



Future Lives with
Oceans and Waters

D1.2 inFLOW lens

*Report on the development of the transdisciplinary
lens*



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Contents

1. Aim and scope.....	3
2. Development of the inFLOW lens.....	3
3. Usage of the inFLOW lens.....	5



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1. Aim and scope

In contribution to the European Union Mission Restore our Oceans and Waters by 2030¹, FLOW studies young generations' relations and engagement with oceans and waters.¹ Through the FLOW project, our research hopes to gain better insights into how European youth shape and hold their expectations about the futures of oceans and waters on the one hand, and the relations, values and emotions they exhibit when considering the present and future states of our waters on the other.

The inFLOW lens aims to transfer insights, concepts and theories relevant for the FLOW project² to a non-academic and young audience. It is based on concepts listed and explained in the FLOW Encyclopædia (D1.1).³ It tries to provide a story that sensitizes for the importance of relationality. It weaves together different conceptions of relations instead of sequentially providing different lenses (like an optical phoropter) for focusing on fixed ontologies such as aquatic ecosystems or humans. It emphasizes looking at what is represented by the hyphen between humans and waters in the concept of human–water relations. **The inFLOW lens uses visual storytelling to present the relationality of human connectedness to water to a non-academic and young audience in an appealing and pointed way.**

2. Development of the inFLOW lens

Building on the FLOW Encyclopædia (D1.1), the inFLOW lens has been developed in two rounds with the following steps:

1. Involving the FLOW academic partners
 - a. During a workshop and series of discussions in June 2023, the academic partners identified a set of concepts deemed most relevant for FLOW (table 1).
 - b. The selected concepts were clustered according to the following scheme: key concepts central to the lens development / concepts hinted at in the lens / concepts recognized (figure 1).
 - c. Each of these concepts inspired the development of a specific figurative perspective on human-water relations and connectedness (see table 1).
 - d. In July 2023, fictional characters were developed that engage with issues, situations, questions and phenomena linked to these concepts. Characters and issues were inspired by cultural sources and signals collected in the foresight work package (WP2).
 - e. A storyboard was developed that portrays the interaction of characters with these issues, situations, questions and phenomena.
 - f. Images were collected (stock images, own drawings and photographs as well as computer-generated images).
 - g. Through a range of pictures that were selected and sorted according to their characteristics, style and content image boards were created. By using an image board as a consensus artifact the different imagery can be discussed and selected.
 - h. This way, a range of options were explored in collaboration with the project partners, to arrive at a visual language that is appropriate for the project's concepts to be conveyed, i.e. in terms of implicit values, narrative content and degree of ambiguity.

¹ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/restore-our-ocean-and-waters_en
retrieved: 07.06.2023

² www.flowhorizon.eu

³ Zoheb Mashiur, Melania Borit, Riyan J. G. van den Born, Bernadette F. van Heel, Krisztina Jónás, Max Priebe, Aaron Rosa, & Philine Warnke. (2023). FLOW D1.1 Open Access Transdisciplinary Dataset FLOW Encyclopædia. Zenodo. <https://doi.org/10.5281/zenodo.8021142>



- i. Using image editing software, the images were shared, cut and assembled into digital collages (e.g., Figure 2).

Table 1 Overview of connections between concepts and story elements. Literature references can be found in Transdisciplinary FLOW Encyclopædia (D1.1)⁴.

Concepts	Figurative perspective
<p>Dimensions of connectedness with water – only few studies have specified connectedness with water (Ehl, 2023). More frequently, specifications of connectedness with water have been used (Nuojuua et al. 2022). Ives and colleagues (2018) distinguish five dimensions (material, experiential, cognitive, emotional, philosophical) which can be distinguished as dimensions of connectedness with water as well.</p>	<p>Material – consumptions and use of materials from water. Representation in the story through: sea food (sushi), water transport (sneakers), energy sources from water (oil platforms).</p> <p>Experiential – direct interactions with water. Representation in the story through: e.g. swimming.</p> <p>Cognitive – knowledge about water. Representation in the story through: Spilhouse projection of our blue planet.</p> <p>Emotional – feelings about water. Representation in the story through: longing for the sea as a place of calm and relaxation, fear of flooding or tsunamis.</p> <p>Philosophical – reflecting on values of water and on how humans should interact with water. Representation in the story through: different values of water, moral perceptions about how human treat oceans.</p>
<p>Different perspectives and concrete examples of human-water relations – the relationship between humans and water is the interaction between humans and human economy and the hydrological system (Simmons et al. 2007).</p>	<p>Care – both an attitude of concern (caring about), and a practice (caring for, e.g. clean-ups), where people meet the needs of another human or non-human entity regardless of benefits it has to them (Jax et al. 2018). Representation in the story through: Washing and brushing of merfolk-being by main character.</p> <p>Extractivism – describes the large-scale operation (often profit-driven) of extracting natural resources (such as minerals) (Parks 2021). Representation in the story through: dive into the ocean that reveals activities such as deep sea mining and industrial fishing.</p>
<p>More-than human perspectives – refers to the perspectives of non-human entities (de Souza, 2021).</p>	<p>In the inFLOW lens, the perspectives of the following more-than-human entities include amongst others: underwater, fictional humanoids (Merfolk), crustacea (crabs), fish and seahorses.</p>
<p>Sociotechnical imaginaries – collectively held visions of desirable futures, attained through advances in science and technologies (Jasanoff & Kim 2015).</p>	<p>The inFLOW lens visualizes some sociotechnical imaginaries and techno-scientific visions of human-water relations, such as: deep sea mining, diving scientists with DNA pumps.</p>

⁴ Zoheb Mashur, Melania Borit, Riyan J. G. van den Born, Bernadette F. van Heel, Krisztina Jónás, Max Priebe, Aaron Rosa, & Philine Warnke. (2023). FLOW D1.1 Open Access Transdisciplinary Dataset FLOW Encyclopædia. Zenodo. <https://doi.org/10.5281/zenodo.8021142>



Critical theories – approaches to social philosophy focusing on society and culture and attempting to reveal and challenge power structures.

In resonance with issues highlighted by critical theories, the inFLOW lens aims to visualize and question power structures in terms of: sea borders, migration, gender constructions.

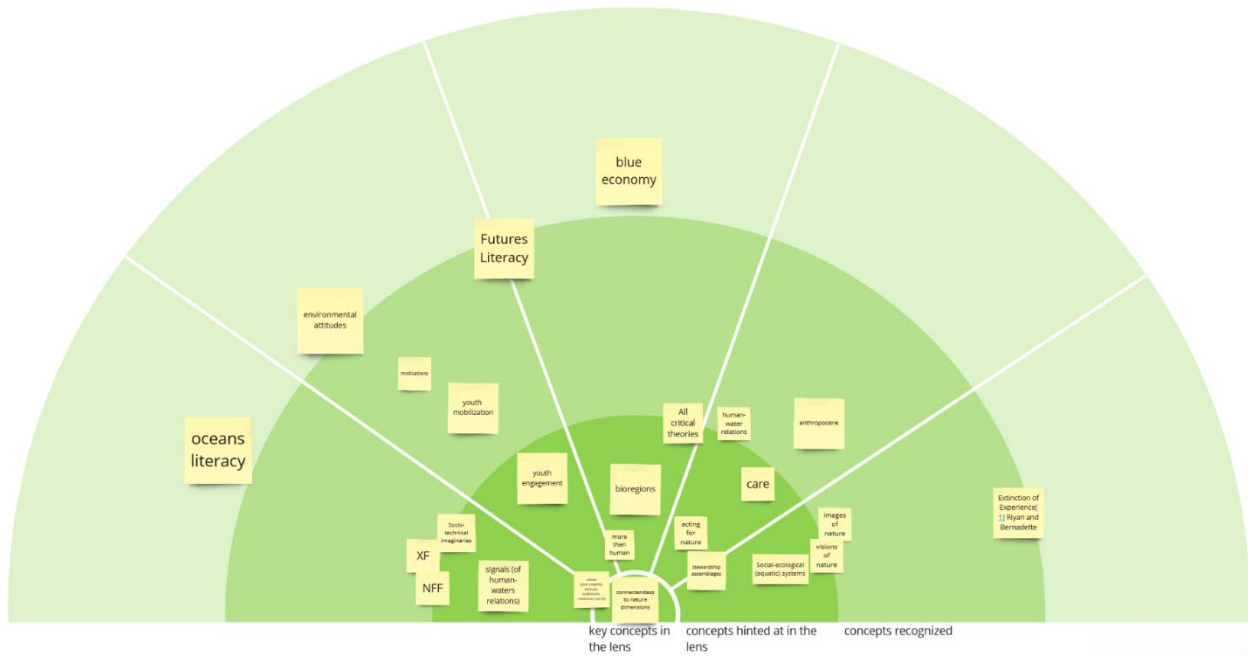


Figure 1 selected concepts

2. Involving the Youth Advisory Board

- a. From September 2023 onward members of the Youth Advisory Board will comment on draft versions of the lens. Questions will include: What thoughts and emotions does the inFLOW lens trigger? What perspectives does it entail? What does it leave open? How should it be adapted?

The inFLOW lense will be published under a Creative Commons Attribution 4.0 International.

3. Usage of the inFLOW lens

The inFLOW lens will be used to transfer insights and questions concerning human-water relations to a non-academic audience. It does not aspire to present a holistic perspective. Neither does it present itself as educational material. Instead, it tries to trigger responses (everything from amicable to antagonistic), it is slightly provocative, and presents human-water relations as ambiguous and complex entanglements. It is communicated and shared via the project's social media activities, its website and used during workshops (WP4 and WP5).



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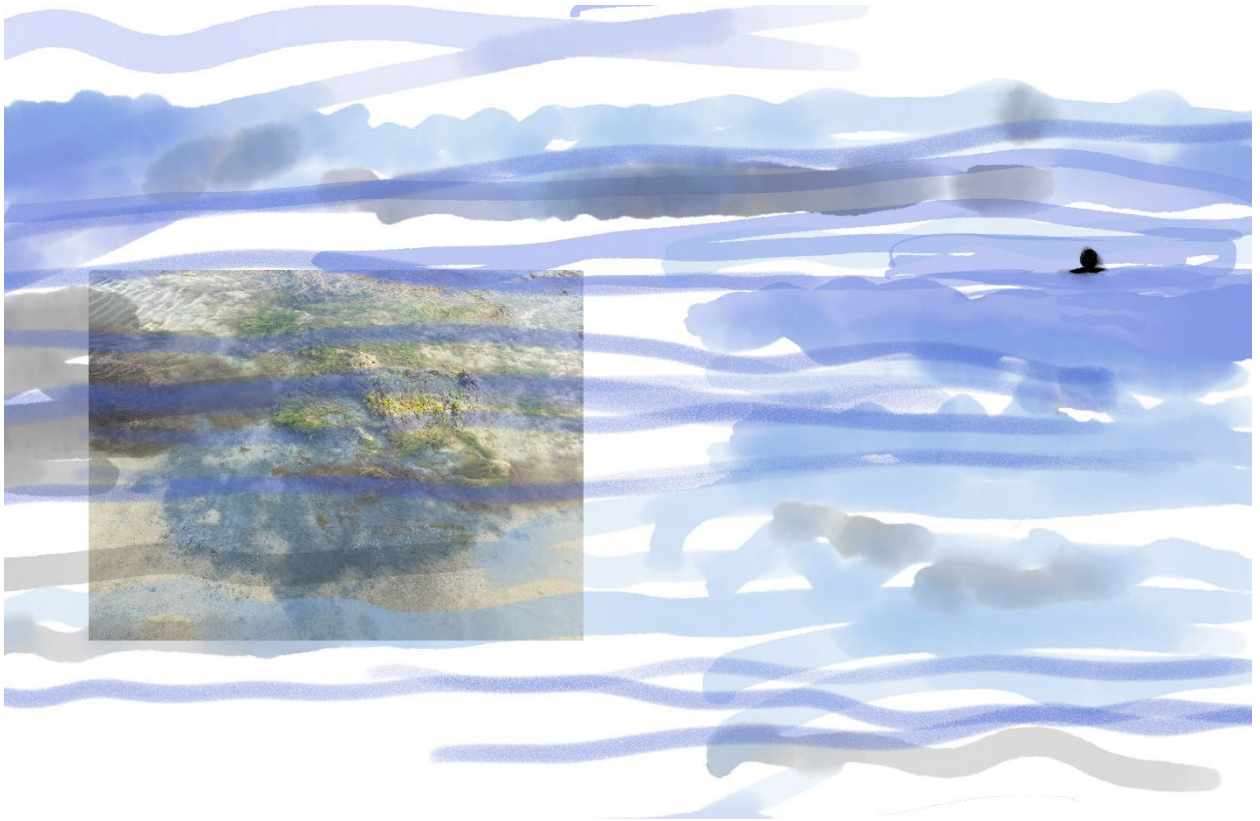


Figure 2 Sketch for the visual storytelling



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