BETWEEN CLOUDS AND OCEANS

SEEING THE UNSEEN: THE VALUE OF WATER

AUGUST 23 - SEPTEMBER 1. 2022



Between Clouds and

Oceans is a collaborative series initiated by the students at the Geneva Graduate Institute

Water Initiative in collaboration with Charlotte Qin of the

QinTheory Studio.

Each painting created by Qin carries a message from the water.

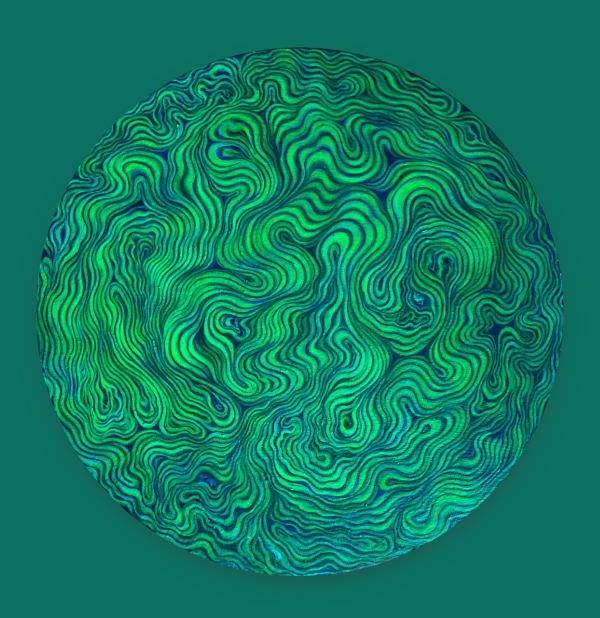
Water is the origin of all lives but is also indispensable to the identity and cosmology of our ancestors.

Following where water flows between clouds and oceans, we illustrate a currently disrupted hydro-cycle and the solutions that we seek through water governance, diplomacy, and management.

This artistic initiative aims to restore our intrinsic connection with water as humans and unlock our long-sought answers to creating peace and living in harmony with one another through learning from water.

Give Water Freedom Again. It Can Free Us from Our Shackles.

by Jörn-Jakob Luhn



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or centuries, humankind has built dams and large water reservoirs, relocated or changed the course of rivers, and reclaimed land from the seas. By doing this, have we ever questioned ourselves what we are doing to water, being probably the most precious resource for our human existence? Did we ever ask water for permission? Or did we simply conclude that we would not understand its language anyways, so that we could simply use water for our own human objectives?

While various indigenous groups throughout the world have long recognised the value and spirit of water, it was only recently that the discovery of climate change has also raised further awareness about water issues among the international community as a whole.

"Give Water Freedom Again. It Can Free Us from Our Shackles." "What are these shackles?", you might ask. Generally, I would answer that these shackles are the ones humankind has put on itself, by its overuse of natural resources and its pollution of our Mother Earth and its blue blood - water. But this story should not feel dark and depressing. On the contrary, these lines should tell us that there is hope. Hope for recovery, redress, and a human future on a healthy planet. Water should be a key part of our hopes...and actions.

Indeed, water can significantly help us to reach our common goal to limit global warming to well below 2 degrees, as stipulated in the 2015 Paris Agreement. But since it was us, the humans, who have mistreated water, water now needs our help first before it can come to our support. As this article wants to illustrate, this "help for help" can come in various facets and even small projects can contribute to making a difference, which sometimes do not even require extensive technology or R&D.



Mire near Darze, Mecklenburg-Vorpommern.

<u>Photo</u> by Ralf Ottmann

A current project in the northwestern German state of MecklenburgVorpommern (Mecklenburg-Western Pomerania) is a very good example here. Mecklenburg-Vorpommern covers a vast area of land (for German standards) but has a rather small population. The state is characterised by agricultural activity and does not have considerable industry. About 13% of the state's area is covered with mires (Hirschelmann 2020: 3). Mires (a sub-category of peatlands) are wetlands where, through only partial or no decomposition of

organic substances, peat is formed (GMC 2020a). Peat formation is the first step on the way to carbonisation. Peatlands were historically drained to reclaim land, mainly for agricultural use. In Mecklenburg-Vorpommern, the same was done primarily in the 1960s/70s, when the region was part of the German Democratic Republic (NDR 2020).

However, not only the further agricultural use of the drained peatlands has negative consequences for CO2 emissions, but the drainage itself is

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particularly harmful for the climate: Peatland in its natural wet state is a powerful CO2 storage - a "naturebased solution" (GMC 2019: 4) as part of nature's cycle of self-regeneration. Most notably, wet peatlands worldwide bind twice as much CO2 as all forests together (UNEP n.d.). But as soon as the water has been drained, nature's blessing turns into a substantial burden: Not only are drained peatlands unable to absorb further CO2, but they actually emit considerable volumes of CO2. In the case of Mecklenburg-Vorpommern, drained peatlands account for one third of the state's overall CO2 emissions (GMC & IKEM 2021: 4). In view of the emission reductions necessary to reach the Paris 2015 goal, the state government has decided to accelerate a project that had already been going on in the area since the 1990 (NDR 2020) but had come to a halt in the early 2000s: the rewetting of drained mires (Backhaus in Ostseewelle 2022). In practice, rewetting basically means allowing water to return to the areas that it had naturally covered. Therefore, manmade drainage systems are blocked so that water can accumulate in the mire again. So far, 10% of the mires have been rewetted since 1990 (see NDR 2020) and were thus returned from

being man-made polluters into climate savers. It is hoped that all drained mires will be rewetted by 2050 (NDR 2020), so there is still some way ahead.

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Climate protection often require creative measures. In the case of Mecklenburg-Vorpommern, interesting solutions are tested to secure funding for the project as well as alternative economic opportunities for farmers that will lose farmland due to the rewetting. As to funding, the state government started to sell climate certificates called "MoorFutures" to finance part of the rewetting (NDR 2020). While this way of emission re-compensation is not uncontroversial (as for example

companies can "green-wash" their harmful activities by buying those certificates), it is undoubtedly a way to take some financial burden from public budgets. Finally, also science has an important role to play. In addition to monitoring the rewetting progress (GMC 2020b), the Greifswald Mire Centre (GMC) at Greifswald University has developed the concept of "paludiculture". The concept aims at bridging the gap between climate protection and the economic use of peatland (see Joosten et al. 2016), so that water and humans can exist side by side.

The case of Mecklenburg-Vorpommern represents only one of many initiatives worldwide, as the rewetting of drained peatland has been widely recognised as a cost-effective measure to combat climate change. Recent projects for example exist in Indonesia or Russia, in various EU countries under the EUfunded <u>"LIFE" programme</u>, or even at the <u>UN level</u>. Thus, to fight climate change, what we have to focus on are not only technological advancements alone, but also the original ways nature has ensured its continuous regeneration. Water plays a key role in that. Water is a powerful resource, but only if humans allow water the freedom to flow, it can unfold its inherent potential to help us creating our future. Because ultimately, water is the source of all life, including ours.

About the Author



JÖRN-JAKOB LUHN

Jörn-Jakob Luhn is originally from Germany and currently a second-year Master student of International Law at the Graduate Institute of International and Development Studies (IHEID) in Geneva, Switzerland. Being fascinated by the nexus between water, human rights and renewable energy, he also joined the Water Initiative at IHEID. However, he does not only deal with water issues in his academic life: If the weather allows, he also enjoys taking a refreshing dip in Lake Geneva or in the Baltic Sea during his holidays.

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