



We are grateful to the pupils of the indigenous school of Nossa Senhora Aparecida, Osbi, for the illustrations of the story.

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Università di Torino  
Dipartimento di Giurisprudenza



Video of Tarumã available at:



GIULIA PAROLA  
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# TARUMÃ, WATERS THAT SPEAK

A LEGAL DESIGN AND VISUAL LAW PROJECT, CO-CREATED  
BY LAW STUDENTS AND THE CHIQUITANO PEOPLE:  
THE POLLUTION OF THE TARUMÃ RIVER  
AND ITS CONSEQUENCES FOR THE CHIQUITANO PEOPLE





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## INTRODUCTION<sup>(1)</sup>

This book is the result of the project on *Legal Design and Visual Law in Environmental Law: Application in the Case of Pollution of the Tarumã River and the Reflections on the Chiquitano People*, developed as a part of the digital workshop (Tromsø, 2021) *A conversation between the river Tarumã (No-su-ruch maku-numã) Mato Grosso, Brazil, and the river Tana, Finnmark, Sápmi*. The research was co-funded by the Norwegian Directorate for Higher Education and Skills (HKDIR Utforsk 2020) through the project *An Exchange Program on Empathy, Compassion, and Care in Water Governance, from the Perspective of Integral Ecology – (ECO\_CARE, HKDIR UTF n. 2020/10084)*<sup>(2)</sup>, the Faculty of Law UiT The Arctic University of Norway (Strategiske Midler 2021), as well as by the UiT Library Funds for Open Access scientific publications (2022).

Coordinated by Giulia Parola and Margherita Paola Poto, with the help of Loyuá Ribeiro Fernandes Moreira da Costa, this project shows the importance of co-creation for responsible research and innovation in the fields of environmental and indigenous law.

This book includes a scientific rationale concerning the research and methodology which stemmed from a novel, innovative process of co-creation (PART I). A co-created illustrated story (PART II) is the result

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(1) Both authors contributed equally to the design, writing and editing of the Introduction.

(2) Official website: <https://en.uit.no/project/ecocare> last access September 2022.

of a groundbreaking collaborative research effort between ECO\_CARE team members, law students of UNIRIO (Brazil), representatives of Chiquitano People of Mato Grosso (researchers, teachers and community members), as well as school pupils from the Chiquitano school of the village Nossa Senhora Aparecida “Osbi”, in Mato Grosso, Brazil.

PART I explores the main pillars of the ECO\_CARE project, elaborating on the foundational ethics of its methodology, committed to decolonizing research and education. This process of decolonizing research and education has taken shape through the collaboration of researchers, students and community members and the application of creative techniques to legal reasoning. Within this context, researchers, educators and community members have been applying a participatory methodology that focuses on the co-creation of illustrated storytelling based on legal documents through a constant process of dialogue, validation and implementation of the project results. Such methodology is considered essential to developing a conceptual framework for participatory water governance. As will be further elaborated in the sections that follow, the method we used to inquiry legal issues connected to water governance consisted of four main phases: (1) co-initiation, involving education activities developed between the project coordinators, law students, and community members, to investigate the research gap, community needs and the possible actions that address the identified problems; (2) co-design, focusing on decisions and collective activity on the adaptation of the methodology and process to the reference context (in our case, we used the framework of cocreation in research-practice to analyze the problem related to the pollution of the river Tarumã); (3) co-implementation, where the design was enacted and the participatory processes facilitated; and (4) co-evaluation, involving a collective evaluation of the project results.

PART II is the tangible result of the co-creation, and has three direct outcomes (1) It can be read and approached as a children’s story, by teachers and anyone interested in sensitizing children towards environmental issues<sup>(3)</sup>; (2) With a rich record of legal provisions, com-

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(3) In addition to the original version in Portuguese and English, the story has already been translated into Ukrainian and adopted as a learning material for a series of classes on environmental consciousness to children from Ukraine. See more in detail the project PolarRES <https://polarres.eu/> last access September 2022, as well as the open access ECO\_CARE portal under the section Education: <https://en.uit.no/project/ecocare/education> last access September 2022.



mentaries, and documented stories, it contains the first legal recollection of previously unpublished phases of the struggle of the river and its peoples for the defense of nature and human rights<sup>(4)</sup>; (3) It provides a frame of reference for university courses in Legal Design, LD, Visual Law VL<sup>(5)</sup>, as well as environmental and indigenous law, helpful for lecturers to design their classroom activities and for students to develop their creative group and individual projects<sup>(6)</sup>.

The study followed the ethical guidelines for research from the host and partner institutions<sup>(7)</sup>, establishing voluntary consent from teachers, students, and community members with the right to withdraw at any time. With regard to open science, the project followed the EU Open Science Policy on data collection, handling, transfer, protection, and specific security strategy<sup>(8)</sup>, whilst ensuring a sound base for a powerful, sustainable, and valued data system. With specific regard to open access, the project supports the cOAlition-S initiative<sup>(9)</sup> and is dedicated to contributing to its development by publishing this research as a fully open access resource, and disseminating and communicating its results to the relevant communities via key international conferences, workshops, social media and outreach activities.

Finally, throughout this project, we have been drawing on an inclusive and co-created legal methodology to create possibilities for participation, plurality and open spaces for transformative engagements in research. Consequently, as we continue engaging in an innovative research and education methodology for academic audiences and community members, we strengthen our commitment to empathy, compassion and care for the people and natural environment with whom we research.

GIULIA PAROLA

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(4) For a rich list of video resources, scan the QR code on the inside of the cover.

(5) On the definition of these concepts and their application to university courses and research, see more in detail PART I.

(6) For a list of courses where LD and VL have been already integrated into University curricula, see the ECO CARE educational platform: <https://en.uit.no/project/ecocare/education>.

(7) See [https://en.uit.no/research/ethics/art?p\\_document\\_id=723908](https://en.uit.no/research/ethics/art?p_document_id=723908) last access September 2022.

(8) [https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science\\_en](https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en) last access September 2022.

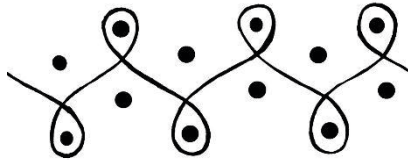
(9) <https://www.scienceeurope.org/coalition-s/> last access September 2022.



PART I

**PROJECTS ON LEGAL DESIGN AND VISUAL LAW  
AND THE CO-CREATION OF THE STORY**

**GIULIA PAROLA, MARGHERITA PAOLA POTO<sup>(\*)</sup>**



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(\*) Giulia Parola wrote Chapters II and III; the author thanks Cecília Silva Campos for the reports of the online meetings with the Chiquitano representatives. Margherita Paola Poto wrote Chapter I. Both authors contributed to the research, editing and supervision of the final version of PART I.



## CHAPTER I

### THE FOUNDATIONS: ECO\_CARE AND THE CONVERSATION BETWEEN TĀRUMĀ AND TANA

The project's vision is to develop a collaborative governance model that protects water and communities as legal living entities. Water is the most essential element for life to flourish in our environment, acting as a powerful medium for living beings and places. Thus, an ecologically integrated approach to water sustainability and management models, that puts participation at the forefront, is paramount. Water governance cannot solely rely on a top-down approach from government officials, corporations, and world leaders, as they have failed to meet any of the global environmental goals set in the last decade (i.e. Paris agreement<sup>(1)</sup>, Agenda 2030<sup>(2)</sup>). This concern forms the basic premise of the project: water governance must ensure that we are responsibly and collectively contributing to a functioning and healthy water system. Yet, we are increasingly faced with water-related challenges that impede such premise: scarcity, contamination, and inequitable distribution.

As a result, we observe detrimental environmental stress, leaving communities and biodiversity in a vulnerable state, hindering their respective rights and reciprocal obligations towards one another. Given the alarming scenario at hand, the project recognizes the importance of re-evaluating the legal response of water governance from

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(1) Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

(2) UN Resolution, AG, A/Res/70/1 published on the official website: <https://sdgs.un.org/2030agenda>, last access September 2022.

a water-centered perspective. This response is rooted in the field of environmental law, as a means of conceptualizing and constructing a water-centric system that addresses the challenges through new legal environmental foundations (Philippopoulos–Mihalopoulos, 2011). A water-centric system can be achieved by recognizing the value of water, its interconnectedness to all of life, and the importance of orienting our actions towards protecting it (Pope Francis, 2015).

The conceptual framework for the project's methodological approach is predicated on legal research (Friedland and Napoleon, 2015), which provides the grounds for rethinking, reinterpreting, and modeling water governance through the ecological ethics of empathy, compassion, and care (Moriggi, Soini, Franklin and Roep, 2020). Such an approach establishes thoughtful relations within ecological communities (human and non-human), by empowering them to care for themselves and each other. This goal is achieved by humans developing greater compassion and empathy within the overarching ecological community (Bandes, 2017).

The first project step toward remodeling water governance through the aforementioned critical legal approach began with an assessment of the expansion of participatory environmental rights from merely procedural to substantive positions. This shift in conceptualizing participatory rights as a substantive right consequently gave a platform and increased legitimacy to the voices of nature defenders and ultimately to nature itself.

The need for new participants in decision-making was first recognized in environmental law and then expanded to administrative law. This expansion was catalyzed by the legal recognition of environmental access rights (structured into the three pillars: the right to access documents, to participate in decision-making processes, and to access justice), enshrined in Principle 10 of the Rio Declaration<sup>(3)</sup>. Such a recognition facilitated the entry of procedural rights holders and contributed to a shift away from a centralized model in environmental decision-making in which the States held significant power. The 1998 Århus Convention (ÅC) (Parola, 2013)<sup>(4)</sup>, the first international treaty imple-

(3) 1992 Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I), 31 ILM 874 (1992).

(4) United Nations Economic Commission for Europe (UNECE), *The Århus Convention: An Implementation Guide* (2<sup>nd</sup> ed. 2014) available at <http://www.unece.org/fileadmin/>

menting Principle 10, marks the recognition of environmental rights for non-state actors. Widely enforced in the EU, although limited in content and regional extent, the ÅC paved the way for the expansion of participatory rights to vulnerable groups, including Indigenous People s, by creating space for the approval of the 2018 Escazú Agreement (EA) for Latin America and the Caribbean<sup>(5)</sup>. The EA carried forward the ÅC legacy<sup>(6)</sup>, expanding the environmental decision-making to new actors and their views on nature. By doing so, the EA broadened the horizons of rights from merely participatory to substantive. Passing the baton of environmental decision-making to the carriers of nature-centred views, the EA opened perspectives for the gradual recognition of the rights of nature also at the global level (López-Cubillos *et al.*, 2021).

Replicating the three-pillar structure adopted in Principle 10 and ÅC, the EA expands the discourse beyond Euro-centric views, broadening the spectrum of participants to the carriers of nature-centered views. Article 9 clearly qualifies such participants as human rights defenders in environmental matters, «whose safe and enabling environment is to be guaranteed so that they are able to act free from threat, restriction and insecurity»<sup>(7)</sup>. Thus, the EA brings forward the discourse

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DAM/env/pp/Publications/Aarhus\_Implementation\_Guide\_interactive\_eng.pdf last access September 2022.

(5) Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, 4 March 2020, available at <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf>, last access September 2022. For updates on signature and ratification status see: <https://observatoriop10.cepal.org/en/treaties/regional-agreement-access-information-public-participation-and-justice-environmental> last access September 2022.

(6) Moreover, as expressly mentioned in the Foreword of the EA, the year of approval marks the 20<sup>th</sup> Anniversary of the Declaration of Human Rights Defenders: [https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428_en.pdf), last access September 2022.

(7) See Art. 9 EA: «1. Each Party shall guarantee a safe and enabling environment for persons, groups and organizations that promote and defend human rights in environmental matters, so that they are able to act free from threat, restriction and insecurity. 2. Each Party shall take adequate and effective measures to recognize, protect and promote all the rights of human rights defenders in environmental matters, including their right to life, personal integrity, freedom of opinion and expression, peaceful assembly and association, and free movement, as well as their ability to exercise their access rights, taking into account its international obligations in the field of human rights, its constitutional principles and the basic concepts of its legal system. 3. Each Party shall also take appropriate, effective and timely measures to prevent, investigate and punish attacks, threats or intimidations that human rights defenders in environmental matters may suffer while exercising the rights set out in the present Agreement».

on actors involved in environmental decision-making<sup>(8)</sup>. Its beneficiaries are the populations of the concerned regions — the most vulnerable groups and communities in particular — recognized as human rights defenders that contribute to strengthening democracy, access rights, and sustainable development. EA gives voice to environmental defenders (Art. 9), whether Indigenous Peoples or local communities, whose survival depends on nature and is threatened by large-scale projects of resource extraction, industrialization, and development<sup>(9)</sup>. Both the AC and the EA led to international legal recognition of effective participation for the environment, preparing the terrain for the discourse of nature substantive rights, also applicable to water. They apply to the environment as a whole (including human and non-human beings) and pave the way also for nature and therefore water-centred voices.

Starting from the theoretical framework, and intending to model a collaborative water governance system, ECO\_CARE suggests a re-reading of these environmental rights by integrating indigenous perspectives with the suggestions of students engaged in environmental learning, and the creative help of school communities.

To achieve this objective, the project team adopts a methodological integrated approach, through (i) critical legal research; and (ii) empirical legal and anthropological research embracing, and adapting principles and techniques of knowledge co-creation, LD and VL, visual communication and illustrated storytelling. This integrated approach is an effective tool for investigating complex systems, such as environmental governance, which simultaneously promotes the advancement of diverse knowledge diversity.

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(8) Prior to the EA, several initiatives — not all of them binding, however — have been conducted in Latin America to promote and protect participatory rights for nature and rights of nature: here we may note the Peoples' World Conference on Climate Change and the Rights of Mother Earth, hosted by the Plurinational State of Bolivia in Cochabamba, 20–22 April 2010, followed by the Universal Declaration of the Rights of Mother Earth. See UNGA Resolution 73/235, [https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/04/A.RES\\_.73.235.pdf](https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/04/A.RES_.73.235.pdf), last access September 2022.

(9) See UNDP (2018). What does it mean to leave no one behind? A UNDP discussion paper and framework for implementation, available at [https://www.undp.org/content/dam/undp/library/Sustainable%20Development/2030%20Agenda/Discussion\\_Paper\\_LNOB\\_EN\\_lres.pdf](https://www.undp.org/content/dam/undp/library/Sustainable%20Development/2030%20Agenda/Discussion_Paper_LNOB_EN_lres.pdf) last access September 2022.



The first step was the creation of a visual identity for the team members, through the illustration of the project logo, representing the blue planet Earth, embracing continents, waters, persons and emotions (represented by a heart hugged by the Planet) in a continuum flow. The logo contributed to creating a cohesive visual aesthetic that not only unifies the project team, rationale and activities visually, but also lays the groundwork for an environment that encourages creativity and spirited collaboration among the project members.



**Figure 1.** Logo of the project realized by Valentina Russo, Mucho Amor (Instagram: @mucho\_amor), 2021.

Co-creation of visual results has been continually pursued and resulted in the publication of two comics books for law students and practitioners (Parola, Poto, 2021a and 2021b), and a composite learning toolkit formed of an illustrated book, a handbook, and prototypes of touch book and finger puppets (Porrone, Poto, Russo, 2021a; Porrone, Poto, Russo, 2021b).

In the first project year, another multistep collaborative project was developed, and co-created storytelling, illustrations, and other visual communication techniques were integrated as the result of the cooperation between the indigenous communities of the Chikitano People

living near the Tarumã River and the Sámi People of the Tana River. The project comprised of three steps.

Step 1 was dedicated to the preparation of a collaborative questionnaire for the two target audiences (i.e. the two indigenous communities living along the mentioned rivers) in Portuguese and English. The use of this questionnaire was intended to respectively build trust with the Chiquitano teachers involved in the project in Mato Grosso and to gain an understanding of the relationship between the Sámi People and the Tana River. In Step 2, surveys and semi-structured interviews were conducted with representatives of the two groups, to give voice to their struggle and build up a comparative understanding of the challenges faced by water communities. Step 3 involved the students from the course of Legal Design and Visual Law at UNIRIO (2021): based on the studies and research conducted on the two rivers, Matheus Goulart, one of the law students, designed the project's cover, where the two rivers and their elements are engaged in an imaginary conversation.

The visual representation of the conversation prompted important cooperation between indigenous and non-indigenous researchers, students, and indigenous co-researchers, holding great promise for indigenous and water knowledge promotion in academia and communities.

All the aforementioned steps contributed to improving the team spirit and reinforcing the international team members' conviction of the potential of co-creation to meaningfully contribute to research processes and to build knowledge that is relevant and reusable both within and outside the research and local communities.



**Figure 2.** Project cover created by Matheus Goulart, 2021.

