaneously the temporalities of scientific investigations and the materiality of its own lenses?

When all the traffic lights turn red: The color of robot-love-poetry

Hyaesin Yoon, University of London

In Margaret Rhee's poetry collection *Love, Robot* (2017) and her installation *Kimchi Poetry Machine* (2016), the color red signals concepts that are considered to be contrary to the nature of robots: love and poetry. Playing with Alan Turing's words "Can machines think?" and "I could never write poetry," Rhee asks: "Can robots love?" and "What poems do you hear from machines?" However, what unfolds in *Love, Robot* is not so much anthropomorphic ventriloquism of robots; instead, Rhee presents all-too-human stories of being fascinated by, making love to, feeling frustrated with, and being heartbroken by various machines, offering an enchanting look at both robots and humans. In this poetry, red lights - used in machines due to its "primordial vividness" that signals "rupture" and "danger" (Maneley and Ronda) - illuminate a queer "ecology of sensation" (Amit Rai) in which humans are wired into robots through desire and intimacy. The cityscape where "all traffic lights eventually turn red" opens a time-space for robot love, and "the soft part of my fingers" touches a robot lover to "make her blink red." Rhee's inquiry into human-robot love is a political project, and not only because it offers an alternative vision to the prevalent "green" ecology that often reinstates masculinity and heterosexuality as "natural." This alternative vision is also a postcolonial one, evoking the fractured affinities between robots and Asians (and Asian Americans) women. In *Kimchi Poetry Machine*, the artificial red (also the color of kimchi) operates as a connection among the labor, pleasure, and voice of (Korean) women and robots, as poems are created and circulated through human-kimchi jar-Twitter. If, as J.J. Cohen states, the "binding element" of "ecology's rainbow" is love, will love also be a prism through which to look into the compositions of ecology?

From Exsanguination to a Bloodless Coup in *White God*

Lynn Turner, Goldsmiths, University of London

Black, grey, white and tan: these are the colours of the dogs that burst through the streets in the canine redescription of Budapest in *White God*. They also substantially describe the colours of the film itself, tonally blending with their bodies while blue light and blue clothing complement in particular the honey-tan coat of the leading dog, Hagen. Given the prominence of both the *mise-en-scène* of the slaughterhouse and the solicited anticipation of a revolution wrought upon a righteous sense of *jus talionis*, there is surprisingly little red, surprisingly little blood. In light of Derrida's meditations on the meaning of cruelty in *The Death Penalty seminars* - 'cruor is red blood, blood that flows' - this paper will follow the traces of blood that differentiate three key sequences in the ecology of *White God*. Namely, the opening framing of the slaughterhouse that establishes its overlap with the home and with the family, hinging upon the father, and articulating a carno-phallogocentric ecology that exsanguinates the carcasses of those it deems 'good to eat'; the saturated bodies of dead dogs dragged from the fighting ring making way for Hagen's entrance, his teeth artificially sharpened to guarantee that nature is indeed 'red in tooth and claw'; the astonishing force of a bloodless coup instead of bloody retribution that closes the film, dwelling in the dawn light with the logic of blood for blood having been laid down.

ULLRICH, Martin,
Nuremberg University of Music

Green as a liminal color in Wilhelm Müller's and Franz Schubert's *Die schöne Müllerin*

In Wilhelm Müller's collection of poems *Die schöne Müllerin* ("The Maid of the Mill", published 1821 in *Sieben und siebenzig Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten*) and in Franz Schubert's song cycle of the same name (op. 25/D. 795, composed 1823), the color green is a part of a material-semiotic network that connects nature, love, life, hunting, death, music and autopoiesis with plants, music instruments and people. A close reading of the literary and musical texts of several songs by Schubert/Müller from *Die schöne Müllerin* reveals intersections of nature and culture, life and death, sound and silence, that are made possible by a liminal and ambiguous construction of green. Green is called "the favorite color" (die "liebe Farbe") and shortly afterwards "the hateful color" ("die böse Farbe"). So, green in *Die schöne Müllerin* questions traditional notions of subjective autonomy and artistic authorship in favor of an actor-network that includes a fashion accessory (the "green lute-band", das "grüne Lautenband"), a brook, a musical instrument, plants and animals. We encounter here a paradigmatic and at the same time outstanding case of green romanticism. Green in this sense functions as a marker of

natureculture and opens up the possibility of applying the concept of romantic ecology to German romanticism.

VAAGE, Nora S., Maastricht University

Gene Editing in Art: Technology Otherwise

Since 2012, new gene editing techniques have facilitated easier modification, insertion and removal of genes in whole living organisms, from bacteria to human beings. Artists have, in the ensuing few years, started engaging hands-on with these techniques, in works that employ gene editing otherwise than the applications envisioned and developed by scientists. These artworks may show the limitations of the technology, give it a backseat role, or question what is natural. Taking works by Anna Dumitriu, Günther Seyfried, Marta de Menezes, and BCL as a starting point, the paper will discuss these other purposes for gene editing through the perspectives of phenomenology and care ethics.

VAN DER ELST, Judith,
independent researcher

Questioning Fast Forestation

We can see Earth's forested areas shrink and swell from space. Green matter can be identified based on their reflectance values recorded by satellite born sensors. The specific signature enables the identification of species and also the health of the specific specimens. Wow, we can calculate biomass and assess the health of our host planet.

Not so fast: In science we can use a number of indices, proxies and so on, to give an indication of something else that is hard to measure. In my previous work I have written about the 'greenness index' as a way to measure environmental health but also about the problem that not all green is good. Sometimes, or maybe often, these indices are based on assumptions that are actually never tested. Another example used in my field (archaeology) is to measure carrying capacity based on caloric value, yet somehow we know that to sustain life, it is nutrients that are important. However, our current research efforts are failing us in assessing these values accurately. We search for simple, often economic-based models and metrics, such as carbon offset to mitigate our unsustainable lifestyles and dwindling of healthy green. In this paper I will begin to explore the false idea of 'fast forest' in a gray zone between science and literature. Carbon has a bad reputation; undeserved, and the chapter *Carbon* in Primo Levi's story collection 'The Periodic Table', reminds us that we need to thank carbon for our life. Like everything in life, it is about relationships with others. Based on the assumption that trees and forests are carbon sinks, in other works they help store the excess amounts of CO₂ that humans produce / transform, any kind of tree stand can perform this storage function. In a machine-based thinking world, these amounts can thus be transformed back by adding trees as a simple calculation. Plant a tree, score a carbon point, so to speak. Slow down. On the European continent the rate of afforestation is faster than that of current deforestation, resulting in a net increase in forest areas. Given its history this is not so difficult as most of the forest has long disappeared, there is

not much left to deforest. Nonetheless, it contributes to attaining CO₂ benchmarks set as international protocols, but recent research has indicated that many of these new forests are actually carbon sources instead of sinks. In my current residence in Sicily I live closely to one of these forests, a 'nature reserve' that shows up as a green area on the map surrounded by 'beige' emptiness. On the ground however, this forest (green) encroaches on pasture and arable lands (beige). The forests of the reserve are 'mono' forests consisting of non-native eucalyptus or pine; the pasturelands are a mixture of native vegetation, including oak, olive and other Mediterranean trees and shrubs. Reading D.H. Lawrence, who lived on the island, passionately wrote about the rural vitality of the Mediterranean landscape as a kind of necessity for the survival of humanity.

VANDSØ, Anette,
Aarhus University and ARoS Museum
Tagging Nature – Reworking Greenness

When Katharina Grosse began painting the Memorial Park in Aarhus pink and white as a part the ARoS' exhibition *The Garden*, few had anticipated the turbulent debate it would stir. Already in the making of it where the artist wore a white coverall and air mask as she doodled the green grass pink and white, the artwork came to function as a 'concrete intervention' (Kester) in the socio-ecological relation between the local people and a the beloved park, and read as a destructive act where the woman/ARoS/ mankind destroys the park/nature/the world. The debate shows how Grosse's painting not only covered up, but also, as a palimpsest, allowed its audience to revisit the original green and debate its; is the park nature or not? As the Memorial park is not only linked to our past via the memorial but also the Queens castle, the prestigious neighbor of the park, Grosse's intervention also situates the matter of greenness in a historical context of power, representation and garden-design. It has been suggested that the word nature and indeed also the color green in counter productive to any attempts to re-orientate ourselves in the new reality of the Anthropocene (Morton, Latour). The word and the color signifies an idea of nature as a homogeneous global thing 'out there' separate from the human culture, which is not longer realistic nor productive. A pink nature pushes back at modernity's idea of a homogenous green nature, and could thus serve as a more suitable representation of our lives on a damaged planet (Tsing) in line with the other images and discourses suggested in the vast field of Anthropocene art and thinking. However, Grosse's air mask in the press photos links the pink color to air in the same way the green color naturally is linked to chemical composition of the air inside the atmosphere of earth. The artwork (in its paratextual context) thus also suggests that the color green is not just a nodal point in a problematic discourse, but also a material reality in the pigment chlorophyll which is necessary in the photosynthesis so essential to our survival on the damaged planet. In the 'Planthropocene' (Myers) it seems not productive to simply avoid green nature in our art, our thinking and our discourse, because to live 'in' the earth (Latour) is also to live with/of the

green. This presentation therefore suggests that we instead have to explore the specific multispecies engagements with the green, in order to establish new discourses, re-presentations and practices usable in the political context (what does it mean to 'protect nature') and in our overall civic world (how do we enjoy 'nature'). With Grosse's piece and two other artworks from *The Garden*, Webster's *Concave Room for Bees* and Tiravanija and Hirsch's *Do We Dream Under the Same Sky*, I show how each of these artworks in their own manner are reworking greenness by 'tagging'— either as literal graffiti practice or the tacit act of collecting, framing and thus naming - something green that we would normally call 'nature'.

VANOUSE, Paul, University at Buffalo
**Toward a Radical Sameness:
Reflecting on Histories of
Classifying and Differentiating**

This talk will contrast historical processes of differentiating peoples by type (eg. color), with my own artistic process of doing just the opposite. This oppositional process has little etymological status. When one seeks antonyms for the verb "differentiate", terms like "mistake" and "misunderstand" are suggested.¹ To "same", or to "repare" are unusual processes and suspect terminology and why I describe their conclusion as "radical sameness". Color, as witnessed in historical arguments between realists, subjectivists and phenomenologists among others, is an unstable categorization, and often considered a secondary quality, rather than a primary quality or essence of a thing.² The instability of color categories and differences is particularly evident when viewed through the lens of the visual arts as in which the relativity of the perception of color is key to the craft. The colorization attributed to peoples is even less stable, more obviously epistemically and ideologically based. Decolonial theorist Walter D. Mignolo reminds us that Chinese and Japanese have never been yellow, nor have Native Americans been red, nor have South Americans and Latinos been brown. But rather "they fill the spectrum between white and black, reflecting a process that in the sixteenth century mapped slavery with blackness and master with whiteness."³ The secondary quality of color was used to reify a more essential difference of racial type and vice versa. Whereas contemporary genomics typically undermines the idea of race, it typically does so not by suggesting unity nor sameness but even greater differentiations at the genetic level than were apparent at the surface levels during the colonial era. DNA is continually described as that which differentiates us and makes us unique. However, in my artwork with DNA, I've assumed, hypothesized and sought to operationalize the opposite. DNA is mostly the same across the human species and for the sake of most experiments can be treated as generic. In the "America Project", 2016, I deliberately mix human spit samples before extracting the DNA to produce DNA Fingerprints, which remain identical regardless of the individuals sampled. While one's DNA Fingerprint

shouldn't be conflated with one's entire DNA sequence, my manifesto of radical sameness is intended to destabilize assumptions of human difference, which follows five centuries of differentiating and color-coding of the peoples of the world.

VARFOLOMEVA, Anna,
Central European University Budapest
“Our green jade is less valuable:”
the perceptions of local nephrite
in Buryatia

This paper focuses on illegal jade (nephrite) extraction in Okinsky district of Buryatia, South-Central Siberia, and various local narratives associated with this issue. The illegal extraction became especially widespread in Okinsky district at the beginning of 2000s when the demand for nephrite increased in China which is now the primary market for Buryat nephrite. The local residents of the district have mixed feelings about illegal nephrite mining: it represents “fast money,” but is at the same time perceived as a very dangerous business. The attitudes to the stone itself also vary: it may be viewed very pragmatically - as the source of income - or more metaphorically, as a mysterious stone which should be treated with care, as it might bring bad luck. The green jade from Okinsky district is constantly compared to the white nephrite extracted in other parts of Buryatia and is viewed as “less valuable” or “less in demand;” this comparison generates worries about the future of the local nephrite business. The paper discusses the perceptions of nephrite “greenness” in Okinsky district and relates them to more general issues of local identity and belonging.

VOLKART, Yvonne,
Academy of Art and Design Basel
Acting green, nonetheless

“Nature is for me, and I venture for many of us who are planetary fetuses gestating in the amniotic effluvia of terminal industrialism, one of those impossible things characterized by Gayatri Spivak as that which we cannot not desire.” (Donna Haraway, “The Promises of Monsters”, 1992). Donna Haraway's plea for the im/possibility of the term “nature” more than two decades ago might give us answers to the conference's questioning of the term “green”. I agree with the call for paper's notion, that *green* is “more concept” and “metaphor” “than color”. And yes: *green* has not only been adopted by capitalism's green economy, but became also a placeholder for everything that refers somehow to ideas like nature, sustainability, or environment - all of them highly problematic be themselves. But how to speak of the various relations between the various earthlings? Do we, in this specific case, really solve the problem by switching or deleting the term “green”? Against those voices and in accordance with Haraway's argument I state, that, also for political reasons, we cannot afford anymore to not desire acting green: because in capitalism, there is too much exclusion of “green” or “ecological” issues, such as interspecies life,

attentiveness to the earthbound or non-human - even or because there is a lot of talk about ecology, the Anthropocene or the Technosphere. “Rather than moaning about this other fact, that is has already ‘recuperated’, it belongs to political struggle to invent the manner in which to make what has thus been learned count.” (Stengers, 2015) What counts, therefore, is “to invent the manner” - celebrations and ceremonies of being and acting green can be aesthetically invented and performed, e.g. refusals of the current refusal or capitalist adoption of the green. In this sense, I want to develop a transversal techno-ecological aesthetics that opens up new relations to what we might call ‘the green’ - a cultural practice that is a “green culture” (Astrid Schwarz) or “A Green Poetics” (Rasa Smite and Raitis Smits). Green culture or green poetics embraces hybrid aesthetic and life style experimentations with technologies, ecologies, urban gardening, waste and dirt, cooking wild plants, bio hacking, and so on. It is the enacting of playful relations between human and nonhuman-species and technology. And it can be perceived as a non-ideological way to experience that there are other ways of existence and living a life than the dominant culture makes us believe. Against the ideology of permanent *growth* (another metaphor from the area of the green), but beyond a new call to order or restraint, green poetics can make us feel that less can be more than enough. In contrast to the archaic eco-hero, the maker of green poetics is not only a child of social media and an advocate of collective practices, she also knows about her own corruption. She knows that sensing, visualizing or sonificating climate data does not reduce her or our intake of fossil energy. He knows that hearing the flow of water in a tree does not stop him from flying around the world to attend the next eco conference just in time. Drawing upon the ongoing collaborative research project “Ecodata - Ecomedia - Ecoaesthetics” and further techno-ecological art projects, this paper asks what kind of aesthetic practices might open-up to the vitality of the *zoë*, to the other, “the green”, beyond the limits of the I?

WADUM, Jørgen, Statens Museum for Kunst,
Centre for Art Technological Studies and
Conservation (CATS) Copenhagen
Paintings from Schrieck to Weie:
perceiving greens or red, yellow
and blue

Seventeenth century manuals on the making and use of green pigments or green paint describe caution against the dangers of decay and lack of permanence of some of the greens laboriously manufactured and applied in paintings in the artists' studio. Despite warnings, artists continued to experiment and utilise the green colour in their compositions whether in illusionistic textures of leaves, landscapes or the crackling satin fabric of draperies in devotional shrines or genre paintings. Was then the notion of perception still in its infancy, as was the understanding of the function of the eye that perceives a composition, imagery was created in hitherto unseen quantities. Landscape painting would not exist without an exorbitant use of a large variety of greens, either in glazes or as pastose and innovative dabbing's of paint in

rarely observed and poorly understood mixed media. Will our eye compensate for the flaws in the green hues when viewing a 400 years old aged painting and will current spectators create an intellectual compensation for its lack of intensity or presence? In 20th century art some greens may stay hardly unaltered against other modern pigments of red, yellow and blue which may fade partly or completely. How do we then perceive an originally colourful scenery within a narrow path through a majestic dense green forest?

This talk will reiterate some of the 17th century painters' manuals on the making and utilisation of green paint and confront the recommendations with current reception of paintings by the Dutch painter Otto Marseus van Schrieck (ca. 1613-1678) and his contemporaries. This will be followed by a critical review of works by the Danish artist Edvard Weie (1879-1943) and his use of green colours and other modern pigments. We shall illuminate an example where the pictorial harmonies have been disrupted to such a degree that the connotation of the image and its narrative is jeopardised and now largely obscured compared to the original intent of the artist. The question remains whether we understand the mechanisms and variations of the intensity of a green colour against the fugitive tints from other pigments of an artist's pallet. If not, are we then unconsciously generating new perceptions and creating novel narratives as a consequence of our inability to understand the original interaction between form and materiality in a world full of seemingly perfect digital images of the current and the past? Will scientific analysis be necessary to unravel the variations in the greens, blues and reds before we will be able to fully understand the artistic intention of an analogue image in front of us on a gallery wall?

WAMBERG, Jacob, Aarhus University

Green/brown: Exposing the earthy base of Gaia

Commenting upon his curating of *Reset Modernity!* at ZKM in Karlsruhe in 2016, Bruno Latour stated in a recent interview: "...the first thing I told my co-curators was that there should be no plants nor any images which could be even vaguely related to the repertoire of nature! Everything had to be brown and layered and no green whatsoever. This approach was chosen to help visitors to shift attention away from what we associate with nature: green, global, unanimous, and nice. Instead it had a mundane, earthly, ruinous, brown, layered character, which is not the sort of thing that looks like the 'global horizon of modernity'."

Why this attack on nature in its green guise and a corresponding upgrading of it in its brown and earthly appearance? In this paper, through the lens of visual art and culture, I will demonstrate that Latour's attack is symptomatic of a broader experience of the Anthropocene that also finds resonance in earlier historical paradigms. The sensibility at stake could be called anti-humanist and anti-organic. It exposes the common version of ecological concern, the green one, as sentimental and based in a dualism between humans and plants. Here the plant world appears as the good other of humans, ultimately as the immaterial paradise, whereas the

brown ground, from which plants derive, is seen as a necessary evil that has no value in itself. Although Latour considers this sentimentalization of nature as a result of the utterly immaterial view, the global one, that results from a distanced view from space, he strangely promotes a conception of the earth that clings to the surface of it as a film, thereby not establishing a contact with those deeper layers of the earth that he otherwise recommends. In my paper, integrating a large-scale syncretic view with ingredients from Big History and continental philosophies, I will use examples from visual art, both recent and older ones, as a guide to exposing the earthy base of Gaia. The Earth Art of the sixties is thus clearly brown, exposing the naked material ground and excluding all sentimental references to green nature. Moreover, I will show that this sense of the deep ground finds forerunners in the rocky landscapes of premodern art. When humans entered urban civilization, what Timothy Morton terms the agrilogistic or Mesopotamian paradigm, a schizophrenia arose between brown and green nature, ambivalently splitting an inhabited wilderness originally interlacing fertility and destruction. Thus, the brown earthy part of this wilderness, forming a consistent base in pictures from Mesopotamia to the Middle Ages, was increasingly bound up with notions of chaos and the infernal, while the green part was correspondingly pointing towards paradise and its connotations of immaterial heaven.

It is this paradisiac nature, which is still being re-circulated in the common green and sentimentalist version of ecology. In so-called eco art, the notion of green is thus lush with all sorts of ethically rightful connotations such as sustainability, ultimately re-evocating the phantasy of paradise, the good all-nurturing and self-sufficient nature. To develop a more encompassing and complex view of Gaia, we must deconstruct its chlorophyllic superstructure with its earthy base, turning our Anthropocene ecology darker. This implies that the boundaries between green and brown, organic and inorganic, become fuzzy.

WEETZEL, Vera, Linköping University

Green bunnies and fluorescent fish: Bioart as an interspecies research collaboration

The green fluorescent bunny Alba, created by bioartist Eduardo Kac. Red and green fluorescent zebrafish, made in the biomedical lab. These two organisms are part of very different projects, and 'made' with very different intentions. Alba is an art project. Her fluorescent body is a comment on biotechnology and society. The fluorescent zebrafish, made by me (as a scientist), are a science project. Their bodies are models, standing in for human bodies, to answer questions on how the heart develops. But as much as these two endeavors are different, the parts that Alba and the fish play are very similar. In both cases, the animals function as an instrumental part of a human enterprise. In this paper, I ask how it might be possible to *work with* other nonhuman animals, with other bodies, other matter, in a collaborative rather than instrumental manner. I suggest that a bio-artistic approach is the way towards a feminist, posthuman, interspecies research collaboration, where a human might get to know *with*,

rather than merely about, someone or something else. Through a discussion of the two of my own currently realized bioart projects, I will discuss the process, the progress, and the many questions raised in my attempts at establishing such a collaboration. In *I look with teary eyes*, I work with tears, both my own and those of other humans, as a medium for growing plants and microorganisms, making emotion and care an essential part of the research protocol. In the second project, *Seeing Underwater*, I work together with fish in a local water, to get to know with them in their own environment, rather than displacing them into a laboratory environment. In these projects, I make use of the space that bioart creates to interact differently, to not work in the goal-oriented, scientific way with a question that needs to be answered, but rather, to allow for exploration, creativity and interaction between the different players, whether they be human, fish, or nonliving. In doing so, I hope to develop research collaborations that go beyond the human species.

WELLBERY, Caroline, Georgetown University Medical Center & Peter Musaeus, Aarhus University & Menno de Bree, University Medical Center Groningen

PANEL: Dilemmas of the privileged class: Responsibility, representation and mortality in the anthropocene

We interpret “green” for the purpose of this conference, as referring to environmental sustainability. Uncomfortably, but a propos to our topic submission, “green” is also the color of the US paper currency. Thus ‘green’ inherently suggests a tension between greed (capitalist) and grief (elegiac). Our panel explores this tension from a variety of perspectives. Climate change, to those of us who perceive it as a threat, poses a curious dilemma. As the most educated, and arguably the most privileged individuals on earth, we decry what is happening to the planet’s biosphere, but at the same time, thanks to the economic sovereignty we enjoy, we participate disproportionately in its disruption. The ethical, psychological and educational dimensions of this circumstance, where resistance and elegy converge with environmental devastation, remain relatively unexplored. Can a better understanding of the contradictions between what we say and what we do help us in the struggle against ecological collapse? This panel attempts to articulate these lived contradictions through the lens of different disciplines. In doing so, we hope to foster a dialogue that deepens our understanding of our interconnectivity, and to explore how the shared responsibility interconnectivity entails might inform our actions.

Responsibility

Peter museaus, Caroline wellbery

Using informal crowd-sourcing survey results among medical educators and medical students, the presenters will discuss the reasons why individuals in the field of medicine, which may be said to advance both the most privileged and

most altruistically driven impulses of the developed world, have been slow to address climate change, even while the health care system itself is a major contributor to greenhouse gas emissions. This presentation will discuss the cognitive dissonance between what we believe, what we say and what we do about climate change; in this sense our moral responsibility is closely linked with the way we represent the problem of climate change including how we evaluate our own mortality in relation with this.

Representation

Caroline wellbery

Climate change has forced artists to rethink their societal role, to the extent that the aesthetic isolationism of postmodern art has become untenable. However, it is far from clear what environmentally activist artists can do that is not exploitative (using ecologically unfavorable materials or creating environmental disruptions), doesn’t contradict itself through aesthetic appeal (finding beauty in ravaged landscapes), or emerges as merely irrelevant (e.g. ‘becomes difficult to distinguish from gardening’). This talk addresses the development of an integrative aesthetic that in the words of Alfredo Jaar, “proposes an alternative in...aesthetic terms but also in ethical ones, in other words, to create great works of art that are socially relevant.”

Mortality

Menno de brie

What if there is nothing more to do? We have heard much about the ‘tipping point’ of climate change as the notions of ‘adaptation’ and ‘mitigation,’ euphemisms for survival, gain popularity. Yet survival on a ruined planet is not a likely reality. This talk will investigate from a philosophical perspective the bearing the arguments developed to understand our individual death might have on the contemplation of our collective destruction.

WHITE, Tom, University of Oxford

Blue Ecology on the banks of the Humber Estuary

The city of Hull sits on the banks of the Humber estuary, in the north of England, on land formed from glacial tills left at the end of the last Ice Age. Erosion of the loose sediment proceeds at an astonishing pace; dealing with this geological inheritance has long been part of living on this shoreline. The medieval *Chronicle of Meaux* (c.1410) records the loss of settlements along the Humber estuary and adjoining Holderness coastline, to a combination of the steady workings of the tide and the more dramatic destructive power of storms and tidal surges. John Lyly’s play *Galatea* (c.1580) begins with a similar scene of destruction: a vivid description of a devastating flood tide that once submerged a low-lying community nearby on the south bank of the Humber (and threatens to return). The community rebuilds, but things aren’t the same. The floods of June 2007 that inundated the city of Hull followed a comparable pattern, though on a larger scale (90% of the city lies below the high-tide line). The slow, faltering clean-up operation after the flood made clear, once again, the government’s apathy for this deprived, post-

industrial city. Since then, the “green economy” has arrived in Hull, in the form of a Siemens plant manufacturing wind turbines for the vast arrays in the North Sea. Last year, Nayan Kulkarni’s installation *Blade* (2017) relocated one of the blades of a turbine to the city centre. This spectacle of the green economy tells us more, I think, about corporate business-as-usual in the age of climate change than it does about the prospects for a progressive, post-anthropocentric political ecology. In this paper, which draws on developing research for a new environmental humanities project on estuarine environments and the politics of the Anthropocene, I dwell on these medieval, early modern and contemporary materials. The Humber, I argue, provides a case study for a blue ecology, both in the sense of an ecology suited to a place where land and sea meet (and the latter continually reclaims the former), but also to a sense of melancholy and impending loss.

WILLIAMS, Andrea,
Rensselaer Polytechnic Institute
Soundwalking: Creating Stewardship for Local Waterways

Citizens and tourists enjoy the beauty of fresh water resources, but when these bodies of water become less pristine through pollution, these areas become less desirable, and therefore it is important to consider ways to increase perceptions of stewardship to protect these precious natural resources. My research focuses on my art practice termed “soundwalking”, a walk based on listening to different features of a specific environment. Soundwalks that are used in this research are based on listening techniques, exercises, and methods of musical composition that were developed primarily through the study of acoustic ecology. Acoustic ecology is the study of the relationship between living beings and their sonic environment. During a soundwalk, one starts to focus more on listening instead of seeing and getting oneself from Point A to Point B, and we begin to sense more of what is directly around us. We even feel our other senses engage more intensely, and it becomes easier to embody a certain area. When we embody a certain area of the environment, we begin to understand its needs more. Through this sense of understanding our role and connection to our local waterways we can become better caretakers of our environment.

I have been leading soundwalks with the public for over ten years now as well as creating soundwalks in people’s dreams through a project called *SleepWalks* since 2009 with artist Lee Pembleton and scientist Todd Anderson (2012). I am using the now well-established practice of soundwalks and sound/dream workshops as a medium, a tool, and a method for creating more ambitious work that focuses on our connection to local waterways. While at Rensselaer Polytechnic Institute, I have created two large bodies of work that address environmental issues of the Hudson River in Troy, NY: *Riverfront Park Soundwalk*, an artist audio tour, and I have expanded the soundwalk experience out to further experimentation with a “meta” project called *SleepWalks: The Body of Dreams*, a state-funded (NYSCA) multi-media

dance performance based on the collaborative local waterways-themed dreams of participants of two-overnight *SleepWalks* performances. I am examining the written feedback from participants of the two projects based on the framework of what environmental psychologists like Renee Lertzman writes in her book, *Environmental Melancholia*, that we have a collective anxiety over survivalist issues that are too large for us to comprehend easily such as pollution or climate change. In that context, I want to explore creative “design engagements” such as soundwalks (including in people’s dreams), that I believe can help us focus on more personal connections to environments that foster a deeper sense of connection and stewardship instead of only focusing on surface-level actions that we may not feel deeply towards such as rules imposed by a green or eco movement. We are in dire need of creative solutions that every day citizens can provide if given the space and empathy.

WILSON, Alexander, Aarhus University
**Dropping Out of Nature:
On Promethean Ecology**

Environmentalist thought finds itself at a crossroads in the Anthropocene. Many still believe that the only way to eschew climate catastrophe is to enter a phase of degrowth, to revert to earlier more sustainable modes of existence, perhaps by establishing a so-called ecological balance between human civilization and nature. But the Anthropocene is also intersected by an opposing *promethean* attitude, which claims that there is no possibility of such ecological balance, that the universe itself is unsustainable, and that humans are essentially a bifurcation out of nature into the artificial. The contemporary promethean believes that the only way out of the Anthropocene is forward, by pursuing, indeed by intensifying the process of enlightenment through technological enhancement, which follows the history of knowledge (philosophy, science) as a perpetual critique of our evolutionarily conditioned folk assumptions about reality. If the goal is to reduce our negative impact on nature, the promethean will argue that the best course of action is to accelerate hominization’s bifurcation from our animal background, that is, to overcome our evolutionary biases and drop completely out of nature, rather than try in vain to establish a balance with it. This paper examines the cogency of such reasoning by exploring various extrapolations *ad absurdum* of the respective arguments. In so doing the paper confronts ecological thought with reductive, functionalist, and eliminative materialist thought, in a quest to map out our contemporary horizons of futurity.

Yi, Dongshin, Seoul National University
**Patina: A Reflection on
Inorganic Green**

“Patina,” writes Mădălina Diaconu in her reflection on “touch, smell and taste” as “aesthetic criteria for works of art, environments, and their experience,” is the green effect of “an immanent dynamics of the matter,” in which “material, time, and touch” work together. But the green in patina is

widely different from that of contemporary interests, wherein the color often points to or represents the positive, healthy, living, reviving, harmonizing and even profitable potentiality of whatever scientific, technological, commercial or cultural program it is associated with, thereby in risk of regenerating biopolitics and bio-power in this posthuman age. Suspicious of the highly organic characterization of green that could perpetuate biocentrism, the paper employs patina as a philosophical trope to reflect on the inorganic side of green. In this side, patina would imply death, discontinuity, corrosiveness, dissolution, and inorganic materiality, but all these seemingly negative implications could help us think of a community that is beyond life and the present. That is, the paper tries to paint both organic lives and inorganic matters in patina green so as to envision a community of “material, time, and touch.”

Zeitz, Anne, University Rennes

The ambiguity of “green” sound, or the sonic dimensions of radioactivity

Radioactivity is invisible, inaudible and scentless. Its detection is closely related to processes of sonification: the characteristics of the sound signals emanating from the Geiger counter indicate the degree of contamination and the radioactive elements concerned. Based on a series of geographical investigations and measurements of former uranium mines in Germany and France, this paper questions the threshold between natural geological environments and polluted landscapes, between “green” sound and sound as an indicator of residual radioactive contamination. It reflects on the impact of mining practices in its different ecological and socio-political settings (for example the Soviet uranium mines in former GDR, or the French uranium mines in Brittany), its past and its present via sound. The unseen is put into light and made audible where nature has taken over agricultural as well as urban spaces. The notion of “green” is equivocal referring to the association of the color to radiation – as a socio-cultural construct, to ecological issues related to nuclear technologies, as well as to the idea of untouched nature. The beeping, bleeping, creaking, cracking, sizzling or screeching sounds of the Geiger counters reveal the thin line that separates the perception of “safe” from “dangerous”, ecological from polluted, touched from untouched and inhabited from uninhabited grounds.

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Thank you for your contribution to this year's SLSAeu conference we hope you have enjoyed it, and we are looking forward to seeing you again in Athens at the 2019 meeting!

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