



realizing potentials

conversations and experiments at the frontier of art-based sustainability

Institut d'Estudis Catalans. C. Carme 47 Barcelona

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UNIVERSITY OF HOHENHEIM



1. Preface

In recent years more and more arts-science hybrid experiences are emerging, contributing to the creation of 'blurred genres' in the academia, which seek to co-produce accessible and meaningful research with and for a diversity of audiences beyond academic peers (Cahnmann-Taylor 2008), enhancing transdisciplinary dialogues at the academic-society-policy interface.

Furthermore, the hybridization between arts and sustainability is also inspiring beyond these two paths and particularly promising to a) inspire societal transformation towards social-ecological sustainability, b) foster "out of the box" thinking and c) inform methodological challenges posed by transformative and learning implications, through the development of innovative, transdisciplinary approaches. The potentials and possible contributions of art to Sustainability Science have been repeatedly highlighted especially in areas related to action research, transdisciplinarity and learning (Bendor et al. 2015, Fernández-Giménez 2015, Scheffer et al. 2015, Heras and Tàbara 2014, Kagan and Kirchberg 2008). Moreover, results from science are frequent inspiration for artistic experiences. However, cross-cutting knowledge about the potential outcomes, challenges and limitations of such experiences is largely lacking. As researchers and artists involved in societal transformations towards social-ecological sustainability we believe that a key way forward lies in the nourishment of a community of practice and learning, able to cross-pollinate, push disciplinary boundaries and construct more nuanced and critical understandings about how art and Sustainability Science approaches intersect and enrich each other.

In this context, we conducted a two-days encounter between sustainability scientists and artists working in the fields of performing arts (dance, theatre, performance), visual arts (film, painting, photography), narrative (poetry, storytelling, creative writing), and art-based research methods to explore the frontiers of social-ecological transformations and art-based approaches. The workshop was held on the 3rd and 4th of November 2016, at the *Institut d'Estudis Catalans* in Barcelona.

The main goals of the workshop were:

1. To open up an experiential space where artists and scientists could share, connect and expand different experiences, projects and discussions in the field of arts-based sustainability research.

A space to experience others' approaches, to play, to be surprised... A space to explore together, pushing our boundaries out of the box.

2. To catalyse a network of Arts-based Sustainability Science as a community of learning, practice and mutual support.

A network expanding in time the sharing of the workshop and connecting different actors working in the field, so as to allow us to critically approach and expand different practices, collaborate together, and face challenges as they emerge.

During the two days, forty-five participants from Spain (20, including the organisers), the UK (6), Germany (5), Portugal (5), USA (3), Chile (1), Sweden (1), Belgium (1), the Netherlands (1), Finland (1) and Norway/Japan (1) engaged in interactive laboratories, talks, artistic works exhibitions and spaces for reflection and discussion (see the final list of participants). Among the participants (excluding the organisers), fifteen identified themselves as Sustainability Science researchers, eight as researchers from the humanities and fifteen as artists. Together we sought to push the boundaries of art-based Sustainability Science using discussions and experiential laboratories to investigate these two broad questions:

- *What are your boundaries within Sustainability Science? (limits to certain types of methodologies, etc)*
- *What are examples of art-based approaches and what can they bring to sustainability science?*

2. Organisers



María Heras. I'm a sustainability researcher at the Institute of Environmental Science and Technology (ICTA-UAB) and a participatory theatre practitioner. In my PhD I explored the potential of participatory theatre for Sustainability Science. My research interests focus on social learning, participatory action-research methods and the potentials of Art/Science hybrid experiences for transdisciplinary dialogues and sustainability transformations.



Diego Galafassi. I'm an artist and sustainability scientist based in Stockholm working with film, performance and installation on the topic of climate change at the Stockholm Resilience Centre. In my Phd I explored practices that support knowledge integration for sustainability transformations.



Elisa Oteros-Rozas. I'm a postdoctoral researcher at Universidad Pablo de Olavide (Seville, Spain). Trained as a Biologist, I'm interested in interdisciplinary and participatory approaches to political (agro)ecology. I'm also an activist in the pastoralist and food sovereignty movement. Contact improvisation dance is my passion and way to embody human-environment (dis)equilibria, commitment and (mutual) care.



Federica Ravera. I'm a postdoctoral researcher at the Chair on Agroecology of the University of Vic in collaboration with CREAM (Spain). My research-action approach is mainly aimed at engaging multiple voices in the research process and a genuine desire to involve and take on board stakeholders in the decision-making, integrating multiple experiences, knowledge systems, values and motivations. My research interests focus on processes of adaptation to change and transformative pathways of socio-ecological systems towards sustainability in mountain and dry regions of the world.



Isabel Ruiz-Mallén. I'm an environmental scientist and a "Ramón y Cajal" research fellow at the Open University of Catalonia (UOC). I'm coordinating a H2020 research project called [PERFORM](#) on the use and assessment of science education based on performing arts to motivate your people for science. I'm also interested in co-creation approaches, knowledge acquisition and sharing for promoting sustainability and resilience.



Luis Berraquero Díaz. I'm an anthropologist and political ecologist, PhD candidate at GISAP (Pablo de Olavide University). I am interested in nature-culture relationships and in collective action, social intervention and political studies. I also focus on urban studies from the Environmental Anthropology, Political Ecology and Critical Geography perspective. I'm a board member of the Urban Resilience Research Network and the Power Relations and Ecosystem Services Network.



Josep María Espelta. I'm a forest ecologist interested in the dynamics and persistence of forests in response to global change threats and how can local actors get involved to increase their resilience. I have lead or actively participated in different European and Spanish research projects and coordinated an international network (IBERO_REDD+) aimed at assessing the conservation status of forests in Latin America by means of ecological and social indicators.

3. The Workshop

We designed the workshop, looking for different “moments” of action and reflection. They corresponded to the classical Kolb’s flow of learning (Kolb 1984, Fig. 1) which alternates feeling and experiencing, watching, thinking and doing phases. Accordingly, a series of laboratories exploring different arts (theatre, dance, performance, storytelling, poetry, visual arts) were suggested as spaces for feeling and experiencing the integration of arts in Sustainability Science. Spaces for sharing previous works were also created around visual arts, plastic arts, music and performances. A series of short talks and several spaces for discussion allowed reflecting along the process. The final space of discussion was organized to discuss further steps of work for the community.

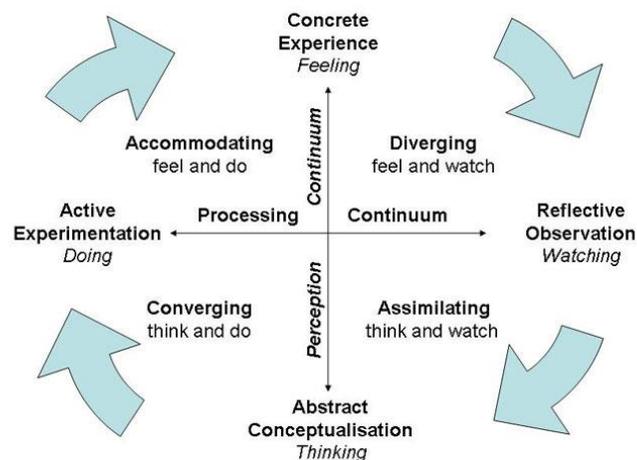


Figure 1. Kolb's (1984) flow of learning that inspired the organisation of the different moments during the workshop.

3.1 Sharing motivations

Prior to the workshop, participants were asked about their motivations to engage in **arts-based approaches to sustainability**. These motivations were further shared at the beginning of the workshop (see activity description in section 4.1). Below, we summarise the main motivations shared, which already anticipate some of the potentials and challenges perceived within the interface arts-sustainability:

- Engaging with sustainability questions beyond rational ways of thinking, dealing with subjective, tacit and non-cognitive dimensions of sustainability
- Generating attractive platforms of dialogue and collaboration, facilitating alternative forms of dialogue and creating more inclusive processes of participation between various social actors
- Raising awareness, through the communication and exploration of complex topics by turning them more experiential and concrete, and shifting relations to others and nature, affecting sense of self and place and fostering new social-ecological relations
- Visioning alternative futures in imaginative ways
- Incorporating creativity and lateral thinking along scientific processes

4. Experiencing: Labs

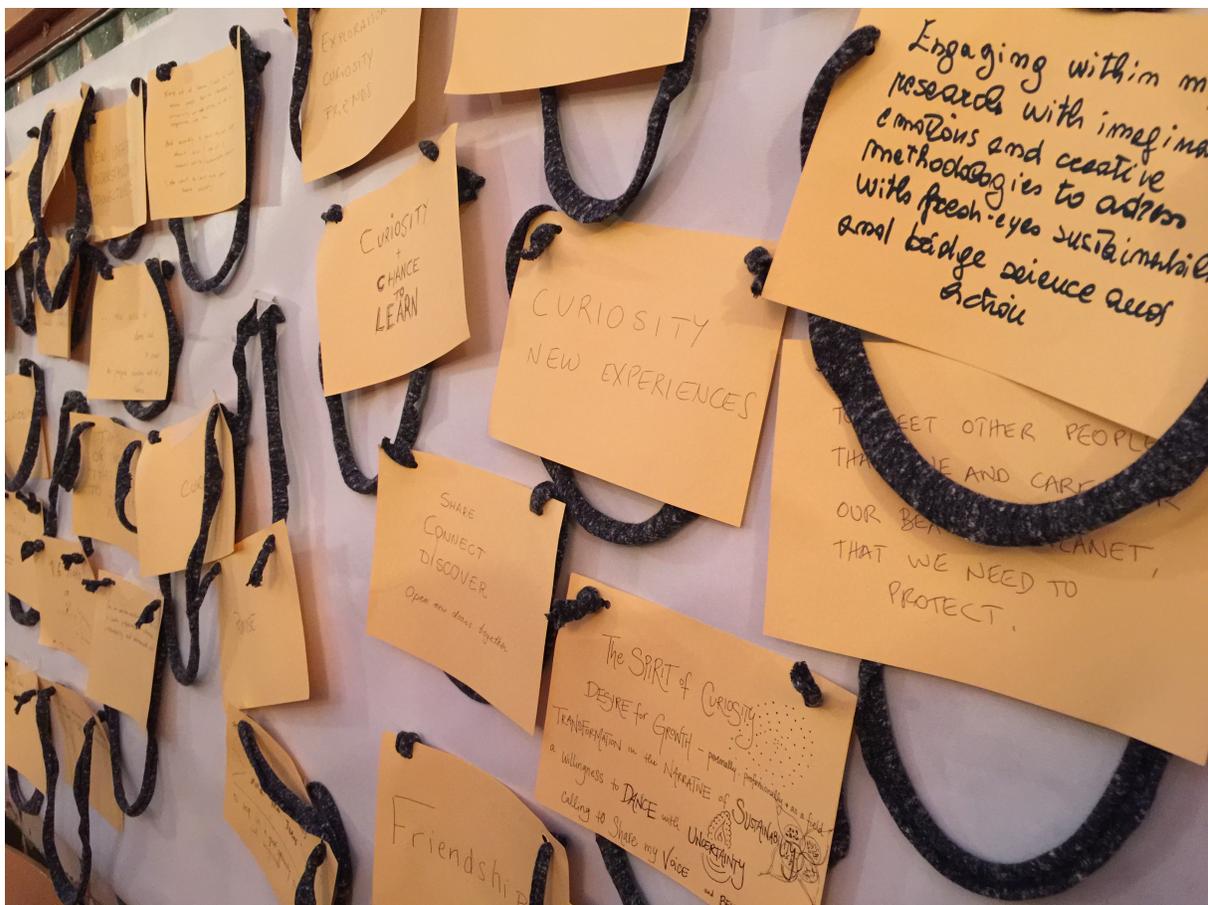
4.1 Warm up: Feeling and reflecting

Introduction to the workshop

Facilitated by the Organising Team

Goals/questions: This opening session aimed to: 1) introduce participants to each other in a friendly and informal way, 2) present the workshop and the organisation team to participants, and 3) let them enter the space and connect with the moment by reflecting individually and collectively why we are here now.

Description: The chairs were distributed in a circle, leaving a big empty space in the middle and a projector was playing different images related to sustainability. When participants went into the room they were asked to find a place and write an answer to the question What brings you here? in a piece of paper that played as their 'life-jacket'. Participants were then asked to wear the 'life-jacket' and walk through the space, 'our sea', following the emotions, movements, rhythms evoked by the images. After a few minutes, they were asked to share who they are and what expectations do they have for the two days in small groups. Each group briefly summarised their motivations and expectations. Then, the organising team introduced the spirit and motivation of the workshop and informed about the observation that is taking place, inviting participants to provide feedback. All the 'life-jackets' –participant's motivations- were stuck in a big paper wall in the room.



4.2 Embodying Sustainability through theatre and dance

Experiencing sustainability through theatre: Exploring the arts-science interface

Facilitated by Sadhbh Juárez-Bourke and Brian Shaw, Freiburg Scientific Theatre e.V., Germany, and Maria Heras, ICTA - UAB, Barcelona

Goals/questions: this lab applied participatory theatre, mindfulness and embodiment to explore what it means for us to be at the art-research interface. The unfoldment of playful games and exercises aimed at guiding participants through a process of self-exploration and discovery, taking their interdisciplinary practice as point of departure and exploring the language of the body to help us transcend disciplinary limitations of written word to re-discover and define our identity as practitioners and artists shaping sustainability.

Description: the lab combined three different moments or parts: a first physical warm up, to allow participants to get into their bodies and bring space awareness and presence; two embodied exercises exploring notions of sustainability from a conceptual dimension (what does sustainability mean to me?) and from the perspective of identity and personal experience (how does it feel to be at the art-research interface?); and a collective final exercise of exploration of common visions through the creation of the image of the ArtScience interface and its dynamisation (bringing voice and movement, interacting with the 'audience'). These exercises were combined with debriefing and sharing moments, in which participants were invited to reflect and share (in pairs or in plenary) about their reactions and insights experienced through the exercises.

Tapping your body wisdom: Engaging playful creative practice as a form of research

Facilitated by Sophia Van Ruth, Animate Arts, Netherlands

Goals/questions: this lab explored complexity through body movement, play, voice and story, with the broad aim of allowing participants tap and express their non-intellectual knowledge about the topic and explore a body-based form of research.

Description: The session was a succession of exercises based on the practices of InterPlay, an active and embodied approach developed to be accessible to anyone, with or without a background in the arts. Sophia introduced the session with a little explanation about how we can embody complexity and how we can use this approach in our research areas. She also warned us that there weren't wrong, bad or good movements with the body: our bodies should move as freely as they could during the session. Through the exercises participants explored their relationship to nature by integrating memories and ideas into their movements, walking and moving inspired by music, engaging with other participants through mirroring and listening exercises, applying elements of contact-dance, playing with their voices, and storytelling and representation of stories through movement.



wanted to jump into a conversation on the topic, moved inside the circle too. People could enter or leave circle as long as they had (or not) something to say around the topic of discussion.

El Món de les Margarides (Daisy World)

Facilitated by Joan Vendrell, Maria Rivera, Marco Rainieri, CACiS El Forn de la Calç, Barcelona

Goals/questions: The workshop aimed to be an explosion of ideas and feelings around an overview of the CACiS project, based on the Gaia hypothesis of James Lovelock on the earth as a system in equilibrium, as well as through art, science and nature in balance.

Description: The workshop started by observing pictures and watching a video about the different art structures inspired by nature that the artists from the CACiS have created so far and the materials they used. The chair first invited participants to build a 3D structure made of bamboo sticks following his instructions. The bamboo structure was called the "nest" and the part on the floor was filled up with wool, forming a warm and cosy place to reconnect with nature. Another chair entered the nest for a sensorial performance; participants were invited to join the woman in the nest to be embraced. The facilitator explained that sense is not to live with nature but within nature, with its hard and soft sides. Enjoying the embrace in the nest was part of the soft side of life in that specific moment.

4.4 Capturing emotions and thoughts through poetry

Knowing self and knowing another: Poetry as a tool for discovery, empowerment and sustainability

Facilitated by Octavius Jones, Colorado State University

Goals/questions: This lab was proposed with three main goals: 1) to provide a tool for both the facilitator and the participants to learn more about each other and where they come from; 2) to give the participants a chance to find/develop their own voice through the use of poetry and open the doors to better understanding who they are, where they come from, and how those are deeply connected to a place/space; and 3) to begin the dialogue that seeks not to create top down laws/policies/regulations, but create bottom-up approaches to behavioural change and practices that led to sustainable conservation practices with local communities.

Description: The lab proposed to use poetry to reflect on some of the participants' childhood experiences and connections to the environment, which were inserted into a "Where I'm from" poem template. The session started with Octavius Jones' reading his own "Where I'm from" poem. Then participants worked with a partner sharing their own poems to consider and share similarities, differences and various nuanced intersectional identities. Sharing them, place everyone in an equal level opposite to a classical academic presentation. Such activity also allowed reflecting on how language and formal ways of expression embed discrimination and poetry can be used as a tool to include them. There are different explanations and truths for the same single concept. Some of the voices that give explanations are excluded, while others are not. Poetry can be a tool to have more complete visions and to include perceptions and unrepresented parts of the ecosystem.

Exploring the Art-Science-Sustainability nexus with poetic analysis

Facilitated by María E. Fernández-Giménez, Colorado State University, USA

Goals/questions: In this lab we explore the intersection of art, science and sustainability using the medium of poetry. We will draw on research materials and products such as interview transcripts and scientific publications to create poems, identify emergent insights, and reflect on the process of using poetry to do and communicate science. We will explore such questions as: Do interview texts reformulated as poems reveal new meanings? Does creating poems out of scientific documents uncover hidden beauty, feeling or humour embedded in science? Do poems enable us to distil and express key scientific findings in a compelling and accessible way? How can poetry and science blended together help catalyze social transformations towards a more socially just and sustainable world?

Description: The workshop engaged participants in experiencing three poetry-based methods applied in science: 1) creation of poems from qualitative data, 2) ethnographic poetry, and 3) documentary poetry. Participants initially reflected on their own relation with poetry, as way to feel transformation, connect voices of people into science and introduce self-reflexivity of researchers through humour. In the first exercise, Maria read some of her poems as a first contact with her approach and gave us some texts to create a poem getting inspired from interviews or our own research. The second exercise engaged participants in the creation of ethnographic poetry, by adopting the exacts words of the transcripts to express the voices of the people interviewed and creating an poem with that input. Finally, we explored the creation of poems from scientific papers and how to use poetry in our daily work and interaction as scientists. We reflected about the potentials and constraints of poetic analysis and creation and shared our own reactions and emotions while engaging in this practice.

5. Inspiration: Artistic works

Three main groups of artistic works were presented, related to audio-visual, performing arts and plastic arts. After the presentation of their work, the presenters and all participants were invited to reflect together around the following questions:

1. *How the opportunity to integrate visual arts and Sustainability Science emerged in your experience?*
2. *Which challenges did you deal with along the process?*
3. *What are the potentialities (added value and future paths) of integrating visual arts within Sustainability Science?*

5.1 Audio-visual

Audiovisuals and Environmental Justice: ¡AJA!

Presented by Beatriz Rodríguez-Labajos and Andrea Cardoso, ICTA-UAB, Barcelona

Republika

Presented by Rodrigo Malvar, Teatro do Frio, Portugal

Film and Wonder: Engagement from the inside-out

Presented by Diego Galafassi, Fasad and Stockholm Resilience Center, Sweden

This session was a showroom about different experiences of audio-visual arts applied to the environmental arts or Sustainability Sciences. A round table around the use of audio-visuals in sustainability research and transformations was organised, in which participants highlighted the value of using films beyond communication: using films a way to create communion, which is only possible with bodies, not behind a desk or computer. Some questions came out to enrich the debate: Using video as a participatory way to become blurred research objects? Are researchers using video/films or other arts in a very instrumental way? Are activist using books or other writing communication also in an instrumental way?

5.2 Performing Arts

Interpreting the voice of earth

Performed by Seshen Arts, Japan and Norway

Self-Exploration for Sustainability

Performed by Neda Movahed, Arizona State University, USA

Both performances were interpretative examples about how to represent nature, but also how to establish a specific relationship with the environment, based on spiritual *cosmovision* that is typical from certain cultures relying on animism with nature elements. The first one reproduced sounds using vocal techniques and dance and explained her motivation wasn't to represent nature in a descriptive way, but fostering interpretation and connections with personal experience. The second performer developed her work when she was outside in meditation with nature. Her first piece was created during a travel through the national parks in the western

coast in United States. After performances, a short but intense debate was held amongst participants around the interconnections between performances and spiritual elements.



5.3 Plastic Arts

Participants were divided into four groups to explore the four different artistic works hearing first hands from the artist who had around ten minutes to share their work. The artistic pieces presented were the following:

The GUERILLA BEEHIVE Project

Presented by Anne Marie Maes, Urban Bee Lab, Belgium



Participatory Art: From Creation To Exhibition

Presented by Emma Li Johansson, Lund University, Sweden



Rare Plants (Working Sheet, Farrera)

Presented by Àngels Viladomiu, Universitat de Barcelona, Barcelona



The party is over

Presented by Paula Bruna, University of Barcelona, Barcelona



After the walk through and exploration of the different artistic works, a common discussion took place mainly about the term “sustainability”. Presenters shared their views about the use of this concept in arts: “sustainable arts, photo sessions or exhibitions use this concept, but are we talking about the same idea? Are we only “painting in green”?” And also reflected on their experiences as artists in collaborating with scientists, that sometimes were not easy because of lack of time to build collaborations and also because “scientists are skeptical about artists’ work”.

5.4 Collective creation of a mandala: the wonderful World of Seeds

Through the collective creation of a Mandala, the WAKESEED organization (<http://circlesofseeds.blogspot.pt/p/the-project.html>) in collaboration with Ana Castilho, proposed to the participants to experiment through art a different experience with seeds. Normally people look at seeds as something that is put on the soil to grow plants, but there is much more. Seeds are used since century's as medicine, as instruments, to give aromatic and exotic taste to food, as a way of paying things, in shamanic activities, in some cultures the best gift that you can give to new married couple is a hand of your best seeds. Women are seen in many cultures, as having a specially close relationship to seeds and in art seeds can be seen in many ways. There is a lot to explore, so many things to show. Doing a giant Mandala made with seeds helped participants to touch, smell, watch, feel the seeds and their powerful aesthetic and poetic power.



6. Talks

Art and Nature. From Ecologic Art to Bioart

Presented by Daniel López del Rincón, Universitat de Barcelona, Barcelona.

The work presented drew upon the growing interest of ecological concerns among contemporary artists, focusing on the period comprised from the late sixties to now.

Environmental Humanities. Strategies for ecological empathy

Presented by Jose Albelda Raga, UPV, Valencia.

A research project was presented that reflected on the synergies between visual arts, literature and ethics in relation to the development of ecological consciousness.

Former art, former nature: eco-aesthetics, ethics and politics of sustainability in the Capitalocene

Presented by Christian Alonso, AGI, Art Globalization, Interculturality, UB, Barcelona

By bringing together geo-eco-philosophies and neo-materialist thought, this presentation considered transdisciplinary aesthetic practices as providing different ways on how to imagine and perform life and the world otherwise through discursive, visual and sensorial strategies, experimenting beyond disciplinary confinements and generating new subjectivities, new posthuman ethics and novel posthuman politics.



Lagrange pie

Presented by Daniel Erice, Alioth Arte & Ciencia, Madrid

This is an innovative project for the popularization of science led by Nuevo Teatro Fronterizo and Alioth arte&ciencia, whose main goal is to investigate the way in which new scientific paradigms can modify our way of creating art.

Picking Europe's Tomatoes: attempting to do more than interviews

Presented by Lydia Medland, University of Bristol, UK

This session was a short introductory chat to explain an ongoing research in a horticultural region in Morocco, the dilemmas related as a researcher, and the methodology used that drew on both participatory action research and interpretivist social science to inform the research design.

7. Reflecting

7.1 Artful Sustainability: The artistic turn in Sustainability Science

Presented by Sacha Kagan, Leuphana University Lüneburg, ISCO (Institute of Sociology and cultural Organization), Germany

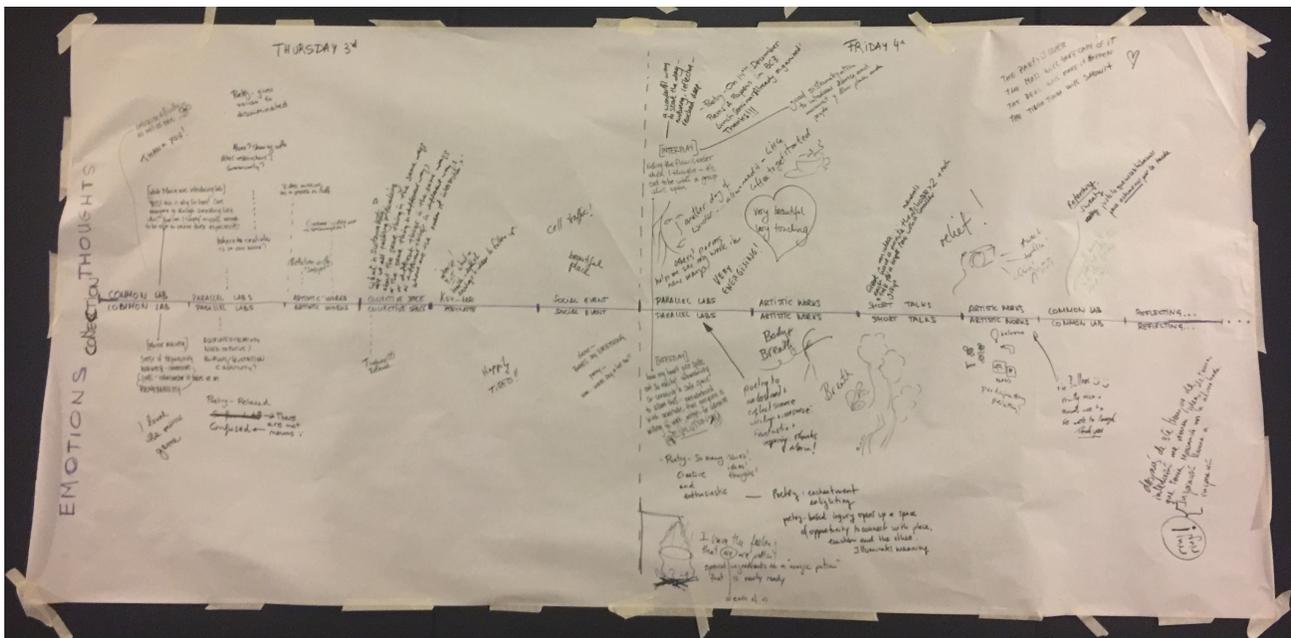
This key note conference addressed the cultural dimension of sustainability, which points to a renewed epistemological imagination for Sustainability Sciences fuelled by artistic and arts-based research approaches. Sustainability can then move beyond a modernist and technocratic discourse of optimization that perpetuates an illusion of cybernetic control, opening up instead to an imaginative world-making journey towards the art of living well together. An artful sustainability research expands reflexivities framed by a candid transdisciplinarity within which arts-based inquiries open up spaces of possibility. It queers perceptions, affects and thoughts, embracing the complexity and creativity of life, thus training a sensibility to qualitative complexity that is indispensable for an integrated approach to sustainability.



7.2 Sharing final impressions and thoughts

The joint dialogue through the two days of workshop identified five sets of challenges that also bring great opportunities for mutual learning and co-development. The most common challenge is that arts and science practices operate through different paradigms and utilize different vocabularies. With this comes the challenge of dealing with different notions of what counts as “evidence” for knowledge, what is “impact” and “change”. The need to find joint forms of assessment was suggested as well as the opportunity for mutual learning and generation of new ideas.

A second important challenge is coping with dynamics of power between the fields. Yet again this is important in relation to the criteria considered as relevant for assessing learning processes. Participants discussed the need to avoid the instrumental use of arts, but also reflected whether true integration is indeed possible. Another challenge related to the timing at which sciences and arts operate. Sometimes artistic production does not thrive well in strict timelines. Since integration processes require patience and trust, the need for face-to-face connection was highlighted as a cornerstone. Finally, the idea of working together in action-research projects was imagined as an immediate opportunity.



8. An emerging community of practice

Creating community was one of the vertebral motivations for organising this workshop. Such community can foster the practical and discursive connections between artistic practices and sustainability research to support the emergence of novel arts-based approaches. We are aware that building community requires time and sustained engagement, but we hope that these two days of laboratories, talks and diverse exchanges contributed in this direction.

The discussion at the end of the workshop about the community of practice highlighted possibilities and challenges faced by practitioners in the field of arts-based sustainability. The first issue related to how engaged practitioners in the interface arts/science face new needs, which call for spaces of sharing and mutual learning. Across our different landscapes of work (both geographical and disciplinary) we realise the need for and the potential of spaces of encounter were diverse and disperse initiatives can be shared and connected, discussed and enriched, expanded in space and rooted in local action.

In the survey sent after the workshop, participants brought up other aspects related to the emergence of this community of practice. Creating community was raised as a motivation to participate and a value of the meeting, as well as a broader need in the field of socio-ecological transformations:

'Meeting some inspiring artists broadened my perspective of potentials for the future collaborations as well as possibility for further interdisciplinary artistic explorations'

'Since I am artist and my approach is very human's senses oriented, I don't have many opportunities to meet others who care about the same issues and approach them more in intellectual ways. Just seeing other people approaching for the same interest in so many different ways gave me hope and trust that there are many beautiful things I should be able to create in collaborations in the future'

'We need more time for connection!!! People to people IN PERSON. The internet is awesome but we need face to face contact to remember we are HUMAN. What does it mean to dance around a room and pay attention to a person and then find out that others are paying attention to you, we want to feel important and connection so that we can be willing to take risks and be inspired to make bold action'

Creating a critical community of practice might also help us approach the different challenges ahead, while providing opportunities for mutual learning and institutional support. But **this requires vision, connectedness, time and energy**. 'Realising Potentials' is one among many initiatives and that more connection is needed within the constellation of diverse practices that is represented in the arts/science interface. However, more connection is also needed with spaces of local action to ensure the sustainability of such a community. In this sense, we would like to expand our network, while at the same time strengthening the links and synergies with local actors. A possible way of operating could be to work at two different levels: one local/regional network which is more focused on sustained spaces of joint creation and exploration among different practitioners; and an international network focused on periodic spaces and opportunities of encounter and exchange, where we can share

experiences at local and regional levels and plan together any lines of action. This could facilitate the creation of physical spaces of face-to-face encounter where relationships and joint projects can be built, while keeping connected and synergised with other initiatives of our interest.

While this community is taking shape, we would like to invite everyone to take part in building it. We plan to organise a second meeting in 2019, while launching a web to maintain contact and exchange (e.g. disseminating events and initiatives, proposing and facilitating labs, sharing resources, funding calls, etc.). Other ideas and initiatives are welcome, please participate! Also, if you would like to host any of the future meetings at your institution/city/village.

A year and a half has passed since Realising Potentials and new encounters, projects, ideas, experiences have taken place. We are experiencing an ever-growing interest and openness to the synergies between the arts and sustainability research and transformations, which encompass the challenging and complex nature of the social-ecological transformations we are facing. We hope that Realising Potentials can be a de-centralised platform from which contribute to boost such a community.

Let's keep our community open and alive, curious and fresh, like this short text written by Elisa, inspired by participants' inputs during the sessions:

'It all started with friendship and curiosity to learn about how to strengthen the links between arts and Sustainability Science... and a promise. The title and an attractive program did the rest to gather together people that love and care for our beautiful planet. The beauty of the seeds that they want to see expressed in art got them into a new community of ideas, understandings, practices. People that, inspired by a mixture of a desire to share, experimental urge and tons of that same spirit of curiosity for new experiences, came together and shared journeys onto new waters. Their bad habit of living loving in the frontiers blended with a desire for personal and professional growth. From a need to explore other views within Sustainability Science, to exchange practices, to share, connect and discover, these people magically opened new doors together. In the journey, they got engaged in their research for transformations towards sustainability with creative methodologies, imagination, emotions... and with fresh eyes! By dancing with uncertainty and sharing their voices and beliefs they communed, synchronized, mobilized... and realised potentials!!!'

References:

- Bendor, Roy, Junia Anacleto, Drew Facey, Sid Fels, Tim Herron, David Maggs, Rachel Peake, John Robinson, Michael Robinson, Jon Salter, Stephen Sheppard, Obi Vattanawong, Austin Wang, and Steve Williams. 2015. Sustainability in an imaginary world. 22, 5: 54-57. DOI=<http://dx.doi.org/10.1145/2801039>
- Fernández-Giménez, M. E. 2015. "A shepherd has to invent": Poetic analysis of social-ecological change in the cultural landscape of the central Spanish Pyrenees. *Ecology and Society* 20(4):29. <http://dx.doi.org/10.5751/ES-08054-200429>
- Heras, M., and J. D. Tàbara. 2014. Let's play transformations! Performative methods for sustainability. *Sustainability Science* 9:379-398. <http://dx.doi.org/10.1007/s11625-014-0245-9>
- Kagan, S and Kirschberg, V. 2008. Sustainability: a new frontier for the arts and cultures. Vas Verlag Fur Akademisch, Frankfurt, Germany.
- Kolb, D.A. 1984. *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Scheffer, M., J. Bascompte, T. K. Bjordam, S. R. Carpenter, L. B. Clarke, C. Folke, P. Marquet, N. Mazzeo, M. Meerhoff, O. Sala, and F. R. Westley. 2015. Dual thinking for scientists. *Ecology and Society* 20(2):3. <http://dx.doi.org/10.5751/ES-07434-200203>

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