

Balance-Unbalance: The art of living in the physical world.

Balance-Unbalance: el arte de vivir en el mundo físico.

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Abstract

The fragility of the living being (in general), of us humans (in particular), and the systems that we have been building through millennia, becomes apparent when abruptly, the usual and traditional reality is transformed and collapses. There are individual and collective consequences when the system we trust stops behaving as we wish. One of the initiatives launched aiming to use media art as a catalyst to engendering a deeper awareness and creating lasting intellectual working partnerships to face the many facets of the environmental crisis is the Balance-Unbalance international conference. Balance-Unbalance is a catalyzer where media artists, scientists and experts in emerging technologists meet with NGO leaders, policymakers and motivated citizens to produce positive changes and confront this major challenge. Also, the “art! ∞ climate” contest, developed with the Red Cross Climate Centre, and the EChO network, are described briefly in this introductory text.

Keywords: environmental crisis, media art, transdisciplinarity, culture vs. nature.

Resumen

La fragilidad del ser vivo (en general), de nosotros los humanos (en particular), y de los sistemas que hemos ido construyendo a lo largo de milenios, se pone de manifiesto cuando abruptamente, la realidad habitual se transforma y se derrumba. Hay consecuencias individuales y colectivas cuando el sistema en el que confiamos deja de comportarse como deseamos. Se han puesto en marcha tres iniciativas que proponen utilizar a las media arts como elemento catalizador para generar una conciencia más profunda y crear redes de trabajo que permitan hacer frente a las múltiples facetas de la creciente crisis medioambiental. Uno de ellos, el proyecto internacional Balance-Unbalance, es donde artistas, científicos y expertos en tecnologías emergentes se encuentran con el objetivo común de buscar soluciones a los difíciles desafíos que enfrentamos. También el concurso “arte! ∞ clima”, realizado junto con el Centro del Clima de la Cruz Roja Internacional, y el proyecto ECO, están brevemente descritos en este texto introductorio.

Palabras clave: crisis ambiental, media arts, transdisciplina, cultura vs. naturaleza.

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We seemed to be in balance

When it comes to thinking not only of ourselves but also of what some call the common good, questions arise about what it is, who defines it, how, and when, among other aspects.

It is challenging to recognize fragility. To think that in order for food to reach the supermarket, the necessary events are sometimes dependent on a complexity that is unthinkable for most consumers. That to appreciate a piece of music that we can collectively perceive as being of quality, each instrument needs a history, its performer of years of intellectual and biomechanical training, and the work of a creative composer is of fundamental importance, of course, too. And that for having high-speed Internet at home, the chain of efficient pieces of technology that need to work is not less than astonishing. The individual actions, and the long series of events that eventually lead us to have systems that work to help us, solve problems, and live better, often pose fundamental conceptual issues to us.

The humans' delicacy and the systems that we have been building through millennia become clear when abruptly, the usual and traditional reality is transformed and collapses. There are individual and collective consequences when the system we trust stops behaving as we wish. A health crisis on a planetary scale affects millions of human beings as I am writing these lines. While many people want to return to the previous state, others see what is happening as a turning point that will substantially improve our lives. We can also consider that what is happening puts us all in a unique social and citizen laboratory, more than ever.

The current pandemic is not the only human species challenge, for sure. There are others, such as global changes due to the effects produced by an increasingly complex environmental situation.

An idea to promote and develop activities to help us reflecting and carry out actions focused on improving our relationship with the planet we inhabit was crystallized in 2010. When we need solutions, we look to engineers, doctors, lawyers, physicists, but not composers or sculptors. However, when we try to design a possible future, understanding our present better by studying the past, our ancestors' art and culture are what it mostly remains to understand and learn from them.

The work between experts in different disciplines but with a broad criterion that would allow and facilitate the construction of a transdisciplinary research-creation culture could be a peaceful and, at the same time, a revolutionary path of development, increasingly harmonious. Thus, the Balance-Unbalance (BunB) international project arises to facilitate the meeting between scientists, artists, engineers, experts with varied experiences, and delegates of non-governmental organizations looking for new collaborations to reflect on the future. And we know those reflections need to lead to critical actions since the deadlines are shortening.

Turning point

We are living in a world reaching a critical point. The equilibrium between a healthy environment, the energy our society needs to maintain or improve its usual lifestyle, and the world's interconnected economies have recently passed from a delicate balance to a new reality, where unbalance seems to be the rule.

It is clear now that traditional disaster management approaches are not enough to deal with the current problems and the rising risks. New forms of collaboration are needed to inspire people and organizations to link knowledge with action.

Artists could inspire new explorations and contribute with innovative perspectives and critical thinking to actively participate in solving some of our major challenges, such as the spiralling environmental crisis. We need to develop creative ways to facilitate a paradigm shift toward a sustainable tomorrow. Creative thinking, innovative tools, and transdisciplinary actions could produce perceptual, intellectual and pragmatic changes.

Some of the initiatives that aim to use the media arts as a catalyst, with the intent of generating a deeper awareness and creating lasting intellectual working partnerships to face the many facets of the environmental crisis are: The *Balance-Unbalance* international project, the "art! ∞ climate" contest, and the EChO network.

Balance-Unbalance

The *Balance-Unbalance* international conference project explores [art, science, technology] intersections between nature and society.

The first conference was held in Buenos Aires, Argentina, in 2010 and was hosted by the National University of Tres de Febrero (UNTREF). Papers were delivered by artists, a representative of the National Secretary of Environment and Sustainable Development of Argentina, experts and graduate students from different universities with chemical, agricultural, and environmental engineering backgrounds (some of them specialists in pollution, renewable energies and food technologies), a lawyer, a sociologist, and an astrophysicist, coming from Argentina, Brazil, Canada, and the US [1].

The second Balance-Unbalance was held in 2011 at Concordia University in Montreal, Canada [2]. In 2013, the third edition of *Balance-Unbalance* showed the potential of the actions carried out. The expected catalyzer started to work better each time, and the media arts were helping to lead the way in connecting people, projects, and actions. This time the conference was held at the Noosa Biosphere, an ecological reserve recognized by UNESCO. This biosphere is a dynamic learning laboratory for sustainability in one of Australia's most pristine and diverse environments. An e-book with some of the papers presented at that conference was published and can be downloaded for free [3]. The conference theme: "Future Nature, Future Culture[s]" aimed to challenge our expectations of Earth, provoke our understanding of nature and inspire our actions for a sustainable future. *Balance-Unbalance* proposed that we ask ourselves: "What will we be calling 'nature' in 20, 50 or 100 years? How will we live in the future? How can creativity help us shape a society of understanding and interconnectedness? What role could transdisciplinary thought and action play in reimaging a sustainable future? Our limited knowledge of life can be expanded, but to do so, we need better ways to understand each other. This includes a deeper awareness of how different human societies can comprehend cultural differences and synergies." (from the *Balance-Unbalance* 2013 website) [4]. As in previous editions, [electronic] art was not only part of the papers presented in the form of theoretical analysis and proposals but also a substantial component of the event. Also, in the Noosa Regional Gallery, the Leweton Cultural Group performed traditional music and dance from Vanuatu's endangered islands. We were learning how *Balance-Unbalance* could help to give voice to some of the many underprivileged. The MIT Press has published 15 articles on

research and creation projects presented during this edition on Leonardo, the Journal of the International Society for the Arts, Sciences and Technology, on a special section devoted to *Balance-Unbalance* [5].

The fourth edition of the *Balance-Unbalance* conference was held in 2015, hosted by Arizona State University and its main focus was on "Water, Climate and Place: Reimagining Environments." The subject reflected the particularly relevant circumstances considering the conference's location was in the southwestern desert of the United States [6]. In 2016, *Balance-Unbalance* was hosted by the University of Caldas in Manizales, Colombia. This city is part of the coffee-growing axis and is built in a mountainous region with seismic instability. A rich, changing and challenging environment, with a subtropical highland climate and an average of 1,500 mm of precipitation a year, allowed participants to have a contrasting experience considering the places where the previous conferences were held. The program included scientists, artists, designers, architects, leaders from the program Sonidos de la Tierra (Sounds of the Earth), mixing music education with entrepreneurship, the Land Art Generator Initiative collective, and organizations such as the Red Cross Climate Centre, among many others [7].

The 6th edition of the BunB conference was held in the UK, hosted by Plymouth University in collaboration with the North Devon's UNESCO Biosphere Reserve, Beaford Arts, the Eden Project, and Fulldome UK. A full visit to the Eden Project, a complex dominated by two huge adjoining domes (one of them emulating a rainforest environment, and the other a Mediterranean one) offered an exceptional opportunity for the participants to exchange ideas, also helping to generate a growing sense of community [8].

Balance-Unbalance was held in The Netherlands in 2018 and had its focus on the theme: "New Value Systems - Sustainability and social impact as drivers for value creation." It was hosted by The Patching Zone with activities in V2_Lab for the Unstable Media and the Het Nieuwe Instituut of Rotterdam. With tracks such as: Generating Urban Values, Ecological Impact as Drivers for Value, Creating Value Through Transdisciplinary Learning, Alternative Economies, and Social Impact as Driver for Value Creation, this 7th *Balance-Unbalance* incorporated aspects not explored in other editions [9]. The Proceedings are available online for download from the conference's website [10].

In 2018, the Leonardo journal published a selection of 27 papers from the 4th (2015, USA) and 5th (2016, Colombia) editions of the *Balance-Unbalance* International Conference [11] [12].

The current situation with millions of people isolated and without being vaccinated yet did not stop the problems we had in our world before. Today's difficult and uncertain context has brought a different approach to produce the 8th edition of Balance-Unbalance (BunB 2021), avoiding postponing a new opportunity to induce reflections and produce changes related to our decisions and possibilities regarding the natural environment. This time the conference was held on June 15-18, 2021, as part of PANORAMAS, a large event hosted by the Polytechnic University of Valencia (UPV) from Spain, and jointly organized with this university, Rede Media Lab / BR (UFG, UnB, Unifesspa and PUC-Campinas) and the Balance-Unbalance international network. PANORAMAS brought together the VIII International Symposium on Innovation in Interactive Media (SIIMI) and the 20th International Meeting of Art and Technology (#20.ART) from Brazil, with the 8th Balance-Unbalance (BunB), and it was mostly held online. Also, the PANORAMAS EXP was exhibited in Valencia with sound art and audiovisual works by over 40 artists, projected using a semi-panoramic screen set for immersive videos, focusing on water and climate change as their central theme [13].

As part of the activities proposed by Balance-Unbalance for PANORAMAS, there were a series of presentations on local collective actions distributed around the world, focusing on art-science issues, traditional knowledge discussed with leaders of indigenous peoples, as well as artistic installations focusing on citizen reflection and action. Also, a co-creation workshop on the theme of water; and a round table with artists, scientists and humanitarian workers from Europe, Australia and the Americas, specializing in climate change, sound ecosystems, transportation, astrophysics, education, design, and architecture.

art! ∞ climate

Sometimes projects take their own way. One of the projects that came out of Balance-Unbalance is the *art! ∞ climate* sound-art miniature contest. The Red Cross / Red Crescent Climate Centre, and UNTREF's Electronic Arts Research and Experimentation Centre

(CEIARTE) in Argentina, joined efforts to develop the art! \propto climate contest for the creation of sound miniatures focusing on the environmental crisis and climate-change-related issues.

The Climate Centre's mission is to help address the humanitarian consequences of climate change and extreme weather events. In its efforts to engage people at risk, government agencies, academic institutions and other stakeholders, it has become clear that information is rarely sufficient to trigger behaviour change. As a result, the Climate Centre has been designing and facilitating learning and dialogue methods that involve the brainpower and participants' emotions (such as collaborative workshops, participatory games and short educational films, linking information, decisions and consequences on disaster management).

The *art! \propto climate* contest has two main objectives: a) Provide the Climate Centre with sound-based art material that can support their actions; and b) Improve knowledge about the human dimensions of the environmental crisis and promote awareness about the effects of climate change, both among creative artists and among those exposed to their work.

The categories for the first edition of this contest were: "Mosquitoes" and "Open Theme." The "Mosquitoes" category aimed to support initiatives to raise awareness and better manage the growing risk of malaria, dengue and other mosquito-borne diseases that are showing new regional and seasonal patterns due to changes in rainfall and temperature [14] [15]. The themes for the second contest were "Sea level rise" and "Zero poverty. Zero Emissions. Within one generation" [16] [17]. Those for the third edition were: "Timescales" (about the difference between climate and weather) and "Thresholds" (about Forecast-based Financing and the fund's preparedness actions before a disaster strikes) [18] [19].

All pieces are now available in SoundCloud, both for listening online and downloading, under a Creative Commons license [20].

EChO

EChO focuses on how the media arts have responded to the environmental crisis's challenging problems, looking forward towards an increased role for the media artists. It seeks to

understand how art has served and can further serve as an essential link between science, social science, activism, and policy formation.

ECHO is proposed as a transformational knowledge network to aid the generation of links among similar art-science-technology projects worldwide, empowering and helping them connect with key players (e.g., research groups, humanitarian organizations, policymakers, artists associations, opinion formers, technology innovators, etc.) having interests alike. This project proposes to facilitate the building of links to give power to otherwise unrelated initiatives and actions.

ECHO has been cataloguing and analysing media artists' efforts to represent the causes, nature, extent, and possible solutions to environmental problems ranging from climate change-related issues to hazardous waste disposal, habitat destruction, the introduction of invasive species, and many others. The growing database helps create links between artists' projects and actions, and between artists and other possible partners. The outcomes of EChO will have the potential of converting limited-reach projects with significant potential into something that could influence an international community [21].

Conclusion

Once humanity can go over this pandemic, other significant challenges will probably come, and we need to act as soon as possible.

In this context of global threats: Can the [media] arts and artists help? Everyone has a role in the construction of the future, artists, too. We must search, investigate, reflect, and act. We can create, and we can also invite others to analyze, engage, envision and act. It is not possible to wait longer or to delegate personal responsibilities.

By bringing people from very different sectors of our society to think together and facilitate multi and transdisciplinary collaborative project developments, Balance-Unbalance and its associated initiatives are turning feasible to connect artistic creation and tangible tools for change. Balance-Unbalance has been contributing to make social transformation happen.

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