

# RESEARCH PLAN: CLIMATE-JUST WORLDINGS

*Exploring new perspectives in world-building for film  
in a climate-just world*



*Dr Ron Mallet and Lina Persson in speculative conversation about  
time-machine model. Photograph: David Cool*

## PURPOSE & AIMS

The purpose of the research proposed here is to reveal something about possible future conditions for artists, when the resources may have become scarce and to investigate art's possibility to act out and prepare for future hypothetical scenarios. I was born in 1978. During my lifetime society has evolved an unsustainable way of life that is rapidly changing the conditions for future generations on this planet. If we produced/consumed the way we did in the 70's, and re-invented what that would mean today, research shows<sup>1</sup>, that we could turn the current ecological crisis around. In my research, I want to try to make a loop in time applied to both production modes and storytelling conventions. I have worked as an artist collaborator for more than ten years with scientists on anthropogenic landscape transformations, this crossdisciplinary approach is increasingly fruitful as our anthropogenic climate situation collapses the distinctions between natural history and human history<sup>2</sup>. I grew up in the countryside and, since then, engagement in the environmental movement has given me a strong sense of place within our ecosystem. I long for sensitive structures, that would provide necessary limits to my activities, environmental, social and artistic.

That's why the aim is to formulate and submit to a creative, climate-just contract with the working-title; PRODUCTIONWORLD and to investigate how such climate justice would affect my practice. Sooner or later we are going to have to prepare for vastly reduced amounts of available energy and to imagine our artistic practices in a world where resources have become scarce. The sooner we accept this fact, the more creative room we will have to explore and experiment with the kind of supporting structures that will be required. We need to act now to explore the possibilities while there is still time for trial and error. Creativity doesn't increase with the more resources one uses, rather the opposite is true, art practices flourish within boundaries and constraints. It is within the arts that new scenarios can be imagined and tested and where practices for a climate-just future can best be experimented with. While working under these constructed conditions, in this PRODUCTIONWORLD I aim to undertake a STORYWORLD production. The aim is to enrich the film industry's worldbuilding techniques with critical perspectives on environmental representations and to expand the role our ecology plays in storytelling. Our current models, concepts and images of nature mislead us and do not help us grasp the

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<sup>1</sup> Naomi Klein. This changes everything. Canada: Random house, 2014, 80.

<sup>2</sup> Dipesh Chakrabarty, The Climate of History: Four Theses Critical Inquiry Vol. 35 2009, 201.

severity of the current climate situation. They are based in the same ideology that led to this unsustainable situation.

In the context of an already existing community of environmentally conscious artists and arts practices, the fictional world I am proposing will be built of texts, images and sound. It will be open source, a shared universe where any artist who wishes to explore critical perspectives on the environment is welcome to contribute to and participate in. The STORYWORLD will have a platform online where people can add their contributions according to collective fan-fiction logic. Anyone can interact with the world as long as the PRODUCTIONWORLD certificate requirements are met.

### STATE-OF-THE-ART

This research combines knowledge and approaches from the different art fields described below.

#### Art de-colonizing nature

This research joins contemporary movements of de-colonizing nature and the art of the last ten years of critical image making that questions our way of seeing nature and of reinventing our perception and approach to ecology. Influential exhibitions like dOCUMENTA (13), have been dedicated to this idea in recent years. This year Sweden's three largest cultural journals dedicated entire issues on the topic. In film, genres like eco-horror and cli-fi portrays nature as a revenging agent. In my research project Tung Ting<sup>3</sup> I mapped the field of animated film and its history of portraying nature as living and full of agency, as opposed to passive backgrounds to human drama and explored my practices of teaching and animation with other-than-human audiences in mind. The point of departure of the de-colonizing-nature-movements is the apprehension that our current anthropogenic climate situation stems from a human-centric worldview, reducing nature to a mere resource for the purpose of humans. In this movement, some art focus on exploring new modes of thinking and representing the environment while others seek more direct actions with instant effects. Art collectives like Laboratory of Insurrectionary Imagination focus on direct action, they may be most famous for initiating the Climate-Games<sup>4</sup> in connection to COP 21 Paris. The games coordinated performances, interventions and connected people from all over the world. The collective Not an Alternative runs a Natural History Museum<sup>5</sup> as an art project. This way they can transform the museum sector from within via their critical approach to the way museums often leave out human being's impact on nature in the history narratives they create. In the film industry, environmental themes are commonplace but in the rare cases where the production process is considered there is a tendency to purchase carbon offsets to make projects carbon-neutral rather than changing or challenging existing procedures and protocols<sup>6</sup>. Although the studio Bavaria Film GmbH<sup>7</sup> is one example of a Company actually trying to create a sustainable production environment. And at Calmers a recent master thesis carried out a Life cycle analysis of a performance at the Gothenburg opera<sup>8</sup>.

At Stockholm Uniarts there is existing artistic research knowledge to build on. Anette Arlanders ongoing artistic research project, Performing with Plants, explores mutual creativity with the environment. Arlander has developed interesting methods relevant to my worldbuilding process. Stacey Sacks's PhD project makes for a critical environment in which to discuss possible ways to act within colonial relationships. I've long investigated artistic/ecological problems/possibilities in my practices of art, animation and film. In the video essay Being Animated<sup>9</sup> I discuss how images can sometimes fail to help us accept our new environment paradigm but that animation is perfectly placed to offer alternative understandings in imaginative ways. In the article, the *Desert Planet*<sup>10</sup> I tell about my work *fanmo jimte* and how human storytelling and environments transform each other in mutual processes.

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3 Lina Persson, Researchproject; Tunga Ting, Stockholm Uniarts. 2016.

4 See Climate Games, accessed december 6, 2017, <http://www.artcop21.com/events/6450/>

5 See Natural History Museum, accessed december 6, 2017, <http://notanalternative.org/2015/12/18/the-natural-history-museum-interview/>

6 Charles J. Corbett. Sustainability in the Motion Picture Industry. UCLA Institute of the Environment 2006

7 See Bavaria Film Studios, accessed January 2018, <http://www.greenproductionguide.com/green-film-shooting-a-climate-of-change/>

8 Francisco Izurieta, Johan Tengström, LCA of stage performances, Calmers University of Technology, 2010

9 Lina Persson. Being Animated, Videoessay. 2016. See <https://vimeo.com/166354339>

10 Lina Persson. The Desert Planet. Geografier nummer 2, 2016. 20.

### Rule-based generative art

For my PRODUCTIONWORLD I gather experience and knowledge from early fluxus-scores of the 60ies and art after the 70's "legal turn"<sup>11</sup>. Tehching Hsieh's contracts that he signs for his yearlong performances, binding him to fulfil the performances conditions, The Dogme 95 film manifesto with the purpose of introducing limitations in order to have more creative freedom in filmproduction and Kajsa Dahlberg's *Femø Women's Camp 2008: Film and Agreement* are works I learn from and Dahlberg's current research project Chronic Features at RIA, also offer valuable perspectives for my project. Also, the Bechdel test is a relevant reference. The test asks a series of questions designed to spot inequalities of gender representation in film. If a film passes the test it can be marked with an approval certificate. Certifications like this can make visible invisible hierarchies and tacit power structures and in doing so can spark change & action.

### Worldbuilding art

2015 I participated in a workshop with Alex McDowell from USC school of cinematic arts and Worldbuilding institute. Building environments and worlds has been part of my practice for a long time, but the workshop gave me new tools and perspectives, especially when it comes to working together, roleplaying, in teams and groups. Examples such as The World Building Media Lab (WbML), Alan Moore's Short Pieces, Sten Eklund's Kullahusets Hemlighet, Aby Warburg's Atlas, Walid Raad's Atlas Group and the Fifth World<sup>12</sup> (a fictional universe for roleplaying with a climate theme) are important references to me when it comes to worldbuilding. My currently ongoing research project *Return of the Silurians*<sup>13</sup>, is an animated worldbuilding project rethinking and updating the science fiction genre of "the revenging earth" and identifying current limitations in human image making.

### Storytelling the temporal in film

Many films and artworks have inspired me to a more complex view on time and space. As a timebased medium film is perfect for exploring the temporal conditions, Chris Markers *La Jetee*, (1962), is a great example of a time travel fiction that unravels through a conceptual use of still and moving images. Other works that has inspired how I think about time in my work is; The Otholit Group, *The Radiant* (2012), Sun Ra, *Space is the Place* (1974), Tom McCarthy, *Greenwich Degree Zero* (2006), Julieta Aranda, *camera obscura*, 2009, Daar, *Return to Jaffa* (2012), Matthew Buckingham, *Muhheakantuck* (2003) Christopher Nolan, *Inception* (2010). In my work *Molten Glass Movement*<sup>14</sup> I explore the relationship between spatial and temporal understandings of labour, using animation theory of timing and spacing. It was my deep interest in the way film, as a medium, has affected society and how the motions of labour became subordinate to mechanized temporal units, that led up to this experiment, performed at Rejmyre Art Lab 2016.

## **SIGNIFICANCE & SCIENTIFIC NOVELTY**

In his book *Convergence Culture*, Media theorist Henry Jenkins shows that nowadays you don't pitch stories or characters anymore, you pitch a world because a world can support multiple characters and multiple stories across multiple media<sup>15</sup>. There is no question that worldbuilding is becoming increasingly influential in film and media industry. But what I lack is the opportunity to include perspectives concerning the biggest global challenges we are facing today. Scientists and the general public agree that climate change is real and that it is most likely caused by humans. But still we don't seem to be able to act on this knowledge and bring about the necessary change to turn it around. There are many answers to why this is the case, part of it may be in our storytelling conventions. George Marchal<sup>16</sup> argues that it's because our familiar stories teach us to act in situations with distinct heroes and villains rather than offering narratives based on shared common purposes. Dan M Kahan's study<sup>17</sup> suggests that it is

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11 Daniel McClean. *The Artist's Contract / from the Contract of Aesthetics to the Aesthetics of the Contract*, Mousse 25, 2010. 195.

12 See *The Fifth World*, accessed January 2018. <https://thefifthworld.com/>

13 Lina Persson, Researchproject; [Return of the Silurians](#), Stockholm Uniarts. 2018.

14 Lina Persson. *Glass Movements*. 2016. See <https://vimeo.com/171392327>

15 Henry Jenkins. *convergence culture*. New York University Press. 2006. 114.

16 George Marshall. *Don't Even Think About It: Why our Brains Are Wired to Ignore Climate Change*. Bloomsbury USA. 2014. 74.

17 Dan M Kahan. *The polarizing impact of science literacy*. *Nature Climate Change* volume 2, 2012. 734.

because the idea of anthropogenic global warming goes against people's cultural identity and ideology too much to break through. Rob Nixon describes climate change as 'a slow violence that affects the poor', maybe these long term perspectives which reach way beyond human lifecycles are not dramatic enough for film narratives<sup>18</sup>? We also need to reinvent the environment's role in storytelling from the backdrop to drama between humans into mutual relationships between all kinds of more-than-human existences.

It seems that science and knowledge are simply not enough. Scientists are increasingly looking to creative practitioners for hope in finding ways to bring about action and change. For too long, art and culture have failed to address the global catastrophe we are facing. Though recently it seems times are changing. As environmental politics rises up, the film industry must prepare for a drastic change in the conditions of film production, a topic discussed at a seminar at this year's Gothenburg Film Festival<sup>19</sup>. I want to contribute in this process by creatively negotiating aesthetics and ethics, by combining the influential technique of worldbuilding with critical & creative perspectives on the environment. In a near future, the majority of our activities will require radical readjustment in relation to the ecological footprint. I predict that my PRODUCTIONWORLD will need to become a reality. I think artistic research can test the possibilities of such future practices. And I hope my research will be able to shift practices in the present, meeting the future that we desire halfway.

## PROJECT DESCRIPTION

### THEORETICAL FRAMEWORK

#### Decolonizing Nature & legal theory

I frame this research as taking place in a new phase of political theories of decolonialization. Colonial exploitation goes back to the origins of Western civilization and accelerated during post-Enlightenment modernity<sup>20</sup>. It's been carried out in the name of the ideal human, identified as opposed to primitive nature, where elite white males of European descent were considered more human<sup>21</sup> while women or indigenous people were considered less human and closer to nature. These oppressed groups have fought hard and won some rights in a process of decolonization. But today we face the particular challenge of overcoming the old hierarchy and divide between human and nature that reduces nature to a resource for humans.

During recent years the human-centric world-view has been increasingly questioned with alternatives being explored from various post-human perspectives. With concepts like more-than-human, natureculture, new materialism, objectoriented ontology, ecofeminism, speculative realism, quantum-animism, the living world beyond humans is acknowledged in a multiverse of ways. In my research project *Tunga Ting* I investigated some of these approaches in relation to my animation practices<sup>22</sup>. This movement also has its counterpart in legal developments through Earth's jurisprudence, with earth-entered rather than human-centred perspectives on law where nature has legal rights. Legal theory is also important in developing a certificate or contract for my idea of climate-just production. Though global climate negotiations have shown that legal sanctions have limitations when it comes to enabling change, the recent Paris agreement<sup>23</sup> initiated a motivating self-regulation based on voluntary actions. In my research, artistic approaches will both compliment and contradict the legal frameworks.

#### Decolonising futures and concepts of sustainability

Striving for justice is sometimes considered naive and assessing climate-justice may be impossible but it may also be the only way to reach global agreements and there are available tools for at least working

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18 Rob Nixon. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press. 2013. 149.

19 See *Är filmbranschen en miljökatastrof?* accessed January 2018. <https://www.facebook.com/events/170915133672355/?ti=icl>

20 TJ Demos. *Rights of Nature: The Art and Politics of Earth Jurisprudence*. University of California. USA. 2015. 3.

21 Edward Said. *Orientalism*. London: Penguin. 1977. 207.

22 See, *Tunga Ting*: <https://www.researchcatalogue.net/view/265814/265815>

23 See, *The Paris Agreement*. United Nations. accessed February 10, 2019: [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php)

towards climate-justice<sup>24</sup>. In my research, I also want to explore the idea of our present state of as a colonialization of the future. Too often it's not taken into account that natural resources are limited. Only if they are used in balance with what the earth can regenerate, will there be anything left for future generations. As I see it, our current overdraw results in a growing climate debt. This reasoning relies on concepts which describe earth's capacity to regenerate resources in relation to how fast humanity uses it. For example, Ecological Overshoot<sup>25</sup> occurs when humanity's demand on nature exceeds the biosphere's supply, or it's regenerative capacity. The Ecological Footprint represents the human demand on the planet's ability to provide renewable resources and ecological services. Humanity currently needs the regenerative capacity of 1.6 Earths to provide the goods and services we use each year. I will address the questions of decolonization of the future by climate-justice certifying my process in what I call PRODUCTIONWORLD. The future is not remote, but immanent in what is done now, in order to bring about change<sup>26</sup>

#### Mapping temporal territories & quantum physics

I will also address the idea of 'colonialization of the future' in my work with the STORYWORLD. Here, future generations will be able to confront our present thanks to a new time-technology. For this, theories of time will be important, from the temporalities of theoretical physics and quantum physics to the perception of time in indigenous communities. In 2011, I read the book *Time Traveller: A Scientist's Personal Mission to Make Time Travel a Reality*. The book is about Ron Mallet, his life, and how he developed a working theory for a time machine (recently Spike Lee bought the film rights for the book). I became interested in how this technology would work. I got a grant to go to the university of Connecticut and work with him for a month. He involved me in his research & in his models of the machine. Ron also staged a few speculative scenarios together with me, resulting in sound recordings of conversations<sup>27</sup>. When I started to really understand how this technology would actually work I realized that it was something very different from conventional sci-fi time travels. This time machine would not allow me to explore spectacular futures. This time machine would open a one-way portal giving the future access to my time. We would open a door to the unknown that we would not be able to enter, without knowing what we would let in.

When I studied imperialism & colonialism at Gothenburg University I became intrigued by the concept of Terra Nullius. When the European colonial powers begun to take territories in the 16th century they called it Terra Nullius, no-mans-land. There were no owners-contracts for that land, therefore it was considered legitimate to appropriate it. The fact that indigenous people lived there without exploiting the natural resources was considered primitive, irresponsible and wasteful. This viewpoint still dominates our relationship with the environment. But as I see it it's also time that is being colonized. Too often it's not taken into account that natural resources are limited. Only if they are used in balance with what the earth can regenerate, will there be anything left for future generations. I've chosen to call the future Tempus Nullius, a no-mans-time, who's resources are up for grabs for those who can take as much as possible as quickly as possible. Inhabitants in future eras have no means with which to claim their rights. But Prof. Mallet's theory of a time machine made me see the power relationship between the present and the future in a new way. That machine would never give "us" the access to the future, but rather allow the future access to "us". In this way, it becomes a potential platform for discourse in relation to rights claims of those currently voiceless inhabitants of the future. When Mallets time machine is turned on for the first time a time-tunnel will start to grow. As time passes this tunnel grows. In any point in time it would be possible to send information/subatomic particles, back in time as to the moment when the machine was first turned on. But it would never be possible to go to the future simply because the tunnel would not be there yet. This makes the moment of turning on the machine a moment of truth, of facing the future on equal terms making totally new kind of legal claims possible.

24 Jeremy Baskin. The Impossible Necessity of Climate Justice? 10(2) Melbourne Journal of International Law. 2019. 424–438.

25 Living Planet Report, Risk and resilience in a new era. WWF International, Gland, Switzerland. 2016. 124.

26 Dave Beech. Introduction, Speculation, PARSE journal, 7, University of Gothenburg, Sweden. 2017. 8.

27 Lina Persson. Subatomic Particles/ Interview from hypothetical situation. Connecticut. 2012. <https://vimeo.com/70935331>

### Time-based medium and biopolitics

Animation practice and theory triggers awareness of my existence in temporal and spatial dimensions and it will inspire the rendering of the *tempus nullius* in STORYWORLD. Animation is part of a tradition of analysing and mapping movements, time and space, starting with Étienne-Jules Marey's chronophotographic studies continuing with motion capture techniques and leading up to present biometric surveillance. Film theorist Trond Lundemo writes about this and the film mediums biopolitical implications<sup>28</sup> and show how time-technologies affect reality and bodies. This important knowledge was the startingpoint for the course *Techno-Fantasy* and *Sci-Fi Images*<sup>29</sup> at the photography department at Valand, Gothenburg and will be vital for speculating on the consequences the time machine would have on our world.

### **METHODS**

This research builds on my practice and interest in the way art generates, activates, mobilizes and/or materializes abstract ideas, the way artistic practice moves things from fantasy to reality. The method, the way something is done, is always somehow reflected in the outcome. I use this notion as a possibility in my art practice. For example, in my work *Boulder Eclipse*<sup>30</sup> I portray the minerals that are vital components in the technology that I use to generate the very images themselves, from a camera component to the computer chip enabling the light-animations, connecting my artistic practice with problematic mining-practices all-over the globe. Now, in this project, I want to stress this concept even further, to let my method *be* the work, to inhabit a "PRODUCTIONWORLD" for the duration of this research project. This kind of generative art practice is indebted to the Fluxus movement and to art forms such as instruction pieces, scores and contracts, where the emphasis is on the transformative experience rather than a certain outcome or art object. However artworks are still important, especially in the way they reflect on how they are made. Since I want to explore stories and images that involve the environment in new ways I also have to relate to the environment in new ways via my process and production. This way of working, putting up obstacles & regulations for one's actions, stems from a critical standpoint and a pressing need for change. It is also a way to make things that are not 'out of this world' so to speak. Many of these methods have stemmed from my activist and collective work where we wanted to challenge ourselves not to reproduce the very structures we were critiquing. I describe this process in more depth and detail in my MFA degree essay.\*

#### Improvisation, hermeneutics, rule-based, legal & generative art practices

To begin with my artistic practice was an improvised hermeneutic feedback loop between the material I was working with and my everyday life experiences, but rather than interpreting something existing it was a process of interpreting what is about to come into existence, of what I am closing in on but haven't yet grasped. This way my work often became a parallel to the structures conditioning my practice, revealing patterns in the environment. It was a way to understand my context, my place and the things conditioning both me and my practice. But gradually I started turning my method around, setting up conditions and limitations in order to elaborate on the framework, further articulating the parameters conditioning the practice. For example, in my 10 year long project BILAGA<sup>31</sup>, we make four mail-artworks every year with the parameters of a small budget, limited time, low weight & size. This forces us to make art that is more spontaneous, free of pretensions, involving in current debates. In this research, I want to take this method even further and formulate it more explicitly. Making a fictional hypothetical alternative environment, a PRODUCTIONWORLD out of the rules, in which I will perform my practice. This approach is inspired by material feminist thought about making cuts in the world<sup>32</sup> enacting interventions that produce the world I inhabit, a "worlding" that acknowledges the relations, how I am entangled in the world. As Donna Haraway puts it: the world is a knot in motion

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28 Trond Lundemo. Charting the gestures, Glänta, nr 1. 2011. 80

29 Lina Persson. Techno-Fantasy and Sci-Fi Images. Course. <https://www.researchcatalogue.net/profile/show-work?work=433694>

30 Lina Persson. Boulder Eclipse. 2010. <http://linapersson.se/bouldereclips/boulder01.html>

31 <https://bilaga.wordpress.com/about/>

32 Carol A. Taylor & Gabrielle Ivanson Material feminisms: new directions for education, Gender and Education, 25:6, 2013. 667.

and reality is an active verb<sup>33</sup>. This method is partly derived from the Fluxus movement and in the “legal turn” in art during the seventies. In *Essays on the blurring on art and life*, Allan Kaprow describes the Fluxus art as taking form in the consciousness<sup>34</sup>, how it alters culture and reality through one’s perception when working consciously with how to pay attention to everyday things and life in general. And today I think it adds another dimension in terms of the ways our consciousness is monitored, analysed and responded to via algorithms in digitalized society. A society in which memes and viral images exert direct influence on global politics. This was also the starting point for my work *Spilled Milk of Haunted Nations*<sup>35</sup>.

#### Hypothesis & Extrapolation, Narration & Speculation

In my practice, I’ve learnt a lot from the way fiction operates and its potential to give rise to change. This is especially so in relation to Speculative-fiction (spec-fi) and Science-fiction (sci-fi). Science fiction uses scientific rhetoric in order to make its stories more plausible and persuasive, convincing the reader of its becoming-reality-potential. I have investigated how the genre can reinforce current power structures, but also how it has been subverted in afrofuturist, speculative feminism, eco-horror or queer sci-fi movements. In my text *Sci-fi & Makt*<sup>36</sup> I describe how I make use of Sci-fi modes in some of my works. Speculative fiction is useful to me because it uses scientific methods of hypothesis and extrapolation but with the freedom to ask more inventive what-if-questions. As Judith Merrill says it’s “*a special sort of contemporary writing which makes use of fantastic and inventive elements to comment on, or speculate about, society, humanity, life, the cosmos, reality*”<sup>37</sup>. Speculation as research method becomes necessary when there is no other way of getting knowledge about something, like grasping alternate worlds or futures. It can even be a way to open up a transition to an otherwise unlikely future<sup>38</sup>. That’s why it is also of interest in forecasting-techniques in climate and resilience research. The speculation in Spec-fi deals with fundamentals, with what is real or possible. It requires that the laws of the world are different in some sense. It makes it a vital method in relation to world-building projects. My worldbuilding processes starts with one altered law each. In *PRODUCTIONWORLD* there is a climate-just, built-in limitation in the use of resources. In *STORYWORLD* Ron Malletts time-machine gives future generations access to our present time.

#### Worldbuilding & transmedia storytelling

Especially in these Anthropocene times, we don’t have to accept the world as it is, we can make assumptions and images that transform it. Creating worlds is an old art form, it can be defined by: 1) In the ideal case, there will be a series of works that use the same world 2) That world should differ noticeably from ‘our’ world 3) That world should have a geography and history of its own 4) That world can be enhanced in its difference by having physical laws different from our own<sup>39</sup>. The purpose of this research is to investigate and rework our relationship with environment and ecology. In world-building the world sets the parameters from which characters and narratives can be derived. Therefore, it is an appropriate approach when it comes to challenging the current hierarchy around from human centred to earth centred perspectives. To create the multitude a world requires, I often tap into other systems of narration. By diverting and linking my work to on-going fan-fictions, archives, circulating media, scientific news, memes and viral facts it’s contours are blurred and it extends its tentacles into the living on-going storytelling of the digital society. This way the sense of living world can be achieved also in smaller independent projects. A collective process also contributes to a more vibrant and diverse worldbuilding. I plan to make use of Alex McDowell’s roleplaying methods. In roleplaying sessions persons connected to this project from different disciplines and specializations (activism, sustainability, art, physics, geology etc) will contribute to defining the world.

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33 Donna Haraway. *The Companion Species Manifesto: Dogs, People, Prickly Paradigm Press*, Chicago, 2003, 6.

34 Allan Kaprow. *Essays on the blurring on art and life*. University of California Press. 1996, 202.

35 Lina Persson. *Spilled Milk of Haunted Nations*. 2007. <http://linapersson.se/SpilledMilkofHauntedNations/spilledmil01.html>

36 Lina Persson. *Reflektioner kring Science fiction och makt*. 2015. <https://www.researchcatalogue.net/profile/show-work?work=268000>

37 Judith Merrill, “Introduction,” in *SF: The Best of the Best*. New York: Delacorte Press. 1967. 3.

38 Juan Francisco Salazar. *Anthropologies and Futures: Researching Emerging and Uncertain Worlds*. Bloomsbury Academic. 2017. 161.

39 James DiGiovanna. *Worldmaking as an Art*. *The International Journal of the Arts in Society*, Volume 2. 2007. 118.

I am specialized in the depiction of landscape and some of my previous works come close to worldbuilding definitions. Fault in The Tale\* is a installation work with film essays, sculptures and animations depicting a world where mountains transform themselves in a dialogue with human society. Return of the Silurian is an on-going worldbuilding project of a far into the future underwater world. The worldbuilding in this research will be guided by what-if questions like: What happens if a time-machine confronts us with our future generations? What if we were forced to think about temporal territories the way we think of spatial territories? What if the future could make claims regarding natural resources & compensation for ruined land? What if the future tried to sabotage the present in secret attacks? What if there were rebels in the present siding with the future? What if a particle that can unfold into a game, a film, could be sent through the time machine? By using traditional animation techniques mindfully, I will try to establish dialogue with materials and environment in the design process. For example, in stop motion animation, when I animate different objects and materials I transfer the movement from my body into the animated object. In this transfer the self sometimes follows and I become the object that I animate. It's a trans-corporeal experience of ceasing to exist as a separate entity and instead becoming one with something else. In my work Greening Cells<sup>40</sup>, a series of paintings on transparent celluloid, I explore examples from animated films where an action or power materializes its own shape. The paintings then make living images together with its environment, by merging with it.

### Crossdisciplinarity

Cross-disciplinary methods are important to me and I think differentiations between natural and human science is increasingly uninteresting. Sarah Demeuse writes: *"I'm particularly called in by Persson's seemingly ingenious, though persistent way of approaching and attempting to work with natural scientists. Her drive to inform herself at the source signals contemporary modes of research (a more networked world, after all, allows for more immediate access to experts), and forces the experts to enter a messier terrain"*<sup>41</sup>. I often involve scientists in my research, work and teaching. Last February I took several of my students to participate in Konnect<sup>42</sup>, a project where scientists and artists worked together during intense workshop days. *Art and scientific research have much in common, although art seeks the particular and science the general. The problem, according to Lina Persson, is that science is often coded as white and male, that it pretends to represent reality, despite the fact that scientific models are repeatedly proven inaccurate and are constantly rewritten. Artists have always been very sensitive to the cracks that lead to scientific paradigm shifts, and Persson through her playful, progressive futurism is identifying those scientific cracks, nevertheless in relation to socioeconomic models*<sup>43</sup>.

### Quantitative methods & commitment

An external sustainability consultant will be measuring and certifying any climate-just method, I develop, I will also be personally involved in the energy measurement process. There are many tools with which to measure the climate impact of a person or process. There are text-based documents, footprint calculators, surveys and logs, and measurement technologies available on the market and ready to use. I plan to use of a combination of these tools and after measuring behaviour, collecting data on climate impact, analysing the data, making conclusions from the analysis and formulating regulations, I will personally commit to following these self-imposed regulations. Both my methods and my commitment will be reviewed by the external consultant.

## **IMPLEMENTATION**

The first level of the research is what I call the PRODUCTIONWORLD. I will develop a conceptual framework for a self-imposed regulation of the use of resources in my artistic production processes. That framework will be "the world" I will inhabit during this research project. Its purpose is to prevent me from using more than my share of resources in a sustainable ecosystem. It will likely affect my process to a large extent, by emissions, my travels<sup>44</sup> and thus how I collaborate with international partners or make site-specific research. It might affect the scale and the efficiency of my project. It will

40 Lina Persson. Greening Cells. 2016. <https://www.researchcatalogue.net/profile/show-work?work=265822>

41 Sarah Demeuse. Speculating artistic speculation. Rivet, New York. 2011. [http://rivet-rivet.net/pdf/speculating\\_artistic\\_speculation.pdf](http://rivet-rivet.net/pdf/speculating_artistic_speculation.pdf)

42 See, Konnect; accessed on March 5 2015; <http://konnect.hi.is/>

43 Ravini, Sinziana, 2011. Shifting the Real-Three Case Studies from the Nordic Art Scene, Code Magazine #3

44 Living planet report, Risk and resilience in a new era. WWF International, Gland, Switzerland. 2016. 109.

also affect my working hours<sup>45</sup>. In my essay *Outsourcing Animation*<sup>46</sup> I elaborate further on what effects sustainable practice could have on animation practices. Within this framework (PRODUCTIONWORLD), I will stage an artistic process, a worldbuilding-production which will result in the second layer of research; the STORYWORLD. The fictional storyworld is today an increasingly common tool and engine to create a multitude of narratives within one media franchise. I plan to build a storyworld, with text, sound and image, one that evokes narratives with new perspectives on the environment. The starting point for defining and creating my STORYWORLD is the time-machine technology and research in theoretical physics by Dr Ron Mallet with whom I have an ongoing artistic collaboration since 2011. Through world-building I want to speculate how this time-technology might alter the politics of climate justice. Since it would enable future generations to access our time, I envision a scenario comparable to situations where indigenous populations have found ways to claim their rights in relation to colonial powers. This will open up discourse on the colonization of the future and raise questions around rights and the distribution of resources in temporal dimensions. At the same time, it will also question the way the environment has been reduced to a mere resource for humans, often referred to as a colonization of nature<sup>47</sup>.

1. I will start by setting up routines for measuring and documenting my climate impact in collaboration with sustainability researchers. I will start to define the STORYWORLD in crossdisciplinary workshops with invited specialists from diverse fields, and simultaneously measure the climate impact of all action connected to that.
2. The climate-data that comes out of documenting this creative process will be the startingpoint for the formulation of PRODUCTIONWORLD. This will be done in dialogue with and through feedback from sustainability researchers and law advisors. As the PRODUCTIONWORLD takes shape I will place my process with the STORYWORLD within it and let it condition how I let myself continue its production.
3. Finalizing the PRODUCTIONWORLD contract/manifesto/certificate. Building the STORYWORLD from text, sound and image. Building online platform for the STORYWORLD.

Following persons are connected to the project as advisors or workshop participants: Ron Mallet, Research professor in physics, University of Connecticut. Kajsa Dahlberg, phd fellow at RIA, Stockholm. Diego Galafassi, Stockholm Resilience Centre. Guðrún Pétursdóttir, Professor vid Institute for Sustainability Studies, Reykjavik. Sara Eliasson, Paleontolog. Anna Åberg, Assistant Professor, Technology Management and Economics, Chalmers, Gothenburg. Mirko Lempert, Lektor i visuellt media, SKH. Jenny Sunesson, Lektor i audiellt media, SKH. Karin Ryding, PhD fellow at Computer Games Research, Copenhagen IT University. Joakim Andrén, environmental activist. Nils Gustin, marine biologist. Sandra Snan, role-playing game masters & storyworld builder. Lars Kristensen, Senior Lecturer in Media Arts, Aesthetics and Narration, University of Skövde

## PRELIMINARY RESULTS

As a pre-study for this project I have worked with Ron Mallet, Research Professor in Physics, University of Connecticut, learning about theoretical possibilities of time travel. Together we have staged hypothetical conversations<sup>48</sup> in order to push our imaginations to consider the actual impact of such time travel. By applying my knowledge in colonial history, I envisioned possible new ways to approach problems of climate-justice. For more than ten years I have focused on portraying active landscapes and after attending a workshop in worldbuilding for film in 2015 I have become more and more occupied with its methods. Worldbuilding is wonderful for collective practices and I see great potential to link my experiences in working with collective storytelling with fan-fiction groups, my activism in feminist and

<sup>45</sup> John Stutz, *Climate change, development and the three-day week*, Tellus Publications, for a great transition, cambridge USA. 2008. 4.

<sup>46</sup> Lina Persson, *Outsourcing Animation*. 2016. <https://www.researchcatalogue.net/profile/show-work?work=267241>

<sup>47</sup> T. J Demos. *Decolonizing Nature: Contemporary Art and the Politics of Ecology*, Sternberg Press Berlin. 2016. 19.

<sup>48</sup> Lina Persson. *Subatomic Particles/ Interview from hypothetical situation*. Connecticut. 2012. <https://vimeo.com/70935331>

environmental movements, my commitment to alternative organisational models on topics ranging from political platforms to food consumption to my artistic practice. I have also engaged role-playing game masters to assist in organizing workshops. I've had meetings with sustainability CEO at Stockholm County Council and researchers at Stockholm Resilience Centre in relation to structuring my research regarding climate justice assessment as art. I am in dialogue with Chalmers University of Technology for the possibility of making the climate assessment in my project as a degree project at the Division of Environmental Systems Analysis. Below are some of my earlier works that have led up to this project proposal.

- *Tunga Ting*, research project financed by Stockholm Uniarts. Investigating post-human perspectives on the environment in relation to animation practices as well as exploring my own position within the ecosystem through my practices of teaching and animation. For example I generated my material by improvising lectures for various audiences I wanted to have input from. I lectured to all possible entities in the ecosystem I am a part of, from blueberries to colleagues to films in attempts to explore other than human- centric perspectives. I presented the project at Royal Academy of Fine art's Research Week 2016, in several exhibitions and in the online exposition *Animated Ecology*. <https://www.researchcatalogue.net/profile/show-exposition?exposition=265814>
- *Return of the Silurians*, research project financed by Stockholm Uniarts. 2016-Ongoing worldbuilding project for rethinking and updating the science fiction genre of "the revenging earth". Also testing ways for storytelling about far far futures and time perspectives beyond the human lifecycles. Exhibited at Gotland art museum and Gotland museum of natural history 2017 as part of exploring and questioning divisions between natural and human history. <https://www.researchcatalogue.net/view/384069/402780>
- *Labour of Textile and Animation*, Stockholm Uniarts, (2016). An artistic collaboration investigating similarities between textile production and animation production regarding working conditions and sustainability. <https://www.researchcatalogue.net/view/353153/353154>
- *Fault in the Tale* installation, animated films, sculptures and video essay. Worldbuilding project about the agency of geology, portraying landscape interacting with and against human activities. Collaboration with scientists, museums and observatories. <https://www.researchcatalogue.net/view/273739/273740>
- *Fanmo jimte*, DV, 26 min (2008). The film deals with how storytelling and environmental changes are intertwined, it was made by engaging in collective fanfiction processes.
- *Boulder Eclips*. (Tantalum, Beryll, Petalit and Columbit), (2010) installation, Four animation loops and sunfilm on windows. Exploring the connection between process and outcome and the way my practice is connected to global environmental and human catastrophes.
- *Colonizing futures* (2010) <http://linapersson.se/colonizingfutures/colonizing01.html>