THE BREATH PROJECT

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ABSTRACT

The Breath Project is a public art, ecology and technology project. It is intended to create a new model for peace-as-process by connecting the physical experience of an individual breathing in one location, with direct impact on the environment of a distant other, underlining the true interdependence of all living beings. The core of the project is the pairing of two locations that connects the somatic experience of an individual with functioning ecological restoration. Environmental science in combination with art and technology is a means to make things happen. Recognizing the urgency to create change, artists are integrating art processes into daily life. New cultural practices indicate new social orders – ways of life that emphasize participation, challenge power structures and span disciplines ranging from ecology to community engagement, visual arts to scientific innovation. This project that will bring recognition and response to the urgent need for respectful cooperation between conflicting values and beliefs at a time of critical social and environmental crisis.

INTRODUCTION

As the demand for water reaches the limits of finite supply, ecological resources have become victims in conflicts among nations that share trans-boundary freshwater reserves. In recent years, numerous networks in the international community have formally engaged with local and global environmental groups, becoming fervent champions for the rehabilitation of the world's natural heritage. As climate change, water scarcity and other ecological challenges grow in complexity and urgency environmental stewardship is a key mandate of the UN and other global leadership organizations.

Air, water and energy requirements modify the way in which we may consider the authority of nations, the control of borders and the restructuring of global interdependence. Political theorist Julie Mostov describes this complexity in a world of transnational borders: "*While boundaries are regularly and easily traversed today by capital, electronic information, a wide class of goods, environmental hazards and certain categories of people (privileged passport holders and traffickers), other categories of people ..[and resources] are held hostage within the hard borders of "home" states or blocked at the hard borders of potential "hosts." Today's global economic space of interdependence is one of deep cleavages, severe inequality and new spatial, scalar and temporal articulations of social relations and political association.*" [1] The call for what is referred to as "soft borders" is based on the idea that softening borders encourages sustainable resolutions to ethno-national conflicts, economic and social development , problems that do not live separately from the issues of ecological resources. The idea of soft-borders is also a moral consideration, as it is impossible "*not to place this discussion of significantly different international and domestic relations within a larger discussion of global justice.*" [2] Rethinking these relationships is a necessary response to a new kind of "*sustainable and beneficial relationship between human and non-human beings and their environments.*" [3] This challenge becomes even more formidable in conflict regions. The fragility, scarcity and degradation of contested natural resources have "*encouraged states to engage in trade-offs in which they agree to accept some limitations on their sovereignty (in the form of international regulations) for expected benefits.*" [4] It also demonstrates the ability for the notion of sovereignty to become adaptive.

The purpose of *The Breath Project* is to reveal the global interdependence of everyone. This work is critically urgent. If conflicting communities and cultures are able to carve out pathways to ecological restoration along divided resources, these can be pathways for sharing in other capacities. The installation will demonstrate the ability of the shared action of breathing to have a remediating influence upon the environment, while creating new alliances through alternative, public collaboration.

The Breath Project was inspired by a conversation about the potential for a public art project to act on the critical responsibility to set new paradigms for peace-as-process. It was conceived as a creative nexus for addressing issues of joint resources among conflicting cultures and in response to the volatile inter-religious hatred and mistrust that intensifies stress on waning desert water resources. We are bringing together aspects that are usually treated in isolation – connecting practical-on-the-ground work in a socio-political/environmental axis, with creatively applied informatics. Shared data represents the physical characteristics (temperature, humidity etc.) of shared resources – emphasizing the cyclical continuity in the environment surrounding us. Our collaboration brings the potential for remediating scarce and polluted water resources into a whole system of activities that embrace a wide range of aesthetics and beliefs as the basis for peace processes.

THEORIES OF ECOLOGY

Disparate arenas of study and practice regarding the environment are emerging, that are rethinking relationships between human and ecological systems. Spiritual ecology has emerged as a developing field that joins ecology and environmentalism with the awareness of the sacred within creation. This movement acknowledges the critical need to recognize and address the spiritual dynamics at the root of environmental degradation.

In his pioneering concept of Social Ecology Murray Bookchin, takes a different tack and roots environmental degradation in

social structure. "*More specifically, Bookchin argues, that the domination of nature follows from the domination of human to human as found in certain kinds of hierarchical and oppressive social arrangements.*" [5] Taken further, he writes, "ecological degradation is, in great part, a product of the degradation of human beings by hunger, material insecurity, class rule, hierarchical domination, patriarchy, ethnic discrimination and competition." [6]

Felix Guattari, in his seminal essay, *The Three Ecologies* (2000) argues that "T*he only true response to the ecological crisis is on a global scale, provided that it brings about an authentic political, social and cultural revolution, reshaping the objectives of the production of both material and immaterial assets.*" [7] Guattari proposes that the shared nature of the environment that we live in and the collective impact on it such as anthropogenic climate change, reveal the extent of the commons on which we ultimately depend. Guattari was a psychoanalyst, post-structuralist philosopher (often collaborating with Gilles Deleuze) and political activist, who called for global resistance to what he described as 'Integrated World Capitalism,' a psycho-sociology of power and liberation. He perceived that the transformation created by the waning division between the capitalist West and the communist East was leading to the installation of corresponding technologies organizational forms and 'models of desire' across the globe. In the opening lines of 'Integrated World Capitalism and the Molecular Revolution' (1981), he writes: "*Contemporary capitalism can be defined as integrated world capitalism, because it tends toward a state where no human activity on the planet can escape it. It can be considered to have already colonized all the planet's surfaces, so that the essential aspect of its expression now concerns the new activities that it seeks to overcode and control.*" [8]

Guattari speaks of "*a globalization of the division of labor, a general capture of all the modes of activity, including those not formally covered by the economic definition of labor.*" Informatics is a driving force in the establishment of this totally capitalized world system: "*The computer revolution considerably accelerates the process of integration, which also spills over into unconscious subjectivity, both individual and social. This machinic-semiotic integration of human labor implies that the mental models of each worker must be taken into account in the productive process: not just their knowledge (or what some economists call their "knowledge capital"), but all their systems of interaction with society and the machinic environment.*" [9] By Guattari's description, the capitalist production system extends to global dimensions, while at the same time intensifying its grip over humanity to the point of charting out detailed mental models and interaction routines, not only for classes, ethnicities, income groups and local populations, but also for the most intimate behaviors of individuals. [10]

More than ever, the theory of an absolute global system highlights the necessity for soft-border associations as a counterpart to Guattari's call for resistance to totalizing global systems. It builds

institutions of political association that evolve out of local stakeholder's needs to manage the use of resources, question the provision of public goods (including systems of taxation and compliance) and [...] checks abuses of power linked to global economic practices and the impact of global externalities (resource depletion, environmental degradation and trafficking). [11]

Environmental peacemaking, which supports a soft-border model, is based on the principal that a common dependency on natural resources and a healthy environment can assist and accelerate cooperation between societies and nations. Following the path of nature to create new forms of human circulation, environmental peace-building draws upon three foundations - economic sustainability, socio-cultural sustainability and ecological sustainability. "*Cross-border environmental cooperation integrates the processes of economic and socio-cultural development where societies benefit mutually from the common management of shared resources.*" Beyond this, environmental co-operation provides a platform for intercultural dialogue that "*enables a process of trust building.*" [12]

PROJECT DESCRIPTION

The Breath project consists of a transportable interactive installation that connects to a water restoration project that will beneficially impact water resources and the communities that share them. The core of the project is the pairing of two locations that connects the somatic experience of an individual in one location with functioning ecological restoration in a distant other, underlining the true interdependence of all living beings. A constant stream of digital data that is collected at both locations by environmental sensor systems translates these concepts into the realm of cyber-physical systems. This data will invisibly drive pictures and sounds projected in the installation that are drawn from the places and communities involved.

GEOGRAPHY

The axis between The Hague, known as the international city of justice and the Jordan River Valley, rich with the history of Christianity, Judaism and Islam, balances the meanings of justice and faith embedded in the project. The Hague symbolically anchors the peacemaking and unifying intentions of the design in relationship to the Jordan River Basin, known as the Fertile Crescent of ancient times. Civilization began in this region, giving birth to technological innovations such as writing, glass, the wheel and the use of irrigation. Rivers have often been construed as the natural borders of states and countries. Yet, rivers can equally be considered places of connection, where the flowing water brings its two banks together. Rivers are associated with the origin and formation of the cosmos and with the ethnographic organization of people.

The Jordan River and Basin is the ecological nexus of three continents: Asia, Africa and Europe and the center of a wetland ecosystem that is the biological heart of the region. In addition to

the importance of the native plants and wildlife, the wind patterns of the region can be tracked through the flight pattern of over five hundred species of migratory birds.

Water politics in the Jordan River basin are extraordinarily complex and include competing claims over water usage, access and problems of salinity and pollution. The river is under enormous threat from excessive water diversion. Ninety-six percent of its fresh water is redirected and the area has been the dumping ground for untreated sewage. Since the early 20th century, numerous attempts to foster cooperation between the countries bordering the banks of the Jordan River have been hampered by regional political conflict. In addition, recent political upheaval in Syria and Iraq has generated almost six million refugees who have fled the conflicts; many of them settling in arid and water-impoverished Jordan, a country of slightly fewer than 6.5 million citizens. The ongoing chaos and fast-increasing mass of refugees needing water has stretched the Jordan River's already diminished resources to an unprecedented low. [13] In partnership with the tri-lateral organization EcoPeace Middle East, we have selected three locations in the Lower Jordan River Basin for our ecological interventions. These interventions will enhance water resources and directly benefit the communities that share them. *The Breath Project* is developed in line with the efforts of EcoPeace Middle East to support its effort to advance both sustainable regional development and create the necessary conditions for lasting peace in the region.

RECENT ART CONTEXT

Artists have been operating in the ecological arena since the Land Art movements of the 1960's and 70's. While land artists such as Michael Heizer, Robert Morris and Robert Smithson were treating the earth as a sculptural medium, other artists such as Helen and Newton Harrison, Agnes Denes, Joseph Beuys and Hans Haacke among others, had very different goals - where their notion of "aesthetics" expanded to restoring the earth. These and other artists saw the necessity of approaching ecological issues systemically. Working with biological ecosystems demanded cross-disciplinary collaborations with biologists, geologists and engineers. Some artists (Haake, Beuys and Peter Fend) saw the ultimate necessity of enlarging the systemic context to include the political, social and cultural contexts. The work of these pioneers burgeoned in the 80s with artists such as Mel Chin, Pat Johanson, Viet Ngo and with many others, who over the past three decades, have focused on ecosystem restoration through soil and water remediation, mine reclamation, habitat restoration and sustainable agricultural practices along with their links to environmental justice and political policy.

Since the 90s, some ecological artists have employed strategies similar to current trends in 'relational practices' that center around human exchange and social context and social interventions (Platform, Superflex, Jackie Brookner, Susan Steinman, Future Farmers and many more). These artists engage with communities

and the complex social contexts of shared water, air, soil and solar energy. In contrast with current trends of artistic nomadism in the global art market, ecological art practice, as distinct from the more general theme 'environmental art,' is often sustained for long periods of time in the locations in which it occurs. [14]

In the Middle East, noted Israeli artist Shai Zakai, created the *Concrete Flags* project, barrier flags made from excess construction cement poured into a creek near Beit Shemesh, Israel. The flags were made in cookie cutter shapes and set into the stream, calling attention to the ongoing pollution issue and helping to raise money for clean up efforts to remove cement debris from the creek bed. Her work through the ecoart group that she has established focuses on 'Artivism' as art and ecological activism. Artists in the digital arena have also been addressing ecological and environmental issues, often through sound art and data sonification. It is important to mention the work of Andrea Polli and her work on sound, data and the visualization of air. Although her work does not work on the remediation of air, the aesthetics of her work raise awareness about the environment in critical ways. Similarly, Ned Kahn's work as an environmental artist and sculptor captures the invisible aspects of air in order to make it visible in exquisite ways.

Many artists have been working in the realm of border politics with focus on the implications on shared resources. Artists working along the US/Mexican border have developed projects that provide a potent example of the provocation of cross/border issues. Electronic Disturbance Theater, with their project *The Trans-Border Immigrant Tool*, illustrate the power of the performative "disturbance" of GPS technologies in a mobile phone programmed to lead illegal immigrants to stored water reserves, while providing poetry as spiritual nourishment along the way. Ricardo Dominguez, a co-founder of ETB, calls the work of electronic civil disobedience, 'Artivism,' a practice that grew out his earlier work with Critical Art Ensemble. On a different border, Paparudo, was a public performance by the artist, Monsiuer Moo, as a re-enactment of a 1946 seeding of the clouds with water along the Canada/US border. During a drought, the US introduced water into the clouds along the border and Canada complained that they were deprived of rain by their American neighbors. After this event, under the mandate of the UN, Canada sanctioned the R.Q.c.P-43.r1 treaty legislating control of the artificial creation of rain in North America. [15]

CONCLUSION

As global climate change becomes more than critically urgent, the systemic entanglements among the oil economy, current wars, contaminated air and ever scarcer and more polluted water resources around the world, are clearly revealed. Engaging with environmental peace-as-process demands new partnerships. Art in collaboration with environmental science, technology and organizations that are dedicated to peace processes is a means to make things happen. These practices indicate the necessity

for less segregated approaches to problem solving – new aesthetic paradigms, that emphasize participation, challenge power structures and span disciplines ranging from ecology to community engagement, from visual arts and scientific innovation to activism.

CORE TEAM BIO

The core team of *The Breath Project* is made up of Hana Iverson, a media artist whose work with video and public installation is combined with a focus on mobile art, locative technologies and collaborative community projects; Ecological artist Jackie Brookner, whose work brings plant-based water remediation for parks, rivers and wetlands together with habitat restoration, landscape sculpture and active community collaboration; and Dr. Pramod Abichandani, an electrical and computer engineer whose research interests are centered around data-driven decision-making based on mathematical programming, linear and nonlinear systems theory, statistics and machine learning.

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