

Building on the Project 'EcoArt-Lab': The Potential of Combining Ecological Art, Transdisciplinary Research, and Climate and Eco-Justice for Climate Action

To debate

- ▶ Which role does art play in educating about the climate crisis?
- ▶ What is the potential of art in knowledge production to create ecological effects?
- ▶ How can Ecological Art contribute to Climate Action also through the involvement of the society?

Written by
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Including artistic methods in education about sustainability and the climate crisis is crucial since more than scientific knowledge is required in order to transform dominant cultural assumptions and motivate for climate action. Simultaneously, collaborative creative approaches are needed to reflect on Climate and EcoJustice and create novel and just knowledge for climate action. However, knowledge co-creation collaborations between artists, climate scientists, society, and the more-than-human are not necessarily happening on eye-level, so that some knowledge is often treated as inferior. Establishing epistemic justice in knowledge co-creation is crucial since it aims to contribute to social justice in the context of Climate and EcoJustice.

Art in Educating about the Climate Crisis

Art can be a method for embodiment, diversity, collectivity, empowerment, process-oriented space, and connection to nature in education about sustainability and the climate crisis. Thus, art can transform dominant Western cultural assumptions (such as science is better than other knowledge, some cultures are superior to others, progress is the only goal, humans are superior to everything else on Earth), to re-

duce treating a person or group of people as inferior in education and to deconstruct power relations. In this context, art is considered as the 'holistic expressions of stories, images, sounds, and movements' (Foster & Martusewicz, 2019, p.5) and highlights the approach that everyone can do art. Focusing on embodiment, art can make people focus on emotions and free the mind.

Evoking emotions of care and love for nature but also anger and anxiety through art is crucial to fostering interest in the climate crisis.

Eliciting positive emotions, such as fun, passion, freedom, empathy, and connection in the learning process is helpful in breaking down and dealing with complicated climate crisis issues.

Getting into the body and learning through the senses such as smell and touch, by creating art with natural and organic materials and techniques is crucial to deepen knowledge about the climate crisis. It builds emotional connections to nature and the environment. Expressing oneself through movement, such as dance and theatre, can show and help understand different worldviews, cultures, and relationships with nature. It can also help express feelings, learn about care and empathy, understand interconnections and interdependencies and realise that humans are part of nature. Thus, through building connections to nature, art has the potential not only to educate about the climate crisis theoretically but also empathise with nature.

This focus not only on intellectual reflections but also on embodied actions leads to more active participation. It is empowering for people to understand their influence and agency regarding the climate crisis. Consequently, art can motivate for climate action.



The EcoArtLab engaged with students and guests in a greenery space. Photo & Copyright: EcoArtLab

The Potential of Art for Knowledge Production to Create Ecological Effects

Many art and science collaborations on climate justice issues are aimed at the public. Researchers reach out to artists in order to visualise the scientific results and connect better with people. However, there is more than using art only to illustrate scientific results!

Artists have the potential to challenge beliefs and practices, be critical, question scientific structures without the need to immediately solve issues, explore unusual viewpoints, imagine alternative possibilities, experiment hands-on without restrictions to specific scientific rules, highlight learning through the senses and aesthetics, encourage dialogue, and creatively bring together research. In other words, they can also produce intuitive and artistic knowledge in their own right. In addition, some research questions can only be answered through creating knowledge from bodily experiences and the senses. That shows the need to change art and science research, knowledge, practices, and methods. Even if artists and scientists are working differently, both try to understand the world, and by working together, they can create new outputs.

The Project 'EcoArtLab'

To provide a context, data will be gained as part of the transdisciplinary think-and-do tank and SNF-research project 'EcoArtLab: Relational Encounters between the Arts and Climate Research' which is located at the Bern Academy of the Arts (HKB) in close cooperation with the mLab of the Institute of Geography of the University of Bern. The first subproject is analysing the institutional frameworks, the second is investigating methodologies, procedures, and processes (described in this article), and the third is concerning target groups and mediation concepts of art and climate science collaborations. The focus will be on Switzerland and its global relations, and the project aims to initiate collaborations between artists, scientists, and the public.

www.ecoartlab.ch
www.mlab.unibe.ch



Collective painting as a method for theoretical exchange and practical art-making to reduce marginalisation. Photo: Moritz Schmid (Copyright: Science et Cité)

Epistemic Justice and Ecological Art contribute to Just Knowledge for Climate Action

Art and climate science collaborations aim to explore solutions to avoid further social and environmental destruction. The aim is to transform the view that nature is only valuable for humans because of its resources. This is also called Climate and EcoJustice. Climate Justice describes a combination of social, racial, and environmental justice, while EcoJustice focuses even more on the need to restore all interconnected ecosystems locally and globally while questioning anthropocentrism. In addition, Ecological Art (EcoArt) involves artistic practices, which value how the environment is interconnected, applying natural materials or dealing with environmental forces, restoring the natural environment, engaging the public, and re-envisioning ecological connections. EcoArtists perceive themselves as socially engaged, community-based intellectuals or active citizens, contributing to the activist movement. They emphasise the ecological ethics and principles through the used material and the content of their interventions. EcoArt highlights the current ecological crisis and envisions behaviour, policy, and value changes. The focus is on EcoArt as it 'can play a major role in activating and inspiring change' (Wallen, 2012, p.235). Since the climate crisis is a complex challenge with uncertain and inter-related impacts, it requires transdisciplinary practices. Transdisciplinarity is understood as collaborating interdisciplinarily and with different stakeholders, participants, local people, etc. in order to address societal problems and facilitate mutual learning.

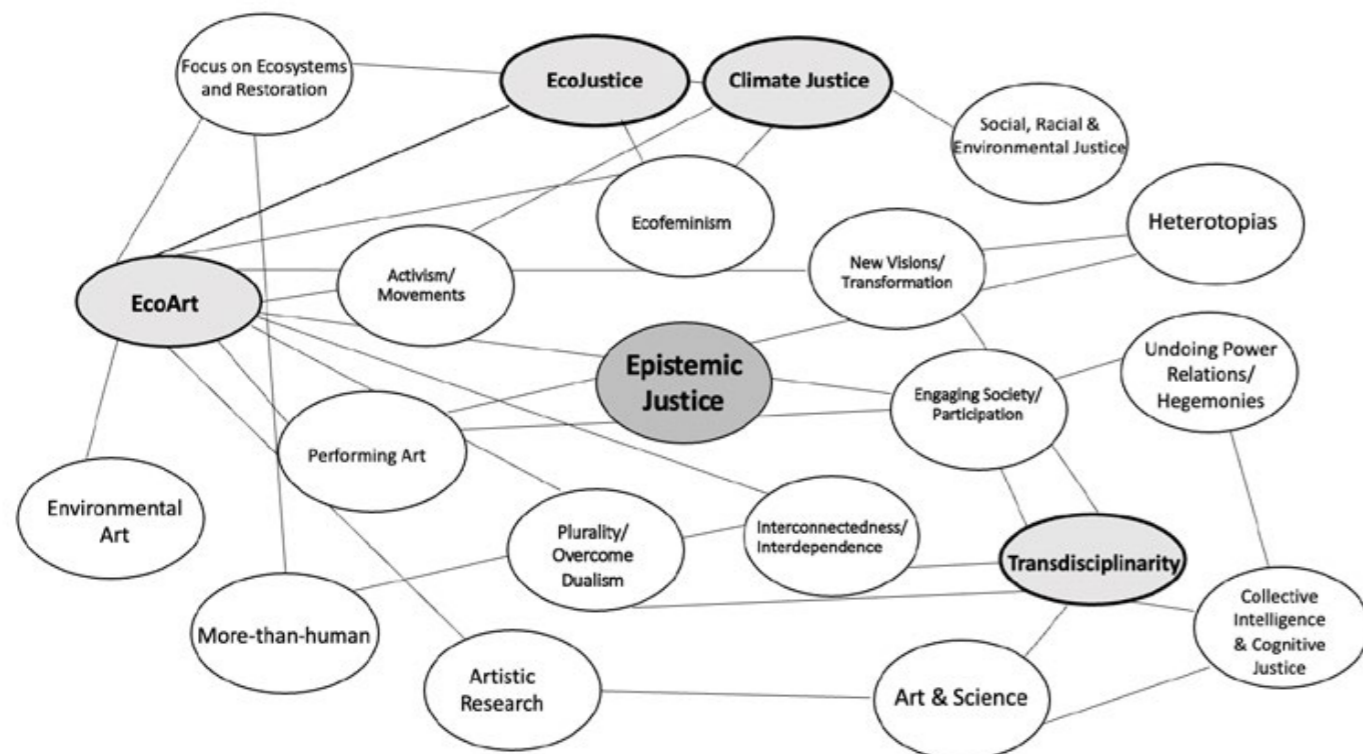


Figure 1: Connections of EcoArt, Transdisciplinarity, and Climate and EcoJustice.

Epistemic justice regards the just co-creation of knowledge in order to increase Climate and EcoJustice. However, these co-creation processes do not necessarily happen on eye level. There might be existing power dynamics between involved actors and their perspectives so that some knowledge might be treated as less important. To reach transformation and ensure epistemic justice, it is crucial to explore and undo underlying assumptions in art and climate science collaborations and their root causes. It is also important to investigate and establish a diversity of different practices, methods, and processes in collaborations to create and implement knowledge and an improved output for climate action. The expected outcome of the research is to uncover emerging challenges, issues, and inspirations and discuss the priorities of some practices over others by adding reflections from which can be learned when creating future art and climate science transdisciplinary research projects. To conclude, we, the people working in the field of geography, can be more open and reflective for collaborating and co-creating knowledge on an eye level with artists, society, and the more-than-human, which is crucial for well-informed climate action.

My five Key-Readings:

- ▶ Jahn, T., Bergmann, M., & Keil, F. (2012). Transdisciplinarity: Between mainstreaming and marginalization. *Ecological Economics*, 79, 1-10. <https://doi.org/10.1016/j.ecolecon.2012.04.017>
- ▶ Kagan, S. (2014). The practice of ecological art. 4. https://www.researchgate.net/publication/274719395_The_practice_of_ecological_art
- ▶ Martusewicz, R. A., Edmundson, J., & Lupinacci, J. (2014). *Ecojustice education: Toward diverse, democratic, and sustainable communities*. Routledge.
- ▶ Mohai, P., Pellow, D. N., & Roberts, J. (2009). Environmental Justice. *Annual Review of Environment and Resources*, 34(1), 405-430. <https://doi.org/10.1146/annurev-environ-082508-094348>
- ▶ Paschen, J. (2022). Can Art in Sustainability Education Challenge Marginalisation? Conversations with Youths and Practitioners in a European Context. 1-56. <https://lup.lub.lu.se/student-papers/search/publication/9097261>

Citation References:

- ▶ Foster, R., & Martusewicz, R. A. (2019). Introduction. In R. Foster, R. A. Martusewicz, & J. Mäkelä (Eds.), *Art, Ecojustice, and Education - Intersecting Theories and Practices* (pp. 1-9). Routledge.
- ▶ Wallen, R. (2012). Ecological Art: A Call for Visionary Intervention in a Time of Crisis. *Leonardo*, 45(3), 234-242. https://doi.org/10.1162/leon_a_00365



Interaction as researchers with the public and youth. Photo: Moritz Schmid (Copyright: Science et Cité)

Summary (in German)

Dieser Artikel erörtert die Rolle der Kunst für die Bildung und die Schaffung von Wissen für den Klimaschutz. Er unterstreicht die Bedeutung von sozialer Gerechtigkeit in der Bildung sowie in der Zusammenarbeit bei der gemeinsamen Schaffung von Wissen im Kontext von Klima- und Ökogerechtigkeit. Das Ziel ist die Erfahrung von Marginalisierung beim Lernen zu verringern und zu verhindern, dass Wissen marginalisiert wird, um epistemische Gerechtigkeit zu gewährleisten. So ist Kunst eine Methode in der Bildung für Embodiment, Diversität, Kollektivität, Empowerment, prozessorientierten Lernen und Naturverbundenheit und um dominante westliche kulturelle Annahmen zu transformieren. Insbesondere um verkörperte Erfahrungen und Emotionen zu vermitteln, die hilfreich sind, um Interesse zu wecken und belastende und komplexe Themen der Klima Krise durch künstlerische Aktionen und Reflexion zu behandeln, aufzuschlüsseln und zu diskutieren. Darüber hinaus verfügt die Kunst (insbesondere die ökologische Kunst in diesem Kontext) über das Potenzial der Reflexivität und der kritischen Analyse, was deutlich macht, dass sie mit der bloßen Vermittlung wissenschaftlicher Ergebnisse in transdisziplinären Kooperationen, mit dem Ziel innovatives Wissen zu schaffen, nicht gut bedient ist.



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