



**CREATURES**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870759. The content presented in this document represents the views of the authors, and the European Commission has no liability in respect of the content.

# CREATURES DELIVERABLE

## D3.1 EXPERIMENTAL PRODUCTIONS ROADMAP V1

Grant Agreement number	870759
Action Acronym	CreaTures
Action Title	Creative Practices for Transformational Futures
Funding Scheme	H2020 Societal Challenges: Inclusive, innovative and reflective societies
Version date of the Annex I against which the assessment will be made	October 9 <sup>th</sup> , 2019
Start date of the project	January 1 <sup>st</sup> , 2020
Due date of the deliverable	June 30 <sup>th</sup> , 2020
Actual date of submission	June 30 <sup>th</sup> , 2020, Date of the first resubmission: October 26 <sup>th</sup> 2021, Date of the second resubmission: March 25 <sup>th</sup> 2022
Lead beneficiary for the deliverable	AALTO
Dissemination level of the deliverable	Public

### **ACTION COORDINATOR'S SCIENTIFIC REPRESENTATIVE**

Prof. Tuuli Mattelmäki

AALTO-KORKEAKOULUSÄÄTIÖ,

Aalto University School of Arts, Design and Architecture: Department of Design

tuuli.mattelmaki@aalto.fi



Authors in alphabetical order		
Name	Beneficiary	E-mail
Andrea Botero	Aalto	<a href="mailto:andrea.botero@aalto.fi">andrea.botero@aalto.fi</a>
Markéta Dolejšová	Aalto	<a href="mailto:marketa.dolejsova@aalto.fi">marketa.dolejsova@aalto.fi</a>
Tuuli Mattelmäki	Aalto	<a href="mailto:tuuli.mattelmaki@aalto.fi">tuuli.mattelmaki@aalto.fi</a>

Change History				
Version	Date	Status	Author (Partner)	Description
1.0	September 29 <sup>th</sup> , 2020	Submitted	Aalto	Original, submitted version
1.1	September 15 <sup>th</sup> , 2021	Revised version	Aalto	<p>Relevant updates:</p> <ul style="list-style-type: none"> <li>– Section 1.2 (extended overview of consortium’s interdisciplinary expertise in the area of sustainable eco-social transformation)</li> <li>– Section 2 (added an extended explanation of the project’s approach to eco-social transformation)</li> <li>– Section 2.1 (added as a new section to outline the interdisciplinary setting of the ExPs development, including the processes employed by the project to involve external thematic experts)</li> <li>– Section 2.3 (extended overview of authors for each ExP, including internal experts / consortium partners and external expert collaborators; updated description of reProductive Narratives ExP)</li> <li>– References section was added</li> </ul>
1.2	March 17 <sup>th</sup> , 2022	Revised version	Aalto	<p>Relevant updates:</p> <ul style="list-style-type: none"> <li>– Section 2.3 (additional details regarding the ethical aspects of the reProductive Narratives ExP; names of expert collaborators in Refuge for Resurgence ExP; information on collaborators in Hackcamp ExP)</li> </ul>

### **Abstract**

This deliverable describes production and implementation activities related to CreaTures experimental productions (ExPs). It outlines the shared ExPs' goal to contribute towards eco-social transformation and the interdisciplinary approach embraced by the consortium to facilitate the ExPs' development. This first version of the deliverable (v1) details ten ExPs that have been confirmed for implementation by M6 and provides the first draft of the ExP Timeline – a shared calendar board that serves as an entry point for consortium members across all work packages to plan and coordinate their research activities around each ExP. This v1 of the deliverable will be continuously updated between M6-M24, culminating in the v2 to be submitted at the end of M24.

# Contents

1. Introduction.....	3
1.1 About CreaTures .....	3
1.2 Interdisciplinary consortium .....	3
1.3 The purpose of this deliverable .....	4
1.4 How this deliverable was produced .....	5
2. CreaTures Experimental Productions (ExPs).....	5
2.1 Interdisciplinary approach to ExPs development.....	6
2.2 Impact of Covid-19 on ExPs .....	7
2.3 Overview of planned ExPs.....	8
I. Gaming for the Commons - Commonsopoly.....	8
II. Experimental Food Design for Sustainable Futures.....	10
III. The Hologram - Collective Health as a Really Beautiful Artwork.....	11
IV. reProductive Narratives.....	13
V. Sustainability Futures Game .....	16
VI. Hackcamp .....	17
VII. Refuge for Resurgence.....	18
VIII. The Treaty of Finsbury Park 2025.....	19
IX. Baltic Seaweed Open Studio & Laboratory (working title).....	20
X. Open Forest.....	21
References.....	23
Annex.....	24
Annex I – ExPs Timeline .....	24
Annex II – Report on the bio-data processes in reProductive narratives Exp.....	25
Annex III – Opinion on the reProductive Narratives Exp from KME RS .....	28

# 1. Introduction

## 1.1 About CreaTures

Creative practices have already shown transformational potential in the area of social cohesion and environmental citizenship, but they are often fragmented, poorly resourced and badly understood. The CreaTures project demonstrates the power of existing, yet often hidden, creative practices to move the world towards social and ecological sustainability by identifying those aspects of creative practice that contribute most effectively to positive socio-cultural transformation.

Drawing on pilot research (Light, Wolstenholme and Twist, 2019) showing that collaboration, reflection and direct engagement are key to changing the public's orientation to social and ecological issues, the project involves three interrelated components:

- *Observatory*, identifying and mapping existing, fragmented and often hidden transformational creative practices
- *Laboratory*, supporting new experimentation and direct engagement with diverse stakeholders by mounting several different scales and types of experimental productions (ExPs). The ExPs are art and design projects set up as temporary co-creative spaces that share the common goal of supporting sustainable transformative processes. Mobilising specific forms of artistic knowledge, the ExPs engage publics and stakeholders in sustainability-related experiences at selected locations across Europe.
- *Evaluation* phase, testing new and existing creative practices for their impact in a systematic and concerted way.

These components are interwoven with a series of engagement events enabling broad access to the evolving outcomes of the project for different groups, including policy actors, scientific community, and members of the public.

The project will combine insights from these undertakings into an open-access, transdisciplinary, evidence-based and practical framework demonstrating effective paths to achieving sustainability, social cohesion and peaceful co-existence at a time of rapid change. The framework will offer a strategic research agenda for key stakeholders, a set of innovations addressing the cultures and conditions for delivering greater sustainability, and policy recommendations to focus and optimise work in mobilizing the arts for transformational futures.

## 1.2 Interdisciplinary consortium

The CreaTures project brings together an interdisciplinary consortium that unites emerging and established research approaches to creative practice and sustainability, drawing on arts, science and social science. In addition to academic researchers, the project includes professional creative practitioners and social change organisations who are experts within the field of sustainability and eco-social transformation. This project design allows for free exchange of ideas: compared with projects where knowledge production resides only with academics, this approach allows practitioner insights to be disseminated more widely into policy and for research to travel further amongst practitioner communities (details available in the project's Description of Action, DOA).



Specifically, the CreaTures consortium brings together following organisations: Aalto University School of Arts, Design and Architecture (FI) is the project coordinator and a frontrunner in artistic and practice-based research, with strong expertise in collaborative and co-creation projects. The University of Sussex's Sustainability Research Programme (UK) is designed to bring together interdisciplinary teams to tackle complex sustainability issues and the pilot work behind the CreaTures proposal was undertaken there. RMIT Europe (ES), as an extension of RMIT Australia, contributes considerable expertise in care-full design, engagement practices and urban transformations. The Utrecht University (NL) brings expertise on governance processes, pathways to sustainability and the use of simulation games. Alongside this research expertise, the project involves skilled creative practices led by major art and design organisations: Superflux (UK) and Hellon (FI) are design studios practising consulting and commissioning work for private and public organisations. Furtherfield (UK) and Kersnikova (SI) are arts collectives that act as cultural institutions and producers, reaching a wider network of artists located throughout Europe. ZEMOS98 (ES) is a creative arts cooperative with extensive networks in activist circles and grassroots projects across Europe. This creative arts and research portfolio in CreaTures is complemented by two non-for-profit organisations with special domain knowledge: Sniffer (UK) contributes expertise in brokering between creative practitioners and policy makers / implementers; OKFI (FI) focuses on the application and development of open knowledge and systems thinking.

The rich, interdisciplinary expertise with creative approaches to transformation and sustainability engendered by the consortium is further extended by the CreaTures Advisory Board and various external collaborators who support the project processes in multiple ways, especially through the development of CreaTures ExPs (details of external collaborators are provided below, in sections 2.1 and 2.3). The Advisory Board involves four members: Hilary Jennings is a Trustee of the Transition Network and Director of the Happy Museum Project, working across the arts and cultural sectors. Isabelle LeGalo is a mathematician, philosopher and director of the Carasso Foundation, a French-Spanish philanthropic organization fostering networks for food sovereignty and citizens art. Marjo Mäenpää is the director of Foundation for Cultural Policy Research and CUPORE – Center for cultural policy research in Finland. Špela Petric is a new media artist trained in the natural sciences (PhD in biology), working in the field of art/science/technology (Ars Electronica Award winner).

### **1.3 The purpose of this deliverable**

The purpose of this deliverable D3.1 Experimental Productions Roadmap v1 is to outline the production and implementation activities related to the planned CreaTures experimental productions (ExPs). The key part of the deliverable is the Attachment 1 – ExPs Timeline that provides an overview of the upcoming ExPs and serves as an entry point for all work package teams to plan and coordinate their research activities around each ExP (NB: The attached ExPs Timeline shows the state of ExPs process as of June 2020, the date when this deliverable was first submitted). The primary focus of this deliverable (v1) is on ten ExPs that have been confirmed with the creative CreaTures partners by M6 of the project. More ExPs (i.e., documentation of ExPs processes) will be commissioned by the CreaTures project throughout M6-M24 and this deliverable will be updated accordingly, culminating in the version 2 to be submitted in M24 (D3.2 Experimental Productions Roadmap v2). This deliverable D3.1 provides an information baseline for the deliverable D3.3 Experimental Productions Documenting Template as well as for D6.1 H - POPD - Requirement No. 3 (templates of the CreaTures informed consent forms and information sheets) and D6.2 H - Requirement No. 5 (copies of opinions/approvals by ethics committees).



## 1.4 How this deliverable was produced

This deliverable was produced by researchers from WP3 in collaboration with CreaTures creative practitioners – partners whose ExPs are scheduled for implementation in M6-24. Since M3, WP3 researchers have had conversations with each ExP group to discuss their evolving ExP plans and also changes caused by the Covid-19 pandemic. These details have been further discussed in the regular CreaTures Research Fellows (RF) meetings as well as on several meetings of the CreaTures Executive Board (EB). Researchers from across all WPs have thus contributed their inputs and comments.

At the beginning of M6, the RF group organized an internal ExPs Roadmapping workshop (June 9th, 2020) that brought together creative practitioners and researchers from all WPs to discuss details, issues, and updates from the evolving ExPs processes. Practitioners were asked to present their ExP plans and mitigation strategies related to Covid-19 restrictions. In small groups, workshop participants exchanged their experiences from various countries where their creative work is located and discussed their diverse rationale for choosing particular mitigation strategies to adapt their work into the current social circumstances. The workshop revealed a diversity of practical, territorial, as well as epistemological factors impacting the decision-making in each ExP group that need to be accounted for in the CreaTures project. Insights from the workshop have been incorporated in this deliverable document.

## 2. CreaTures Experimental Productions (ExPs)

In the CreaTures DOA, we outline that at least six ExPs will be organized within M6-24 of the project. However, already at this stage (M6), it is clear that we will be able to organize more than that. The current plan includes ten ExPs and more are likely to be added into the CreaTures programme as the project evolves.

The CreaTures ExPs are art and design projects set up as temporary co-creative spaces that can mobilize specific forms of artistic knowledge and provide safe collaborative environments for multi-stakeholder interaction to support positive societal transformation. ExPs developed and deployed in CreaTures are embedded in different communities and urban contexts, covering different scales and scopes. Some are large scale – for instance, immersive public installations engaging people’s senses to explore how ways of life can be touched, transformed and reinvented. Some are of medium scale including, among others, multi-stakeholder gaming sessions and performative events that can be achieved with modest resources. Others are smaller and presented as or within community happenings, festivals and art/design conferences, for instance in the shape of co-creative design workshops, courses, and small game sessions.

While formally distinct, all CreaTures ExPs work across eco-social concerns – dealing with interrelated domains of ecological and social sustainability and acknowledging that climate and ecological sustainability goals will only be attained by addressing social sustainability issues (Randers et al., 2018). In CreaTures, we use the shorthand term ‘eco-social’ (see Dolejšová et al., 2021; further details are available in deliverable D2.3 Review Report of Transformational Strategies v2) to reflect this interrelatedness and acknowledge that creative works exploring sustainability as a topic should connect issues of social justice, cultural diversity and ecological issues (Kagan, 2008; Moore and Milkoreit, 2020). The scope of eco-social themes addressed by the CreaTures ExPs is diverse, including human health and wellbeing, communing and governance, forest management, and sustainable food systems and practices. The ExPs are open for viewing/interaction by members of the public and/or specific communities. Within the CreaTures project, the ExPs are accompanied by related engagement activities, such as seminars, panel discussions, workshops, art jams and

travelling exhibitions that aim to engage publics in locally-specific ways conducive to understanding the local-global relations inherent to eco-social sustainability. The ExPs and accompanying activities will produce rich data allowing us not only to compare the different creative practices mobilized, but also distil key methodological lessons.

## 2.1 Interdisciplinary approach to ExPs development

The CreaTures consortium brings together many forms of knowledge and expertise to consider transformation processes. Close collaboration among experts from diverse areas of sustainability research and creative practice – including artists, designers, researchers, social and natural scientists – is vital for the CreaTures ExPs processes. The ExPs are developed in interdisciplinary settings, utilising diverse methods and approaches drawn from experimental and participatory design, socially oriented art, cultural mediation, social change action, sociology, urban studies and sustainability science. The research methodology followed by the CreaTures project is explained in detail in deliverables D2.1 – Shared documentation template and data gathering strategy, and further discussed in deliverables D2.2-3 – Review report of transformational strategies v1, v2. In this deliverable D3.1, we focus specifically on practical details related to ExPs’ production and implementation.

The ExP are developed by different groups of co-authors. Each ExP team (group) involves at least one consortium partner primarily responsible for the ExP production and implementation, and a varied number of external collaborators contributing to the ExP development with their distinct thematic expertise. Details of co-authors identified for each ExP so far (i.e., invited to collaborate on an ExP at the project’s outset) are provided below in section 2.3; however, these lists of co-authors are not final. Many ExPs aim to nurture relational networks of collaborators and contributors through the creative practice. The co-authorship thus evolves along with how the creative practice and how it travels across different social and geographical contexts. For instance, the Gaming for the Commons – Commonsopoly ExP involves a series of gameplays situated in cities and countries around Europe, inviting different groups of players and so-called ‘ambassadors’ from local communities to participate and contribute to the ongoing game development. These contributors are experts on themes related to commoning practices and alternative economics and their sustainability potential, and expand the Commonsopoly ExP with their distinct situated knowledges and expertise (details in section 2.3).

The involvement of CreaTures partners as ExPs co-authors differs from case to case: in some ExPs, partners act as creative practitioners responsible for the creative development of the ExP’s concepts, processes and artifacts (e.g., Open Forest Data ExP co-authored by the partners at Aalto and RMIT and external collaborators). In other cases, partners have the role of curators commissioning and supporting ExPs developed by external creative practitioners (e.g., reProductive Narratives ExP where the CreaTures partner Kersnikova acts as a curator commissioning creative work from artists Maja Smrekar and Gjino Šutić).

In all cases, ExP co-authors are responsible for self-documenting their ExP, using a shared documentation template (details in D3.3 – Experimental productions documenting template). Critically, all ExPs are also supported by consortium members across work packages – in terms of research methodologies and data collection (details in D2.1), evaluation (details in D4.1-2 – Prioritised indicators and baseline v1, v2), organisation of ExP-related engagement events (details in D5.1-2 – Dissemination, Exploitation and Engagement Plan), facilitation of ethics procedures (D6.1-2). All ExPs are further discussed at regular consortium meetings, where consortium members provide feedback to each other and comment on the evolving ExPs processes. The accompanying public-facing engagement activities, where ExP authors invite relevant experts to discuss or otherwise engage with the themes and issues related to their projects, provide

a further occasion for the ExPs to gather insights from thematic experts from outside of the consortium (example is Kersnikova's Freaktion Bars format – a series of public discussions to be organised for some of Kersnikova's ExPs, including the reProductive Narratives ExP describes below in section 2.3).

It is important to note that most members of the consortium maintain composite identities of some sort, having expertise both as academic researchers and creative practitioners. Many consortium members have a dual role of overseeing or supporting research activities in the work packages and, at the same time, developing their own ExP as creative practitioners. These hybrid roles of CreaTures consortium members contribute to the interdisciplinary character of ExPs development, enabling for diverse knowledges and expertise to come together in each ExP case. Such co-creative ways of working together, where creative practitioners are treated equitably as co-researchers, rather than merely research subjects, is in the heart of the CreaTures project.

## **2.2 Impact of Covid-19 on ExPs**

We acknowledge the fact that the restrictions imposed by the Covid-19 pandemic have had a profound influence on the ways the ExPs will unfold over the coming months. Some ExPs have been postponed and others have been adapted to the current social circumstances, depending on their planned implementation format as well as conceptual context. We have discussed the pandemic issues and preferable mitigation strategies widely in the consortium; at individual meetings scheduled by WP3 with each ExP partner as well as at regular meetings of RF groups and the EB. Further, the ExPs Roadmapping workshop provided a dedicated space for such discussions and a mutual exchange of partners' experiences and opinions.

The workshop was attended by creative practitioners and researchers from all WPs, and conveyed some important insights into the challenges that practitioners are facing during the pandemic. Some practitioners were clear that it is unfeasible for them to change the format of their ExP to accommodate Covid-19 restrictions. For instance, large projects such as immersive installations cannot be moved into a virtual space, as the physical presence of participants and the specific character of the local venue are crucial for the intended participant experience. Authors of these ExPs thus decided to postpone their implementation to a later date. The re-scheduling of some of these ExPs that are organised as part of a larger event (e.g., festival or art/design conference) is further dependent on the decisions by the event organizers. This is, for instance, the case of the Refuge for Resurgence / Mitigation of Shock ExP – a large immersive installation produced specifically for the parameters of the Venice Architecture Biennale 2020, which was re-scheduled for May - November 2021.

At the same time, some practitioners deemed it feasible to adjust their ExP format to the Covid-19 restrictions and rethink their planned engagement approach. These adjustments often involve moving the engagement activities into an online space, to avoid travel and allow for a safe social distancing among participants. The shift into an online space has impacted the ways how these ExPs are produced, implemented and documented. To facilitate online participant engagement, practitioners have proposed to use online video-conferencing software such as Zoom and Jitsi and additional co-creative tools such as Miro. The remote engagement activities include, for instance, collaborative sketching, collaging, note-making, role-playing, and group discussions. Documentation of these activities involves audio-video recordings, screen capture, exported sketching/collaging boards, and other digital artefacts (further details of ExPs documentation process are available in D3.3 and D2.1).

An example of an ExP that has been moved online is the Gaming for the Commons – Commonspoly by ZEMOS98 – a board game that is typically played by 6-10 participants in a shared physical space. The game

has been adapted to allow a remote interaction: the authors have shipped a copy of the game board to all participants and enabled them to play from their homes. The virtual co-play is facilitated via Zoom, by a ZEMOS98 game moderator orchestrating the interaction and giving prompts to participants. This gameplay format was pilot-tested by the CreaTures consortium at two gameplay sessions organized on June 11<sup>th</sup> and 29<sup>th</sup> 2020. Another example is the Experimental Food Design for Sustainable Futures ExP – a workshop that was originally centred around a physical food foraging excursion around a local foodscape in the city of Eindhoven (NL), where the workshop was to take place. The online workshop has been re-imagined as a remote foraging expedition around participants' home kitchens, pantries and neighbourhoods, followed by a co-creative interpretation of the foraged items facilitated via Zoom and Miro.

We expect that online ExPs will occupy a fair share of the CreaTures program, at least in the near future. Our continuous effort is to provide a full support to our creative partners who are adapting their projects to the online format and help them to rethink their planned production and implementation approaches. The ExP Roadmapping workshop is one example of such efforts; more internal workshops and opportunities to share experiences and provide peer advice and trouble-shooting within the consortium are planned for the upcoming months.

### **2.3 Overview of planned ExPs**

This section provides a chronological list of ten ExPs that have been confirmed with the creative project partners and are currently in production or nearing an implementation date. More ExPs (i.e., documentation of ExPs processes) will be commissioned by the CreaTures project throughout the M6-M24 and this overview will be updated accordingly. For a graphical overview of confirmed ExPs, see the attachment 1 ExPs Timeline – an evolving, shared calendar board that serves as an entry point for consortium members across all work packages to plan and coordinate their research activities around each ExP.

#### **I. Gaming for the Commons - Commonsopoly**

##### **ExP authors (consortium partners & external expert collaborators)**

###### CreaTures consortium:

ZEMOS98 cooperative (<http://zemos98.org/en/>) – 22 years old non-profit organization with a mission to produce social change through a methodology that supports the ideas of free culture, expanded education and P2P mediation in which digital media plays a crucial role.

###### External collaborators:

Irene Kalemaki – co-founder of the Stimmuli for Social Change organisation specialised in social innovation and education; expertise in Social Innovation & Civic Participation, Education & Skills development, Global Sustainability and Responsible Entrepreneurship

Angela María Osorio – urban researcher and practitioner with a PhD in Urban Studies. Expertise in urban renewal, culture and welfare, and urban migration.

Maria Francesca De Tulio – researcher and activist in urban commons; PhD in Constitutional Law. Expertise in political representation and participatory democracy, privacy and communication surveillance, competition law on the Internet.

Sandrine Cristomo – creative producer in arts, culture and education. Expertise in educational innovation and creativity, art and social transformation, collaborative processes and civic participation in the territories for development and gender issues.

Andrew Gryf Paterson – cultural producer, educator and researcher working with ecological and sustainability movements; expert on cultural heritage and collaborative networks; science and cultural activism related to the commons

Oula Rytönen – Helsinki based performance artist, sound designer and board gamer creating proposals for communal autonomies to recognise the variety of counter-cultural agencies in everyday settings.

### **Format**

A series of gameplays using a custom-made board game Commonspoly. The gameplays will take an online form in 2020 (authors send the physical board game to participants who then play remotely); live or online form in 2021/2022, depending on the pandemic situation. Every gameplay will have one appointed local facilitator from/invited by ZEMOS98 who is an expert on the ExP theme of commons and alternative, community-driven economies. The ExP was originally planned as a live event but later adapted to online format.

### **Thematic focus**

Commonspoly is an artistic device and educational tool to foster sustainable and cooperative ways of life by introducing commons theories and cooperative strategies.

### **More details**

[www.commonspoly.cc](http://www.commonspoly.cc)

### **Location**

Online, lead from Seville and ideally other 4 European cities (to be confirmed, depending on Covid-19 restrictions).

### **Timeline**

Production: April - May 2020

Implementation: June 2020 – March 2022

An internal online pilot gameplay was held in June 2020 among the CreaTures partners, and will be followed by three online gameplays in September, October, November 2020. Another ten gameplays are planned for 2021; three gameplays for 2022 (format: live or online, depending on Covid-19 restrictions). Each gameplay takes 2-3 hours approx.

### **Target group of attendees**

Participants are invited by ZEMOS98 – the main focus is on researchers, activists, artists, media makers, and PhD students interested in the topic of commons and commoning.

### **Estimate number of participants**

6 -10 participants per gameplay

## II. Experimental Food Design for Sustainable Futures

### **ExP authors (consortium partners & external expert collaborators)**

#### CreaTures consortium:

Markéta Dolejšová (Aalto) – postdoctoral design researcher working across the inter-related domains of eco-social sustainability and food system transitions

Ann Light (UoS) – Professor of Design and Creative Technology, University of Sussex, UK, and Professor of Interaction Design, Social Change and Sustainability, Malmö University, Sweden

#### External collaborators:

Sjef van Gaalen – design researcher with expertise in multi-species futures and regenerative ecologies

Danielle Wilde – Associate Professor of Embodied Design at the University of Southern Denmark with expertise in food systems sustainability and designing for social and ecological transformation

Hilary Davis – Senior Research Fellow at the Social Innovation Research Institute, Swinburne University of Technology, with expertise in digital technologies for social sustainability

Ferran Altarriba Bertran – Computational Media PhD student in the Social and Emotional Technology Lab at the University of California, Santa Cruz, expertise in future technologies in playful and socially sustainable relationships

Paul Graham Raven – postdoctoral researcher with expertise in critical futures studies and narrative rhetorics of socio-technical change

Sara Heitlinger – lecturer in Computer Science at City, University of London with expertise in food sustainability, food commons, and urban agricultural communities

### **Format**

A 2-day online co-creation workshop at the DIS 2020 conference (<https://dis.acm.org/>). Originally planned as a live event; later adapted to online format following the decision of conference organisers.

### **Thematic focus**

The two-day workshop, Experimental Food Design for Sustainable Futures, experiments with food as bio-design material and socio-culturally potent, aesthetically rich starting point from which to critically reflect on social and ecological uncertainties. Participants will co-design scenarios, prototypes, and artifacts; engage in foraging ‘walk-shops’; and propose diverse imaginative approaches to nurture transformations towards positive, sustainable futures. Each workshop day will focus on a distinct theme, using food as an accessible starting point from which to explore and articulate values, concerns, desires, and imaginaries associated with a) food-tech futures and b) climate resilience. DIS attendees have the option to sign up for both workshop days or for one day only.

The day 1 workshop *Fantastic(e)ating Food Futures: Reimagining Human Food Interactions* uses food to examine interdependencies between food, eating, and social practices and critically engage with future

flourishing through food-tech innovation. Rather than designing solutions, we will ‘fantasticate’ future food ideas and approach food-tech practices as contested areas navigated by multiple human and non-human stakeholders. We will interrogate the advantages and challenges that new food-technologies bring into peoples' lives, and speculate how they might inform or frustrate the development of sustainable food futures.

The day 2 workshop *Designing with More-than-Human Food Practices for Climate Resilience* uses experimental design co-creation with food to explore how social and ecological uncertainties apply to food system contexts. Acknowledging that human-food practices are a key driver of climate change, we will use prototyping and scenario development to speculate how more-than-human perspectives might be included to support sustainability. We will examine climate-change mitigation proposals and imagine their plausible implementations as climate-resilient food practices, emphasizing more-than-human concerns. Outcomes of the day 1 workshop will inform the activities on day 2: fantastical artifacts, scenarios, and proposals for food-tech futures will be used as inspiration for the more-than-human food futures imaginaries co-created on day 2. The two-day workshop creates an interdisciplinary forum to share experiences, creative practices, and imaginations concerning societal transformation towards desirable sustainable futures.

#### **More details**

<https://experimentalfooddesign.wordpress.com/>

#### **Location**

Online

#### **Timeline:**

Production: April-June 2020

Implementation: July 6-7 2020

#### **Target group of attendees**

Designers, researchers, creative practitioners interested in issues related to food and environmental sustainability, food-technology futures, and/or more-than-human centred design. Participants are pre-selected via a workshop open call (<https://experimentalfooddesign.wordpress.com/cfp/>). The call has been shared by ExP authors via social media, mailing lists, and the workshop website, as well as by DIS'20 conference organizers via their website and social media channels.

#### **Estimate number of participants**

About 20 participants for each workshop day

### **III. The Hologram - Collective Health as a Really Beautiful Artwork**

#### **ExP authors (consortium partners & external expert collaborators)**

##### CreaTures consortium:

Furtherfield organisation (<https://www.furtherfield.org/>) – one of the longest running nonprofit international hubs for critical explorations in art, technology and social change

##### External collaborators:



Cassie Thornton\* (<http://feministeconomicsdepartment.com/>) – artist and activist, feminist economics educator, co-director of the Re-Imagining Value Action Lab in Thunder Bay, an art and social centre at Lakehead University in Ontario, Canada

Lita Wallis\* - youth worker, organiser and informal educator

Melanie Gillian – artist and filmmaker

\*Cassie and Lita are the lead authors of The Hologram project and were commissioned by Furtherfield to conduct the ExP. Furtherfield collaborates on the ExP production and implementation.

### **Format**

Online course and video series (a course once a week, for six weeks within the project timeline; videos will use material co-created with participants within the project timeline).

### **ExP's thematic focus**

The Hologram has its roots in August 2016, when Cassie Thornton began a large-scale art and research project examining alienating healthcare systems, having observed models of radical, free, integrative and transformational healthcare developed in Greece during the financial/refugee crisis. In June 2019, after substantial work in this area (exhibitions, lectures workshops, published research and collaborations), she accepted a residency at Furtherfield to intensively research the project with reference to Furtherfield's own international network of precarious art workers and activists. The start of her residency coincided with the Covid-19 pandemic. The UK's social distancing began just after she hosted our first, oversubscribed workshop on "Collective Health as 'Really Beautiful Artwork'". Originally planned a series of face to face gatherings Thornton has adapted project presentations and discussions with the support of Lita Wallis, a four-week course called "Is this the End or is this the Beginning?" and new participatory research formats for online participation. By paying close attention to access and care issues Thornton and her collaborators have ensured that all events have all been over-subscribed by repeat participants of impressive diversity from around the world.

An insurgency of sick artists is organizing to resist the global crisis of care, from their beds and over the phone. In these days of compulsive overwork in the so-called creative economy, we're all sick artists in some way. But using the ancient technologies of peer-to-peer care and new technologies of digital communion, a grassroots health monitoring and diagnostic system is emerging, practiced from bedrooms and couches all over the world. Through structured conversations between groups of four people (often strangers), participants co-produce a multi-dimensional image of each other's physical, psychological, and social health. Those who receive care and attention provide it to others in a viral network. We call this 3D image, and this process as a whole, The Hologram. We propose to run an updated second iteration of the 6-week online course and to work with participants to create a sci-fi documentary video about The Hologram state of being, enacted by the artist and Hologram participants. This video will take a number of Hologram perspectives reflecting a state of physical, mental or social health in flux. It will be broadcast throughout social media and on the Furtherfield website. This will have a double status - as parafictional artworks and as introductions to a new collective healthcare model.

### **More details**

<https://www.furtherfield.org/the-hologram-an-image-of-health-in-multi-dimensional-crisis/>

**Location**

Online

**Timeline**

The course will take place on 6 consecutive Thursdays starting on September 3 from 6-9pm BST

Implementation: September - October 2020

**Target group of attendees**

General public who agree that they have trouble asking for help and who want to practice The Hologram in their lives long-term, drawn from several groups including:

- Applicants who wanted to be in the first course but for whom there wasn't space
- People who come recommended from the first course participants
- Mothers with young children (we will offer a stipend for childcare)
- Youth in early 20s from London who have worked with Lita on Take Back the Power
- International people from outside of North America and Europe
- People over 50
- People who do socially transformative work who would benefit from some new tools
- People who have attended a workshop about the Hologram and who have signed up for the Hologram mailing list

**Estimate number of participants**

Up to 28 participants per course will be accepted; videos will be available for viewing by an online audience (10,000+ over a year)

**IV. reProductive Narratives****ExP authors (consortium partners & external expert collaborators)**CreaTures consortium:

The Kersnikova Institute (<https://kersnikova.org/>) – a non-for-profit organization producing and incubating contemporary investigative art projects that focus on impacts of science and technology on contemporary society.

External collaborators:

Maja Smrekar\* – an internationally acclaimed artist whose work addresses difficult bioethical problems and dilemmas, especially related to the unsustainable position of the human species at the top and center of the ecosystem.

Gjino Šutić\* - a multidisciplinary researcher and innovation developer in several fields of science (biotechnology, bioelectronics, experimental electronics, ecological engineering etc.) and postmodern new media art (Bio Art, Digital art, Installation art, Multimedia Art & Hybrid Art).

Kristijan Tkalec – expert biotechnologist and lab operator

Universal Research Institute – a non-profit NGO think tank and institute for independent, interdisciplinary applied scientific research

Educell company for cellular biology, d.o.o. – an advanced biotech company founded in 1997, specialising in effective cell treatments and development of cost-beneficial biotechnological products.

\*Maja and Gjino are the lead authors of the reProductive Narratives project and were commissioned by Kersnikova to conduct the ExP. Kersnikova collaborates on the ExP as a curator and producer.

### **Format**

A closed laboratory work (not open to public) followed by an online artist talk (open to public; part of Kersnikova's "Freaktion Bar" series) – all activities are following Covid-19 related restrictions.

### **ExP's thematic focus**

The project uses an artistic metaphor to describe social phenomenologies related to the recognition and appreciation of the female body as a production facility of new life. In the art project, which is situated in a laboratory setting, the author Maja Smrekar experiments with her menstrual blood residue - a socially stigmatized female excrement - as material for artistic expression and reflective conversations. The laboratory work is carried out by Smrekar together with scientist and artist Gjino Šutić at the Universal Research Institute (Zagreb, Croatia), which is duly registered for non-pathogenic biotechnological and bio-art research, and where Šutić is the Director of Research and Development. For the artwork, cells are isolated (differentiated) from Smrekar's menstrual blood and then grown inside growth media that contain hormones extracted from the artist's own urine. These procedures follow a research protocol published by the International Peace Maternity and Child Health Hospital, School Of Medicine, Shanghai Jiaotong University and collaborators in China (2016)\* that has shown the possibility of extracting somatic cells from menstrual blood. These extracted cells may show egg-like properties (specific protein structure), raising a myriad of possibilities and opening a space for speculation regarding the existing and imagined reproductive functions of the female body (NB: these egg-like cells have 2 sets of chromosomes and cannot be fertilized). As part of the ExP, artist observe under the microscope if Maja's own (postmenopausal) urine can affect the morphology of cells from her last period discharge.

The female body has been used as a means of production in these times of populism, in which the significance of the nation increases, placing great value on the birth rate. Through such social regression, the female body has often been seen as the property of the state, law, and ideology. The authors dedicate this project to all the Others out there. Through their deeply dedicated hands-on biohacking research & practice-based process, they warmly welcome further formations of strategic alliances to employ our hormones and bodily fluids as agents for utilizing pharmacological and technological tools as non-invasive (bio)technologies. A further objective of the reProductive Narratives project is to engage and interact with citizens through dialogue, exchange of knowledge, as well as through co-development of open questions and their answers.

\* Differentiation of human menstrual blood-derived endometrial mesenchymal stem cells into oocyte-like cells by Dongmei Lai, Ying Guo, Qiuwan Zhang, Yifei Chen, Charlie Xiang, Acta Biochim Biophys Sin, 2016, 48(11), Oxford

**NOTE:** In response to the European Commission's request for additional details regarding the ethical aspects of the reProductive Narratives ExP and the biodata collection procedures undertaken as part of the ExP's laboratory part, we have taken the following steps:

- Applied for a retrospective ethics opinion on the reProductive Narratives project submitted to the National Medical Ethics Committee of the Republic of Slovenia (KME RS). The application letter was submitted by Kersnikova members on July 27th 2021; response by the KME RS was received on October 20th, 2022). The response received (included in the Annex II. of this deliverable) states that the ExP activity in question was considered artistic and therefore out of the expertise of the medical ethics committee, and that assessing activities retroactively is not possible. This demonstrates the need for special considerations in artistic speculative activities working with biomaterials.
- Compiled a detailed report on the bio-data processes in the laboratory work for reProductive narratives ExP, including data collection, storage, discarding, and related safety measures. The report written by the ExP authors Maja Smrekar and Gjino Šutić is included in the Annex II. of this deliverable.
- Invited and appointed a new Advisory Board member Mianna Meskus with expertise in biomedicine research and bioethics. Meskus is Associate Professor of Sociology and Science and Technology Studies (STS) at Tampere University. She has led several research projects on health, biomedicine, gender, and embodiment. She is currently leading an Academy of Finland-funded project VALDA on biomedical technologies and ethical valuation in reproduction and ageing, and a Finnish Cultural Foundation funded Argumenta-project on the paradoxes of reproductive futures.
- held two Advisory Board meetings (online) to discuss the ethical aspects of the reProductive Narratives ExP
- held two meetings with Kersnikova director and other responsible personnel (online) to discuss the ethical aspects of the reProductive Narratives ExP
- Proposed a discussion panel on ethics issues in arts & design research projects for the CreaTures final event (June – July 2022, Seville, Spain)

At the time of this deliverable re-submission (March 17<sup>th</sup> 2022), we are awaiting the final decision of the European Commission ethics committee regarding the ethicality of the reProductive Narratives project. The Commission has been undertaking the review since April 2021. Due to the pending decision, the reProductive Narratives ExP was officially concluded with the Laboratory work (ending February 2021) and we decided to exclude a public engagement activity – the Fertilize Me workshop – that was supposed to take place within the ExP.

A detailed overview of the research that the CreaTures consortium conducted within this ExP and the overall data gathering strategies is available in deliverable D2.1. The focus of the research and data collection was on ethnographic observations and interviews.

**Location:**

Universal Research Institute (Zagreb, Croatia) and Kersnikova Institution (BioTehna laboratory), (Ljubljana, Slovenia) and online.

**Timeline: July 2020 – February 2021**

Production: July-October 2020

Implementation:

Laboratory work 1. – 26. 11. 2020 (Phase 1) and 1.1. – 28. 2. 2021 (Phase 2)

Artist talk (Freaktion Bar): 26. 11. 2020

**Target group of attendees:**

General public following the project online

Laboratory work: not public, only artists are present.

Artist talk: online, open to general public

**Estimate number of participants:**

Laboratory work: 2 artists; no public participation

Artist talk: 130 participants

**V. Sustainability Futures Game**

**ExP authors (consortium partners & external expert collaborators)**

CreaTures consortium

Hellon design agency (<https://www.hellon.com/>) – service design agency helping organisations to achieve business goals in socially, ecologically and economically sustainable ways considering specific organisation's context and maturity.

External collaborators

FIBS Corporate Responsibility Network – Finland's leading enterprise network to promote financially, socially and ecologically sustainable business

Idil Gaziulusoy – Professor of Sustainable Design at Aalto University; sustainability scientist and a design researcher

Reetta Loponen - Head of Enact Sustainable Strategies in Finland

**Format**

Online board game sessions. Originally planned as live events, later adapted to online format.

**ExP's thematic focus**

The ExP is designed based on a 'Nordic Urban Mobility 2050 game' created for the Nordic Innovation 2018-2019 by Hellon (<https://www.nordicinnovation.org/news/planning-future-mobility-board-game>). The purpose of the game is to co-vision a desirable future state in 2030 and then backcast to find out pathways on how different UN Sustainable Development Goals (SDG) have been achieved.

**Location**

Online (using Zoom + Miro)

**Timeline**

Production: May - August 2020

Pilot game session (internal Hellon & CreaTures partners): August 12<sup>th</sup> 2020

Implementation: August - December 2020 (3 sessions: August 12<sup>th</sup>, August 27<sup>th</sup>, September 16<sup>th</sup>)

**Target group of attendees**

Pre-selected experts on sustainability, mobility and futures invited directly by Hellon

**Estimate number of participants**

6-16 participants per game session

**VI. Hackcamp**

**ExP authors (consortium partners & external expert collaborators)**

CreaTures consortium:

ZEMOS98 cooperative (<http://zemos98.org/en/>) – 22 years old non-profit organization with a mission to produce social change through a methodology that supports the ideas of free culture, expanded education and P2P mediation in which digital media plays a crucial role.

External collaborators:

Invited artists, cultural organisers, activists, educators, researchers (specific names will be confirmed closer to the event that only takes place in May 2022).

**Format**

Participatory happenings (live events)

**Thematic focus**

The Hackcamp creates a trans-disciplinary learning environment which may result in the actual production of realistic and replicable solutions for certain problems identified by communities, with a specific focus on feminist urbanism and social and ecological issues. The Hackcamp is aimed to hack power relationships and establish a diverse, inclusive and democratic way of participation. A group of citizens use participatory methodologies in order to co-create different open source prototypes.

**More details**

<http://zemos98.org/en/projects/hackcamp/>

**Location**

Seville, Spain

**Timeline**

Production: January - May 2022

Implementation: May 2022 (TBC – depending on the development of the Covid-19 pandemic)

**Target group of attendees**

Participants invited by ZEMOS98 – primary focus on researchers, activists, artists, media makers/journalists. However, participants from other groups might be invited as well.

**Estimate number of participants**

15-20 participants per happening

## VII. Refuge for Resurgence

### **ExP authors (consortium partners & external expert collaborators)**

#### CreaTures consortium:

Superflux studio (<https://superflux.in>) – a research, foresight, speculative design and innovation company based in London, UK; specifically: Anab Jain and John Ardern (concept) + Ed Lewis, Nicola Ferrao, Leanne Fischler, Nico Fioritti and Matt Edgson – artists, designers, creative producers; part of Superflux development team responsible for the ExP production

#### External collaborators:

Gareth Lewis (Classic Watercraft) – woodworking studio in Oxfordshire; support of sourcing and crafting of the ExP's artifacts

Miranda King, Wild & King – floral design studio in Knightsbridge, London; support of crafting and arrangement of the ExP's artifacts

Sebastian Tiew (Cream Projects) – visual design studio, design of visual effects for ExP's installation

### **Format**

Public exhibition - large immersive installation.

### **ExP's details and thematic focus**

Having survived Earth's abrupt shift to an era of precarious climate, a multi-species community gather in the blasted ruins of modernity to find new ways of living together.

Working together to carve a new world out of the smouldering remains of the old. Working together to forge enduring forms of sharing and survival. Working together to revive this land; this land once a place of order and control.

A place where all species, all forms of life, were once forced to submit to an alien law. A law that dictated what could live and where. A law labelling anything that did not obey its monolithic order "weed", "pest" or "vermin".

A law that for a time felt relentless, unending, unstoppable; until the planet rebelled and threw its house of cards to the wind. Now, in the ruins of that old world, those weeds, pests and vermin have risen, and reclaimed their rightful place at the table of planetary ecology.

Their rightful place in a new home. A home built on humility, resourcefulness and imagination. A home strong enough to weather the storm, to rise from the flood, to endure the heat.

Humans, animals, birds, plants, moss and fungi gathering around a shared hope. A hope in the life that remains. A hope in the resurgence of life stretched thin around this rock, painting its surface blue and green as it spins wildly in the vast blackness.

### **More details**

<https://superflux.in/index.php/work/mitigation-of-shock/>

### **Location**



- 1) Venice Architecture Biennale 2020 (postponed to 2021); Venice, Italy
- 2) Vienna Biennale 2021; Vienna, Austria

### **Timeline**

Production (Venice Biennale): March-August 2020

Implementation Venice: 22 May - 21 November 2021

Production (Vienna Biennale): January – March 2021

Implementation Vienna: May 29th - October 3rd 2021

### **Target group of attendees**

General public (visitors of Biennales)

### **Estimate number of participants**

Approx. 150 000 people for each event

## **VIII. The Treaty of Finsbury Park 2025**

### **ExP authors (consortium partners & external expert collaborators)**

#### CreaTures consortium:

Furtherfield organisation (<https://www.furtherfield.org/>) – one of the longest running nonprofit international hubs for critical explorations in art, technology and social change.

#### External collaborators:

Cade Diem - founder of The New Design Congress, an international digital infrastructure research group. Expert in tactical tech, cryptocurrency technologies, and their use in supporting sustainable futures

Sajan Rai – graphic designer and illustrator

+ further invited artists and researchers (TBC)

### **Format**

Series of LARPs (Live Action Role Playing events) in the Finsbury Park.

### **Thematic focus**

Care as an act of resistance. An antidote to our anticipation of uncertain and fractured futures, it sets out to re-programme technologies of production and control so they can enhance interaction and exchange between humans, creatures and machines.

2020 is the year NASA prepares to colonise Mars. Meanwhile a planetary health check reveals one million species at risk of extinction as a result of human action. The Treaty of Finsbury Park 2025 is part of the 2020 Love Machines season at Furtherfield which asks how we can reprogramme our systems - living, mechanical, digital - for mutual care and respect here on earth.

At Summer Solstice, we will play a game with various characters to make-believe a new reality in which Finsbury Park is the site of multispecies revolution. Inspired by Nordic LARP (Live Action Role Play), and

the transnational transformative power of treaty and ceremony, together players will renegotiate terms for a new kind of treaty for human and non-human society in Finsbury Park.

At midsummer, Furtherfield Gallery will invite a visiting delegation of artists to work in the heart of Finsbury Park with 150 years of measurements, laws and documents about the park. Local park envoys will present testimony from the many lives of the urban green space.

A deliberation process about the conflicting and mutual interests of the many lives of this urban green space culminates with a theatrical ceremony and treaty signing at the 2020 Summer Solstice.

The artist delegates commit to creating a set of electronic and biological artworks intended to support long term communication and empathy with the many life forms of the park. Together they will enable future societies to operate the park as a love machine in the higher interest of all living entities and systems.

LARP design documents to be published online under a free public licence for use, adaptation and resharing by other park based cultural organisations.

### **More details**

<https://www.furtherfield.org/the-treaty-of-finsbury-park-2025-drop-in-session/>

### **Location**

Furtherfield Gallery, Finsbury Park, London + accessible online via Furtherfield's website and social media channels.

### **Timeline**

Implementation in Summer 2021 (TBC)

### **Target group of attendees**

General public, categorised into four audiences/participant groups:

1. Park assembly: people who participate in preparation events (workshops or online), feed into the park dossier, inform the range of multi-species voices involved and join part of the LARP event as Park envoys and negotiators. 30+ people
2. Visiting artists: Full LARP participants create multimedia formats, structures, audio and visuals for the negotiations and post treaty exhibition in the gallery and online. 6+
3. Park audiences/participants: people who attend the gallery, and the treaty-signing ceremony. 1500+
4. Online audiences (and participants) via Furtherfield website and social media channels: people who may download the concept document, submit data for the park dossier, view, listen to or interact with the media created by artists. 10,000+

### **Estimate number of participants**

10 000+ participants

## **IX. Baltic Seaweed Open Studio & Laboratory (working title)**

## **ExP authors (consortium partners & external expert collaborators)**

### CreaTures consortium:

Julia Lohmann (Aalto) - Professor of Practice in Contemporary Design investigating and critiques the ethical and material value systems underpinning our relationship with flora and fauna

### External collaborators:

Adriene Jenik – Professor at the School of Art; Senior Sustainability Scientist at Global Institute of Sustainability and Innovation; Affiliate Faculty at School for the Future of Innovation in Society, Arizona State University.

Jaanika Blomster – University Lecturer in Aquatic Sciences at Helsinki University, Ecosystems and Environment Research Programme

Samein Shamsheer and Pete Fung – co-founders of the Ocean Confessional, a social innovation project engaging the general public in climate care and co-creative reflections on ocean health

Gary Markle – PhD researcher, artist, and educator working with sustainable fashion themes

### **Format**

A mobile seaweed laboratory - artist and her team travelling in and around the Baltic region and organising in-situ workshops on the way. The planned format is subject to Covid-19 restrictions.

### **Thematic focus**

The ExP develops creative ways and tools to activate people to promote sea health. The aim is to create a network of individuals who might identify themselves as “sea stewards”, individuals who want to care for their local sea environment and might be empowered to do so by creative practice engagements. The ExP draws on artist’s previous work – details available at

<https://www.helsinkidesignweek.com/series/weekly-studio-julia-lohmann-from-the-department-of-seaweed/>

### **Location**

Finland and other Baltic countries (TBC)

### **Timeline**

Summer 2021

### **Target group of attendees**

General public as well as invited experts on maritime biology.

### **Estimate number of participants**

Max. 20 for each workshop

## **X. Open Forest**

## **ExP authors (consortium partners & external expert collaborators)**

### CreaTures consortium:

Andrea Botero (Aalto) - designer and researcher engaging with the possibilities and contradictions of participating in the creation of environments, tools and media that afford more relational, sustainable and caring interactions among people and their environment

Markéta Dolejšová (Aalto) - postdoctoral design researcher working across the inter-related domains of eco-social sustainability and food system transitions

Jaz Choi (RMIT Australia) - Associate Professor in School of Design and director of Care-full Design Lab at RMIT Australia

Cristina Ampatzidou (RMIT Europe) - Research Fellow at RMIT Europe with a background in architecture and urbanism, focusing on the affordances of new media for sustainable urban futures

Ana Tiquia (RMIT Australia) - curator, producer, artist, and future strategist working across the arts, design, and technology; founder and director of All Tomorrow's Futures – an arts and foresight initiative that works with publics to create future ideas, visions and strategy.

### External collaborators:

Kate Geck - artist and PhD researcher working with code and textiles to create interactive surfaces and immersive spaces; Industry Fellow and Lecturer at RMIT Australia

Siobhan McCarthy - PhD researcher and designer investigating possibilities around design provocations for co-creative eco-social future making.

Ulla Taipale – director of the Climate Whirl, an artistic program rooted in the cross-disciplinary research being done at the Helsinki University Hyttiälä forestry field station and Institute for Atmospheric and Earth System Research in Finland.

Timo Vesala – Professor of Meteorology at the Institute for Atmospheric and Earth System Research, Department of Forest Sciences, University of Helsinki. Main research fields include micrometeorology, biosphere-atmosphere interactions, biogeochemical cycles – especially carbon and water cycles – in forests, wetlands, lakes and rivers, greenhouse and other trace gases and in general mass and heat transport and phase transitions in various atmospheric and ecophysiological systems.

Anna Lintunen – Adjunct Professor in Tree Ecophysiology at the Department of Forest Sciences & Research Coordinator at the Institute for Atmospheric and Earth System Research, University of Helsinki. Research focus on tree structure and function in changing environment, transport processes within trees, tree winter ecophysiology and freezing behaviour of wood.

Pasi Kolari – University Researcher in micrometeorology and forest sciences at the Institute for Atmospheric and Earth System Research, Department of Forest Sciences, University of Helsinki

Nidia Catherine Gonzalez Pineros – Research fellow in innovation on governance and climate change at the School of Political and Social Sciences, University of Bologna, Italy & Universidad Santo Tomas, Colombia. Research focus on global environmental politics, local governance and REDD+.

Gonzalo de Quesada – PhD researcher at the Institute for Atmospheric and Earth System Research. Department of Forest Sciences, University of Helsinki

Hyytiälä forestry field station – centre of international multidisciplinary research located in Finland. Current topics cover many aspects of Earth system ranging from the depths of soil to atmospheric processes.

Research Pavillion Helsinki – artistic research institution based in Finland, arranged in connection with the Venice Biennale

Melbourne Knowledge Week, City of Melbourne – an annual festival that brings participants together to explore and discuss, share ideas, challenge assumptions, and spark new ways of thinking

### **Format**

Traveling pop-up installation. The planned format is subject to Covid-19 restrictions.

### **Thematic focus**

At the core of the ExP there will be a speculative catalogue of open environmental data that presents some of the data collected in a (research) forest as if it has been produced from the point of view of the forest and its trees (forest-data). The approach of the ExP is ontological, based on the premise that, in describing (and proposing new) relations between entities such as environmental data; the trees in a forest; citizens and scientists, particular ways of being are created and eco-social sustainability can be enacted differently. Open Forest Data will be deployed as a traveling pop-up installation in selected libraries in Helsinki and beyond and – at least once – in the forest itself.

### **Location**

Finland + other locations TBC

### **Timeline**

Autumn 2021 (Finland)

### **Target group of attendees**

General public

### **Estimate number of participants**

Max. 50 per event

### **References**

Markéta Dolejšová, Cristina Ampatzidou, Lara Houston, Ann Light, Andrea Botero, Jaz Choi, Danielle Wilde, Ferran Altarriba Altarriba Bertran, Hilary Davis, Felipe Gonzales Gonzales Gil, and Ruth Catlow. 2021. Designing for Transformative Futures: Creative Practice, Social Change and Climate Emergency.

Creativity and Cognition. Association for Computing Machinery, New York, NY, USA, Article 3, 1–9.  
DOI:<https://doi.org/10.1145/3450741.3465242>

Dongmei Lai, Ying Guo, Qiuwan Zhang, Yifei Chen, and Charlie Xiang. 2016. Differentiation of human menstrual blood-derived endometrial mesenchymal stem cells into oocyte-like cells. *Acta biochimica et biophysica Sinica* 48, no. 11 (2016): 998-1005.

Sacha Kagan. 2008. Introduction: Sustainability: A New Frontier for the Arts and Cultures, in eds Kagan, Sacha and Volker Kirchberg, eds. *Sustainability: A New Frontier for the Arts and Cultures*. Higher Education for Sustainability 3. Frankfurt am Main: VAS, 2008. 14-23.

Ann Light, Ruth Wolstenholme, and Ben Twist. 2019. Creative practice and transformations to sustainability – insights from research. SSRP Working Paper No1, Sussex Sustainability Research Programme, Sussex University.

Michele-Lee Moore and Manjana Milkoreit. 2020. Imagination and Transformations to Sustainable and Just Futures. *Elementa: Science of the Anthropocene* 8, 1 (December 2020).  
<https://doi.org/10.1525/elementa.2020.081>.

Jorgen Randers, Johan Rockström, Per Espen Stoknes, Ulrich Golüke, David Collste, and Sarah Cornell. 2018. Transformation is feasible: How to achieve the sustainable development goals within planetary boundaries. A report to the Club of Rome, for its 50 years anniversary, 17

## **Annex**

### **Annex I – ExPs Timeline**

The timeline is a living document shared with all consortium members that is being updated regularly, according to the latest ExPs developments.

NB: Zoom in for better visibility. The ExPs Timeline can also be provided separately, as .xls and .pdf files. The Commission's project management system allows to submit only one document, hence these files cannot be included in the submission of this deliverable.





**SUBJECT: Report on the bio-data process in the laboratory work for  
'reProductive narratives' art project by authors Maja Smrekar and Gjino Šutid**

To whom It may concern,

it is important to start that the research was artistic and not by any means scientific or biomedical in nature.

It consisted of epigenetically reprogramming the author's own cells (menstrual discharge residue) with her own urine. To sum up – the material used differs not from biomaterial that we can encounter on an average female toilet and spontaneous reactions that can occur there.

The purpose of the experiment was to observe under the microscope if Majas' own (postmenopausal) urine can affect the morphology of cells from her last period discharge.

Talking in bio-art terms, to be more specific: the purpose of the experiment was to isolate mesenchymal stem cells from menstrual discharge and to expose them to gonadotropin (so-called pregnancy hormone), isolated from Maja's urine until the end of the experiment in February 2021, with a hope to microscopically observe the epigenetic morphological change of MSC cells into oocyte-like cells, in order to tell philosophical art narrative (develop and retell the narrative of a speculative less invasive alternative to IVF, to bring such technology closer to citizens, to raise their consciousness and to boost scientific literacy).

**The bio-data process in laboratory work for the 'reProductive narratives' art project was conducted as follows:**

Before experiments were conducted, Maja Smrekar went on her annual examination for a complete health check. Testing included: physical exam, gynecology exam, blood work, and testing for transmittable diseases. She was healthy and free of any transmittable diseases and so were her cells before the sample collection was done. The mentioned health data has not been used in the scope of the research, it was only relevant to confirm that she is healthy before entering her own research project.

While working on the protocol in the Universal Research Institute laboratory facility, duly registered for non-pathogenic biotechnological and bio-art research, at Vodovodna 15 in Zagreb in January and February 2021, bio-safety was our utmost concern to ensure the quality of work.

The facility is dully registered for non-pathogenic biotechnological and bio-art research. The whole processing of biological material was done within the strict rules of bio-safety, not just to protect the workers from the samples, but also to protect samples from being contaminated by foreign particulates.

Maja's biological material (menstrual discharge) was collected by her with an autoclavable menstrual cup, bought in the local eco-shop. Biological material was kept in a dedicated freezer at -20°C, in a

1

separate double isolation container in which was also later thawed, so no cross-contamination could appear. Maja alone handled her menstrual discharge, so there was no direct contact with the samples by other personnel.

All work was conducted under the oversight of the Director of Research and Development at UR Institute and experienced biotechnologist Gjino Šutić. During the protocol, all of the samples containing biological material were separated from the rest of the samples and equipment. During sample handling, standard protection was used which includes: disposable face protection masks, nitrile gloves, and lab coats. This ensured no unprotected human contact with samples, even though it was Maja's own menstrual discharge. After handling samples, all protection wear was sterilized on-site in an autoclave before being disposed of which is a standard lab practice.

All experiments (from thawing menstrual discharge to dealing with live samples) were conducted inside BSL-2 biosafety cabinet in which incoming and outgoing air is filtered, and all surfaces are sterilized with UV-C light prior to and after work, in addition to being scrubbed (after UV-C sterilization) with a biocidal cleaning agent (which destroys all living material including cells, bacteria, fungi, and viruses). At the end of the research, produced cells were destroyed in a laboratory incinerator on site.

During experiments, no other personnel used the lab. After usage all autoclavable tools were sterilised in autoclave. Waste was also destroyed in autoclave by long sterilization, to become biologically inert and non-hazard, before being disposed of through a standard lab practice. All equipment was cleaned with biocidal agents. And at the end the research bio lab was sterilized overnight with an ozone generator, which is our standard practice, to ensure that any possible residual particulates of biomaterial are completely destroyed.

Gjino Šutić  
*Director of Research and Development at UR Institute*



07. March 2022.

2

## Annex III – Opinion on the reProductive Narratives ExP from KME RS



REPUBLIC OF SLOVENIA  
MINISTRY OF HEALTH

National Medical Ethics Committee of the  
Republic of Slovenia

Štefanova ulica 5, 1000 Ljubljana

T: 01 478 69 06, 01 478 69 20

F: 01 251 77 55

E: gp.mz@gov.si, kme.mz@gov.si

www.mz.gov.si

Jana Putrle Srdić  
Senior producer  
Institute for Culture, Arts and Education  
Likožarjeva 1  
SI-1000 Ljubljana

jana.putrle@kapelica.org

Signatory: Božidar Stefan Vojč  
Issuer: Republic of Slovenia  
Serial Number: cc 52 7c 58 00 00 00 56 7d 87 44  
Date of signature: 12:43, 25.10.2021  
Reference number: 0120-355/2021/13

Number: 0120-355/2021/13

Date: 20 October 2021

**Subject:** Ethics review of an art research project

Relation: Your letter of 27 July 2021

Dear Madam,

On 27 July 2021, the Medical Ethics Committee of the Republic of Slovenia (hereinafter referred to as the KME RS) received your letter requesting an ethics review of the art research project entitled "reProductive narratives". The applicant and project initiator is the Kersnikova Institute for Culture, Arts and Education (Ljubljana). The project is being carried out by Croatian biotechnologist Gjino Šutić and Slovenian artist Maja Smrekar (MS). The research was conducted in the laboratory of the Universal Research Institute in Zagreb (Institute President Gjino Šutić). The project is part of the unfinished CreaTures project and included in the EU Horizon 2021 project.

KME RS discussed the project at its meeting on 17 September 2021 and again at its meeting on 28 September 2021, where Ms. Maja Smrekar and Ms. Jana Putrle Srdić and Mr. Kristijan Tkalec participated to provide explanations about the purpose and aim of the project. Mr. Gjino Šuljić did not attend the meeting.

The Ethics Committee of the University of Aalto in Finland, the European Ethics Committee, and the REA (European Research Executive Agency) Audit have requested the authors to provide the opinion of the National Ethics Committee about the project.

The 'reProductive narratives' project has two parts:

1. It is an art research project based on the scientific publication "Differentiation of human menstrual blood derived endometrial mesenchymal stem cells into oocyte-like cells" (Acta Biochim Biophys Sin (Shanghai) 2016 Nov; 48(11):998-1005) in January and February 2021 in a laboratory in the Republic of Croatia. It involves working with stem cells isolated from the premenopausal menstrual blood of the artist MS and their development into female oocyte-like cells. According to MS, the purpose of the project is to explore social alternatives and possibilities of the reproductive concept for family development in an artistic sense. The aim of the project is (i) to responsibly inform the public about what modern technology can do in terms of exploring the capabilities of the human body,

(ii) to find what opportunities to overcome painful OBMP procedures may be opening up in the future, (iii) to find possible future alternatives for reproductive capabilities in women. The project does not aim to be misleading for the public/women at the present time by making any unrealistic promises.

2. A workshop as part of the Women's Festival in Ljubljana, which will take place in October 2021. The workshop is expected to be attended by eight to ten participants who will each contribute a fresh urine sample, from which gonadotropins will be isolated in the workshop laboratory, and gonadotropin gel will be developed from each individual sample and applied to a patch to be given to each participant. They will be invited to stick the patch on a part of their body. In doing so, they will come into contact with their body in a unique way through art. They will be able to take the patch with them and discard it after 12 hours as during that time it disintegrates. The aim of this part of the project is to discuss the hypothetical social changes which such research suggests, and thus encourage individuals to get a feel for their bodies and give their bodies more thought. This is supposed to contribute to the knowledge and self-confidence of the attendees.

KME RS informed the authors that the topic of the first part of the project is a very sensitive one, and should it be presented to the public inappropriately it could encourage unrealistic prospects for the present and push the public into an even deeper state of distress, especially the portion of the public that due to female infertility is unable to conceive children of their own, which would without a doubt be unethical. MS explained in person that in artistic ethics, the rule is to address the public in a positive way, by communicating information about various alternatives and by communicating that it is art, not science. The project has no health-related aim. This project is about an artistic approach.

KME RS communicates that, in accordance with the instructions available on the [kme.mz@gov.si](mailto:kme.mz@gov.si) website, it is not issuing an opinion or consent for the first part of the project, as it has already been carried out and completed in another country. For the second part of the project, which, according to the author, does not pursue health-related goals but artistic presentation, KME RS is not an appropriate committee, as it is not competent to decide on art.

In further correspondence relating to the research, please kindly refer to the number of this letter.

Yours sincerely,

Dr. Božidar Voljč, MD,  
President of KME RS

Deliver to:

- the addressee – by e-mail