Water as a Metaphor for a Transdisciplinary Approach

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Abstract

Water is a transdisciplinary element in itself. It interconnects, unites, separates, adapts and is present in nature in different states, forms and organisms. The multifaceted nature of water equally challenges researchers, practitioners and users in finding a unity of knowledge that is crucial to (re)establishing a healthier and more sustainable way of life on Earth. This unity of knowledge and perspectives creates a kaleidoscope for the holistic understanding of water as an element – its structure, dynamics, functionality and governance. Based on ternary logic – which recognizes the *included middle* as a universe of possibilities and synergies – the complex nature of water can only be grasped within an open system. Using this logic, stakeholders interact with uncertainties while respecting and valuing diversity, differences, and academic and non-academic knowledge. Through this logic, transdisciplinarity opens the way to alternative ways of perceiving, thinking, understanding, being and behaving in a world that is submerged in poverty, inequality and climatic and sanitary crises. At the same time, the potential of transdisciplinary approaches to efficiently address the world's most pressing issues still requires improvement and legitimation. A transdisciplinary approach addresses the socio-environmental dimension of water governance and can be a source of optimism and opportunities for collaboration. Water governance is, in this regard, committed to valuation of ecological and cultural diversity; to the health of people and ecosystems; and to sustainability. In this opinion article, water is presented as a metaphor of how the transdisciplinary approach – going way beyond modern science's conventional fragmentation – can offer significant governance alternatives, with positive repercussions in various fields of knowledge, and action.

Highlights

1. Water, enshrined in diverse scientific, spiritual, and cultural traditions, can be understood as a metaphor of transdisciplinarity.

2. Water inspires the opportunity to refound a unity of knowledge that is crucial to establishing a healthier and more sustainable way of life on Earth.

3. Wicked problems – such as socio-environmental ones – no longer allow thinking of complex issues in binary or fragmented terms.

4. In this article, water is a metaphor of how the transdisciplinary approach – going beyond modern science's conventional fragmentation – can offer significant advances, with positive repercussions in various fields of knowledge.

5. Transdisciplinary governance approaches open new planning, management, education, and communication pathways.

Introduction

Water, enshrined in diverse scientific, spiritual, and cultural traditions, can be understood as a metaphor of transdisciplinarity.

The transdisciplinary perspective of water – through valorization of dialogue, the coexistence of different ways of life, and respect for its meaning in different cultures – has provided humanity with a fertile field of new potentialities. Knowledge of this element as a source of life and health for all beings and the biosphere has evolved. On the other hand, from nanostructure to integrated and integrative application, water paths reach the dimension of governance with many challenges and perspectives. The commitment to valuing ecological and cultural diversity, including human and ecosystem health and sustainability, generates new lessons and learning.

Just as the transdisciplinary perspective enhances the universe of water, this perspective, in turn, is enriched by the knowledge that water generates and nurtures in human beings.

However, as Tvedt and Ostigard (2010) point out, there are only a few published articles concerning how water has been differently conceptualized and perceived by societies over time. Although all social systems possess a dimension of water, it has been intertwined with social interactions – from profane activities to religious rites – worldwide since time immemorial.

Thus, when one looks at collective systems of representation (that existed before modern science), principles that underpin religion, art, morality, and medicine are related to each other to form a cultural unity. This ensures the coherence of the different domains of experience and knowledge.

Renowned historian of religious ideas Mircea Eliade, for example, states that *"water symbolizes all potential: it is the fons et origo, the source of all possible existence… water symbolizes the first substance from which all forms came and to which they will return"* (Eliade, 1979: 188). These aspects are addressed by religious texts from all over the world. The famous Sanskrit text *Mahabharata* (XII.83-4), cited by Tvedt and Ostigard (2010: 1), summarizes the essence of water: *"The creator first produced water for the maintenance of life among human beings. Water enriches life and its absence destroys all creatures and plant life."*

Greek theorist Thales of Miletus – the first to establish systematic thought based on rational foundations (circa 625 B.C.-558 B.C.), thus inaugurating the philosophical lineage of the pre-Socratics – used his knowledge of Egyptian mathematics and Babylonian astronomy, as well as his skill as a merchant, to state that the origin of all things was in the element water: when dense, it is solid; when heated, it turns into steam, which, when cooled, returns to the liquid state, thus ensuring the continuity of the cycle. In this eternal movement, new forms of life and evolution would develop little by little, originating all existing things (Dessertine, 1998).

Images and ideas about water have been central in stories such as "end of the world" narratives from rituals and rites of passage. Water also inspires scientific theories about the creation and evolution of life and is a seemingly endless reservoir for metaphors in languages all over the world. So why has so little attention been given to reconstructing its history and complexity as a metaphor for civilization?

The same has occurred with our (Western) perspective of water. The nature of water as a relevant research topic has often been neglected or dismissed by social sciences. Or, to be more precise, it is a topic that social sciences seems to find difficult to understand and deal with unless reduced to, or treated as, a strictly social issue. The dominant tradition can be traced back to the "father of sociology" Émile Durkheim (1858-1917), one of the most influential thinkers in social sciences. Durkheim clearly stressed what the task of a social scientist should be: "one social fact" can and should only be explained by another social fact – and only based on the dichotomy between "nature" and "society" can sociology be treated as a distinct and autonomous discipline. Water as a social fact - and not only as physical nature or a historical agent in its own right - should be social scientists' object of study.

This separation between nature and society – and the subsequent delimitation of the investigation of a social object – has been reinforced by highly influential theories of history and modernity over the last 200 years. Development has been historically regarded as a process through which humanity is liberated from nature or its power. Nature has also been understood as the opposite of freedom; instead, human mastery has been considered a criterion for development (Tvedt and Jakobsson, 2006). The separation of nature from culture and society was a prerequisite for nature to be used instrumentally as a set of passive objects to be exploited.

When hydrology – as science of the occurrence, movement, and properties of water over and under the land areas of the Earth in relation to the global circulation of water – was founded in the late 17th century, river flow and groundwater were quantitatively demonstrated to be generated by precipitation falling on the watershed. This new knowledge led to a change in ideas about water and had a far-reaching influence on how water was measured and controlled.

The second half of the 19th century saw the apogee of scientism to which this fracture between nature and society led. It rendered the "controllable" and the "measurable" the only legitimate sources of knowledge. However, it is quite surprising to observe that this concept has survived to the present day, even though the discoveries of quantum physics have been radically challenging its premises since the beginning of the 20th century.

What is certain is that, as Tvedt and Terje Ostigard (2010) point out, water possesses several characteristic peculiarities that no other natural element does. It is well known, for example, that all living things, plants, animals, as well as the cycle of life itself, are sustained by the movement of water, and that water is the most common of liquids – but that it can also have unusual characteristics, since it expands when heated and when frozen.

Moreover, water is empirically and theoretically interesting in that it is a natural element and a social factor at the same time. Water is H_2O in nature, in remote waterfalls, just as in society. It flows from faucets and toilets and is the subject of modern policies regulating water resources and controlling mega-projects. Thus, in its very existence, it challenges the dominant, rigid, dichotomous distinction between society and nature imposed from the 17th century on (Tvedt and Terje Ostigard, 2010). It does this in an authentic way that also sheds new light on theoretical and conceptual attempts to overcome this dichotomy. Water is a unique natural element, because its character and substance are not changed by becoming socialized as other natural resources are. Human beings have woven webs of meaning around water (Geertz, 1973) in a way that no other element can equal.

The way water flows in society and is socialized without changing its natural, chemical, and physical character makes the nature-culture divide – and the way water has been portrayed – not only fruitless, but also irrelevant and limiting. The fact that water has a physical, natural and social character undermines the formal, disciplinary sciences that are restricted to the academic sphere – and confirms its potential as a source, or a reservoir, of new questions and new perspectives for many other fields.

It is no chance that a physicist was the one to propose overcoming the schizophrenia that has characterized our culture for over three centuries. Basarab Nicolescu invites us to a true cultural paradigm shift, capable of responding to the urgent need to refound a unity of knowledge and overcome the dichotomy between nature and society. Presently, an agreement between expertise and perspectives creates a kaleidoscope in the holistic understanding of the element water – of its structure, dynamics, functionality and governance. This knowledge is based on ternary logic, which recognizes the included environment as a universe of possibilities – as an open system that interacts with uncertainties and respects diversity and differences, and that values diverse knowledge as well.

The Transdisciplinary Dimension of Water

Water is a transdisciplinary element in itself. It interconnects, unites, separates, adapts and is present in nature in different states, forms and organisms. Water inspires the opportunity to refound a unity of knowledge that is crucial to establishing a healthier and more sustainable way of life on Earth.

As well as a resource or an input, water is the element that makes up planet Earth's biosphere, and that integrates ecosystems and provides the necessary conditions for life. Life only exists where there is water. Water is part of the planet's body and of all the life forms that inhabit it. The health of water is the health of ecosystems and all beings. The presence of water alters and is altered by the atmosphere, the climate, and life forms, especially human life.

Absolutely essential to the development of life, despite looking like an ordinary molecule, water is a complex fluid that should not be underestimated. It harbors 72 anomalies – physical and chemical properties that make it very different from other materials – and these can be the basis for technological advances (Barbosa, 2015). Thus, greater knowledge of the molecular structure of water can bring incalculable benefits. The application of a transdisciplinary approach to explore the molecular

WATER

structure of water has provided a fertile field for new scientific and socio-economic potentialities and is a promise of other practical benefits of water for humankind.

The relationship and multiple interactions between human societies and the element water make up a complex and challenging system. As Nicolescu reminds us, it is so important that it can hardly be reduced to something that is merely measurable. In Brazil, for example, where water is a public good belonging to all Brazilians, its ecological, social, cultural, and economic functions are formally recognized by the national water policy.

Planning and managing water are significant challenges. For example, starting from the characterization of a particular hydrographic basin, one must consider its essential functions and its multiple, decentralized and inclusive use. Like Brazil, a continental country's socio-cultural and environmental diversity create a cultural, geographical, social, economic, and, above all, ecological mosaic that forces us to get out of a reductionist and simplified vision of water, as usually seen in the scientific mainstream.

Therefore, the construction of water governance is complex and points to uncertainties and challenges for technicians, researchers, managers and members of the hydrographic basin committees and other instances of the Water Resources Management System in Brazil. Uncertainties that go far beyond the need to control and measure a water resource emerge from climate, sanitary and environmental changes and the interfaces with other public policies concerning land use, sanitation, environmental conservation, agriculture, industry, traditional peoples, and communities, and many others.

As highlighted by Rittel and Weber (1973), complex and chronic problems, such as the socio-environmental ones, especially in times of climate and health crisis, no longer allow thinking of complex issues in binary or fragmented terms. The "modern," disciplinary and ultra-specialized science born in the 16th and 17th centuries, which remains loyal to the word "analyze" in its most elementary Greek origin (as a synonym of dissolution, a division into parts to understand the whole), can no longer cope with today's challenges. Planetary collapse is imminent, and the world population is increasingly suffering from hunger, malnutrition, and water stress (FAO, 2020).

A holistic analysis of the governance of commons and water, linking ecological, environmental, social, cultural, economic, political and legal issues, is required. In his Manifesto for Transdisciplinarity, Nicolescu proposes the profile of transdisciplinary action as one capable of establishing relationships and interactions with *openness, rigor, and tolerance*. This is openness to diversity, ethical and scientific rigor, and tolerance with a view to understanding and respecting differences (Nicolescu, 1999).

Based on the concept proposed by Piaget for Transdisciplinarity, Nicolescu structures transdisciplinarity from three pillars: the *complexity theory*, the *ternary Logic,* and the *levels of reality.* In this conception, the idea of the *Sacred* is presented in a preliminary form, as the space of non-resistance in which one can transit, enabling transdisciplinary interactions.
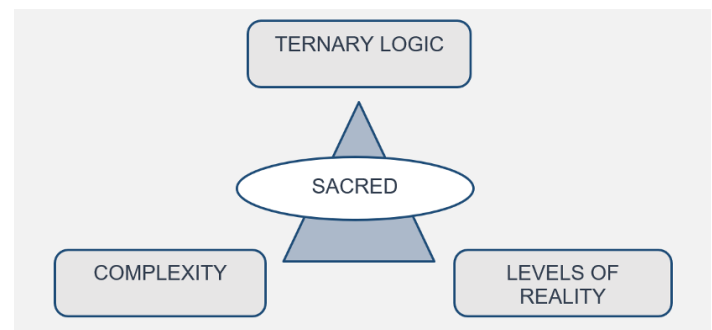

Figure 1: Piaget's Conceptual Model of Transdisciplinarity, prepared for this article.

The reality levels proposed by Nicolescu comprise the recognition and distinction of these levels from the differentiation of the laws that govern each of them. The macro-physical, micro-physical, or quantum dimensions are examples of these levels. Each level operates with specific laws that must be understood at other levels.

This concept can also be understood in the relation between Subject & Object – or even between Subjects. Considering that each subject has its subjectivity or psychic reality, one can consider that its relationship with the object is interdependent, unique and mutually transforming. So, too, is the relationship between subjects. So, there are as many levels of perception of reality as there are subjects, with their subjectivities and realities. This understanding helps respect differences and diversities, such as the social, cultural, religious and cognitive. Thus, it contributes to social processes that involve inclusion,

respect and appreciation of diverse knowledge and ways of life in the relationship, planning, and governance of territory, common goods, and water.

On the other hand, ternary logic transcends binary logic (0 or 1), including the universe of possibilities that exists in and from this interval. There are infinite numerical possibilities between zero and one, which offer a field of opportunities for mediation or the collective construction of knowledge, pacts, and collaborative and cooperative processes. The ternary logic demonstrates that between apparently irreconcilable polarities and controversies, such as opposing development models, it is possible to find a mediating path in which polarities recognize each other, maintaining the integrity and security of their unity.

This included middle is the middle of possibilities for interaction, cooperative action and collective intelligence. This logic proposes the transition between two levels of reality, valuing the included middle as an opportunity to meet between these levels, maintaining the integrity of each level of reality while offering new perspectives of expansion from the multiple interactions with other levels. This dynamic, methodologically worked, offers infinite possibilities and opportunities for the collective construction of cooperative paths that value diversity and respect differences. These paths are fundamental for constructing governance systems of territories and common goods that are shared by multiple worldviews. Even using other words, this was the axiom of Elinor Ostrom, who won the Nobel Prize in economics by explaining that there is a way to overcome the "drama of the commons" and generate common goods such as water in a harmonious, respectful, inclusive and sustainable way.

In effect, Ostrom's theories revisited some of the paradigms to which researchers clung most strongly in the late 1960s and early 1970s. Two clear cases of resource management scholars - Garret Hardin (1968) and Donella Meadows and collaborators (1972) - sounded the alarm. The first is about the irrational and careless use of resources to which it is difficult, if not impossible, to deny access (Hardin, 1968); and the second is about the impossibility of unlimited population growth since the resources to sustain human, animal and plant life on the planet are running out (Meadows *et al*. 1972). It was undoubtedly valuable that these researchers reminded us that indiscriminate access to and use of a resource to the point of depletion could lead entire societies to critical shortages of goods and services.

Contrary to what was thought 45 years ago, one does not always find an absolute depletion of resources, even in unrestricted or difficult to restrict access to water. In these cases, these are self-managed communities with appropriate rules, values and norms (not always formal) for the governance of the commons. Ostrom and her collaborators focused on these types of cases. As the author demonstrated in her 1990 book, it is possible to find communities in which common-use resources are held and preserved in common.

The explanation for this sustainable and participative management as identified by Ostrom can be traced to the third pillar of transdisciplinarity: the complexity, which proposes the development of an episteme capable of recognizing the different levels of realities and their multiple interactions. Complex thinking transcends classical thinking, or, as Ostrom would say, it transcends the strictly economic rationality based on the search for profit maximization. It conceives itself as an open system, which interacts with uncertainties and with the simultaneous transformations of the levels of reality, generating an interactive, dynamic system capable of renewing itself successively, infinitely.

From the complex episteme, it is possible to perceive the dimensions of the complexity of a territory, a biome, a watershed, the water dynamics of a region, the human occupation of the territory, a community that successfully manages everyday use of resources, public policies, social and institutional networks etc. With all this, it is possible to articulate these dimensions to establish interactions with a view to the effectiveness of a more sustainable human coexistence with the planet.

Morin presents Complexity as "Complex Thinking, a Thinking that Thinks" – and proposes seven guiding principles for thinking about Complexity (Morin, 2000):

1. Systemic or organizational: that links knowledge of the parts to knowledge of the whole;

2. Hologrammatic: in which the part is in the whole and the whole is in the part;

3. Retroactive circle: for the understanding of the self-regulatory processes of autonomy of living systems;

4. Recursive circle: which achieves self-production and self-organization - individuals produce society by their interactions, and society, as it emerges, produces the humanity of these individuals by bringing them language and culture;

5. Self-eco-organization: autonomy and dependence - permanent regeneration - Living from death and dying from life – Heraclitus;

6. Dialogic that unites two antagonistic principles in the same reality - coexisting without excluding; and

7. Reintroducing the subject of knowledge into all knowledge: All knowledge is a reconstruction/ translation by a spirit/brain in a given culture and time – regeneration and contextualization.

Table 1. Guiding principles for thinking about complexity (adapted from Morin, 2000).

Within this promising and challenging episteme, transdisciplinarity brings the opportunity to form new ways of perceiving, thinking, understanding, being and acting in the world. Along with the emergence of this episteme, the idea of the Sacred also emerges. Thus, transdisciplinarity brings the idea of the sacred into dialogue with other fields of knowledge and science (Palavizini, 2005).

In research, while disciplinarity is dedicated to looking at an object from an analytical or ultra-specialized perspective, multidisciplinarity brings together different points of view, from different disciplinary subjects, about the same study theme, without integration among these perspectives. On the other hand, interdisciplinarity proposes interaction, integration, and collaboration between the disciplinary views for an integrated reading of the object performed by another subject.

Transdisciplinary research requires the mutual existence of disciplinarity, multidisciplinarity, and interdisciplinarity, distinguished by the dialogue of knowledge beyond the scientific disciplinary universe, including philosophical, religious, traditional and popular knowledge.

Transdisciplinary research and transdisciplinary pedago-gy propose a reciprocal relationship between subject and object, in which the valorization of disciplinary knowledge interacts with the issues and their knowledge involved in the process, establishing with them a field of dialogue and new understanding arising from the exchange between this diversity.

The Water Governance Dimension

Recognizing the scientific and technological advances and the knowledge produced on water: its dynamics, cycle, and relationship with life and the biosphere, including the most recent research on the nanostructure of water, there are many challenges to achieving a healthy and sustainable way of living with ecosystems and, in particular, with water. It is clear that, just as the continuous advancement of science and research is fundamental, self-education and personal and cultural self-transformation for a new way of perceiving and living with water are indispensable. From this perspective, three issues are highlighted here.

The first question concerns the importance of the engagement of people, collectives, and institutions that make up the social dynamics of a given territory, as Ostrom (1990) has pointed out. All planning is only effective when it is practiced in everyday life, and this requires the engagement of citizens and their collective forms of action in the governance of the place where they live. Besides the engagement of individuals, groups, and institutions, there is also the challenge of relationships and interactions between people and institutions to establish networks capable of acting cooperatively towards a common goal. These networks of interactions between people, collectives and institutions, operating towards a common mission, are called social connectivity.

The second issue arises from a set of public policies that act by sectors, ignoring or disregarding the necessary interactions for their operation in the territory, such as municipalities, conservation units, watersheds, or other territorial units defined in public policies. Both the land use and occupation policy, and the biodiversity conservation and conservation units' policy, or even the water management – surface and underground water resources policy, among many others - all require fundamental interactions in their planning, as well as in the construction of an integrated governance system to achieve adequate local implementation.

The third issue refers to the participatory planning and governance process involving diverse knowledge, perceptions, and worldviews, with different levels of knowledge and experience about reality. Carrying out participatory planning and governance processes with a view to sustainable water governance requires valuing the diversity of knowledge, the expansion and exchange of knowledge among those who participate, and the construction of a dynamic governance system, made of successive dialogues and pacts, and committed to sustainability.

Keeping these issues on the horizon and transdisciplinarity as an opportunity to develop a science capable of relating complex thinking, with the levels of reality produced by psychic and cultural diversities – and also with ternary logic contributing to the processes of interaction and mediation of these levels of reality – the idea of Transdisciplinary Governance proposes a path that relates the following: planning, management, education, and communication, alongside the participation of society as transversal and transdisciplinary (Palavizini, 2012).

Transdisciplinary Governance presents interactive planning, which, in turn, considers multidimensionality: an ensemble of ecological/environmental, social/cultural, economic/technological, political/legal, urban/spatial fields, as well as the culture-produced levels of reality, and the psychic subjectivities of people. It proposes dialogue and the exchange of knowledge about this territory and water and natural wealth – also considering the collective construction of diagnoses, scenarios, strategies and shared visions of the future.

The transdisciplinarity management that is built from this conception considers understanding organizational social systems and their public policies – creating networks with dynamic, cooperative, and reciprocal interactions, and valuing the inclusion of diversity and its social, cultural, and economic aspects.

Finally, to broaden knowledge in the participatory processes and motivate people towards sustainability, the concept proposes *Education for Sustainability*, in which environmental education is a qualifier and includes management education and technological education as formative strategies in planning and governance of water and territory.

In an attempt to radicalize the perspective brought by Transdisciplinary Governance, some questions persist in the quest for the heart of the matter. How can we contribute to the transformation of human beings so that, in addition to knowing and understanding, they may become self-educated and self-transformed to be and live a sustainable life? How can we broaden our perception to recognize and interact with new knowledge without feeling threatened by it? How do we develop a sensitive and complex perception of the world, capable of enhancing senses and daring to interact with uncertainties? How can we be open to the unknown and improbable without fear? How do we launch into an adventure capable of changing the way we see and act in the world while maintaining sanity and discernment? How can we look at water and perceive it as life that reacts to physical interferences? How can we realize that our ideas and perceptions about reality are in permanent change and evolution?

In the debate about the underlying mechanisms and the potential effects of structured water on different fields, it is understood that transdisciplinarity exists and contributes to governance and decision-making. Here, however, disciplinarity, multidisciplinarity, and interdisciplinarity must overlap. All dimensions must exist together simultaneously, respectfully, and inclusively (Litre *et al*. 2022; Bursztyn *et al*. 2016). In the same way, binary logic is recognized as fundamental to science and life as the ternary or even the quaternary logics. Therefore, it is proposed that we can include new perceptions, perspectives, and paradigms without needing to deny other fields of science and knowledge. By integrating a new vision, it is possible to change oneself, relationships, and ways of living and coexisting in the world. Transdisciplinarity opens up a different way of perceiving and producing science. As a metaphor for transdisciplinarity, water demonstrates that there are innovative ways of knowing and enjoying water in a healthy, safe, and preserved way.

Many have been invited to join this adventure. In *Science with Consciousness*, Morin (2000) invites humanity to the freedom to think from its ethics. Ilya Prigoginie (1996) announces the end of certainties and launches the challenge for a new, humbler science open to evidence and different visions of the world. Thomas Khun (2003) calls for the courage of scientists to pull from under the rug the hidden non-conformities of classical science, courageously taking on new paradigms. Many others have issued invitations and challenges. Here we are launching an invitation to the reader: to discover water in all its dimensions and possibilities and reveal it to people, from

its visible to its subtle meanings, significance and potential for transformation.

Discussion With Reviewers (DWR)

Reviewer: In my opinion, the discussion on water governance proposed in the article highlights the role of subjectivities that interact in participatory planning, but omits the political dimension, a fundamental aspect in the interactions of subjectivities in collective spaces. I ask: how do the authors perceive the political dimension of governance in the deliberations, conflicts and consensus present in the management and planning of river basin committees in Brazil?

Authors: The political dimension of water governance in Brazil has an important legal contribution to the decentralized management of water, carried out through the hydrographic basin committees (CBH), the water resources councils (national and state) and the Water Resources Management System (SINGRH) itself. However, even though the CBHs are tripartite, with the participation of public authorities, water users and organized civil society communities and entities, their effectiveness as an instrument of water governance in the basin still requires a long journey. It is necessary to increase the capillarity of the CBH in the basin and promote effective conditions for the involvement and participation of society, with a view to guaranteeing multiple uses and respect for the different ways and communities that depend on water.

Reviewer: With respect to the thesis, antithesis and synthesis dialectic postulate, what is the fundamental difference of ternary logic when proposing A, not A and included middle, that is at the same time A and non- A?

Authors: The dialectic postulate proposes that synthesis arises out of the tension in opposition between the thesis and antithesis, affirming itself in unilateral positioning, either confirming the thesis or the antithesis. When one side is confirmed, the other is denied, making it impossible for the two sides to coexist. The ternary logic, of the included middle, proposes, in place of the synthesis, a dimension T, which represents the third included between the polarities. This dimension T does not deny any of the polarities (A and Not A) but contains something of each polarity by presenting itself as something new. An opportune field of encounter, which allows the coexistence of polarities (A and Not A), as an opportunity for mediation.

Reviewer: How can education for peace, that considers the logic of the included third party, contribute to the sharing of water in a society marked by inequality in a climate change scenario?

Authors: In a scenario of scarcity of drinking water and climate changes that may worsen it, there will either be room for dialogue and understanding, or there will be room for war. Education for peace proposes a critical education, based on principles and values of respect for human beings and all communities of life on Earth. The peace proposed in this education is based on dialogue and listening to the other, on respect for differences and on the understanding that everything and everyone is part of the planetary system. Education for peace is the hope of forming human beings who are aware of their planetary citizenship, of their ecological condition and one with the planet and respectful of life.

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