Transdisciplinary Collaborative Practices in Art, Science and Technology

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Abstract

The present panel seeks to problematize what constitutes transdisciplinary collaborative practices in contemporaneity. We will examine their increasing emergence; their methodologies, their challenges and propositions, and what it means to work jointly and why it is important. The aims of this panel are to open discussion on facillitating creative collaboration between different areas of knowledge; on heightening social inclusion in scientific and technological development; and on stimulating pertinent collective local actions based on transdisciplinary collaborative work. We intend to discuss some practices and methodologies used on the development of an artistic board game about the city of Salvador, Brazil; to describe the alternative forms of financing culture characteristics and explore what they can contribute to fostering the cultural commons, while also pointing to possible developments and new collaborative financing forms that can evolve in the future; and to question how we can really and effectively develop innovative and useful ways to do research and apply our findings having a creative approach. Thus, we look to dialogue based on the multiplicity and diversity of expression inherent in the minor and the socially micro-political which differ from identity posturings that are polarized and proprietary and which serve the interests of totalitarian development models.

Keywords

Collaborative Practices, Transdisciplinarity, Art, Science, Technology, Community, Commons, City, Game Practice, Experimental Transdiscipline.

Introduction

Andreia Machado Oliveira e René Smith

The present panel seeks to problematize what constitutes transdisciplinary collaborative practices in contemporaneity. We will examine their increasing emergence; their methodologies, their challenges and propositions, and what it means to work jointly and why it is important. By incorporating this panel in the *Hybridisation and Purity* subtheme, we focus our concerns on the intersection of practices in art, science and technology.

In order to problematize what constitutes collaborative practices in contemporary art and its transdisciplinary engagements, we adopt a procedural and paradoxical position towards activities which embroil the collective and the singular, the global and the local, or the mental and the embodied. The positional strategies are based on the multiplicity and diversity of expression inherent in the minor and the socially micro-political which differ from identity posturings that are polarized and proprietary and which serve the interests of totalitarian development models.

We propose three issues to be considered: how do methodologies of collaborative practice come about within emergent transdisciplinary relations (often in workshops with shared projects)? how to deal with joint authorship in which the artist/scientific researcher is not the author of the conception of the work, and less of its production, but still consider themselves co-creators along with the communities involved? and how does the documentation, distribution and dissemination of collective techno-aesthetic objects happen?

Aiming to differentiate between the Common and the modern idea of society, we look to mesh with the thought of theorists Gilbert Simondon, Bruno Latour, Antonio Negri and Michael Hardt whose works articulate concepts such as the transindividual, the collective and multitude and direct them to power the Common.

The Common refers to what is not in the public or private domain, but to the dimension of what is common to many. It is not linked to party organizations or established institutions, and does not organize itself spontaneously; it requires routine practices and organizational projects specific to each community and which involve the community—in other words, the common requires the constitution of specific practices proper to each community.

We ask what is the place of art, science and technology in the construction of the Common? How does one participate in the Common, in the transmission of transdisciplinary knowledge, in the dissemination of social experience? How does one position art in terms of producing an aesthetics of plurality and not one of universality?

Thus, the aims of this panel are to open discussion on facillitating creative collaboration between different areas of knowledge; on heightening social inclusion in scientific and technological development; and on stimulating pertinent collective local actions based on transdisciplinary collaborative work. We look to dialogue on how to share processes, not products; share singularities and not identities; produce difference and not more of the same in order to activate the powers of the collective.

From this point of view, this panel looks forward to contributions that enrich the problematization the theme in different ways: on the question of siting of art, science and technology towards the production of the common, author Lenara Verle, raises highly pertinent issues in "Towards a commons financing of art & intellectual commons"; with his focus on transdisciplinary practices, professor Ricardo Dall Farra in "Experimental Transdiscipline", brings previous experiences that think the relation between art and other disciplines; and to examine methodologies of collaborative practices, Karla Brunet discusses the development of an artistic board game in Salvador/Brazil, in "Collaborative game practice and the city". The objective is to generate informed exchange, relevant discussion, and applicable insights that lead us to think together how transdisciplinary collaborative practices are occurring today and how they may be put into action.

Collaborative game practice and the city

Karla Schuch Brunet

This panel intends to discuss some practices and methodologies used on the development of an artistic board game about the city of Salvador, Brazil. Having psychogeography and the art of walking as a starting point, we have produce a collaborative artistic board game. The game is based on the experience of moving through a place, in this case, the city of Salvador, and feeling its environment. It is an art game based on environmental aesthetics, *flâneur* and experiencing the city as art, as a game. It is the *Topophilia* popularized by Yi-Fu Tuan, to appreciate the place, loving it. Unlike a mere contemplation of the place, this project aims to raise issues of mobility, urbanism, environment, aesthetics and pollution. Here we discuss collaboration in three levels, on the creation and development of the game, on its playability - it is a cooperative game – and, on its replicability, anyone can copy the game or create his/her own, we published an open source GDD (Game Design Document) on how to construct one.

First, we had an open call for people interested in developing a game. People from different backgrounds and disciplines showed up to collaborate. They were invited to brainstorm, think about their territory and decide which parts of the city were important to be in the game. Later, we made field trips to these places to collect materials / experiences. The GPS trails of these outputs helped us create the map of the game board. Project participants photographed and drawn objects they found on these paths. These have become counters of the board game. Subsequently, the objects chosen as parts were modeled and printed on a 3D printer. We have competitive-cooperative goals and the movements of a player can deprive or rewards all players. The player in this game will be able to help another player, distribute their winnings, and donate their objects and experiences in the city. Collaboration here is mandatory to win the game.

"*Descaminhar*" is the name of the game. It's about leaving one's way, being a *flâneur*, and wandering. Many board games have the concept of a path, of going in a move. A large number of them have "movement" as the main action. Considering our own geographic spaces, experimental cartography and cognitive maps, we have created the main drawing of the board. At the same time, we thought about the strategies, objectives and problems to be solved during the game, always related to the city of Salvador. The objectives can be individual or collective. And the tasks can be related to enjoying the city, solving a problem, improving the situation or creating an experience.

The game consists of board, cards (challenge, narratives, events and item description), pins, 3D counters, time marker, tokens, and the box along with the manual. The board or modules of the game consists of places of the city of Salvador that need to be unlocked throughout the match. The 3D counters symbolize the items that each player achieves during the match, and the cards guide us to the movements to be made. All the material of *Descaminhar* board game can be download. We also encourage players to create their own board game, about their city or location that interested them.

After having done some game tests in different locations – lab, university, school, and art events – we perceived that this art game is a stimulus to practice and discuss collaborative action. In the beginning of the match, the great majority does not like or understand the cooperative goals. After the match is over, their attitude has changed; they are very open to collaboration. When thinking about environment issues and global warming, art is a great method for raising questions about our place, surroundings and collaborative practices.

Towards a commons financing of art & intellectual commons

Lenara Verle

We have today an artificial scarcity imposed on digital intellectual goods by way of DRM and copyright laws. Copyright evolved historically as a response to reproduction technologies such as the printing press and the phonograph. Since those times, authors faced a balancing act. In order to make a living from the sales of their work, part of the profits should find a way back to them through royalties and copyright practices. But too tight of a control might mean the work would not get distributed widely and therefore miss the opportunity to enrich and develop the culture in its full potential (not to mention the artist him/herself). This dilemma still exists. Art and culture is a type of commons and enclosures in the form of copyright laws harm our collective heritage and our access to this cultural wealth. On the other side, artists and authors need the means to live and produce their work.

Options for alternative forms of financing culture are emerging and being tested, making use of digital and networked technologies available in the present. This panel

aims to describe their characteristics and explore what they can contribute to fostering the cultural commons, while also pointing to possible developments and new collaborative financing forms that can evolve in the future. Some of the structures reviewed are: crowdfunding (from product reward only to alternatives highlighting the creation of commons), patronage (content-based or more geared to generating monthly income), cultural funds (and their forms of curation and governance) among others.

Authors have the choice to release their works with copyleft and commons-friendly licenses, and several initiatives are working to develop and refine such licenses in the framework of current national and international law. If new forms of collaborative financing can provide both the living means for artists and allow their work to be disseminated freely, enriching the global cultural commons, that can mean an end to the dilemma and a new paradigm for the distribution and access to culture.

Experimental Transdiscipline

Ricardo Dal Farra

Life is about communication and mutual understanding or disagreements. Humans have created systems and regulations in trying to understand how this world works, but we are far from finding answers to complex issues. The traditional academic structure based on rigid disciplines has proven not to work well to face problems such as climate change or poverty, naming here only two among many multi-dimensional challenges we are facing.

Can we really and effectively develop innovative and useful ways to do research and apply our findings having a creative approach? The solution to complex problems is being explored, increasingly, from multi and interdisciplinary perspectives. However, those strategies are not enough in many cases, and therefore developing a transdisciplinary approach becomes an essential tool.

There are different definitions about multi-, inter-, cross- and transdisciplinary research. The approach of considering transdisciplinary research as a way to create a unity of intellectual frameworks looking beyond a disciplinary perspective seems to be appropriate and useful also from the arts perspective.

It took centuries to build the complex system we have today for the teaching and learning of the various fields of knowledge, as well as to support the research that has been allowing us "to advance", at least in the terms that we understand it in our Western civilization. At the same time, it is necessary to recognize the different visions that people have of the world, and even if sometimes could be hard for us to understand or accept it, some of that can teach us and can be reflected in our academic or professional activity.

Art helps us to connect with the world or to isolate ourselves, to understand and embrace or to dissent, to make sense or to confuse, it can be an engine to free our creativity or to lock it. Art is linked to politics and economy, it can convey feelings and emotions, can also lead us to think about human biology or complex mathematical equations; it can apply principles of fluid mechanics and key elements from game creation, and can open new spaces, make use of very simple or extremely complex techniques, be based on serendipity, and navigate between the accidental or casual and causal, too.

We need to learn about crossing borders again and going beyond the limits, even if some of them are strong as walls. We should be able to understand different perspectives about the world and generate knowledge from a broader apprehension of reality.

The conceptual proposal of transdisciplinarity might be interesting to some but still too far from a possible practical implementation. Some examples of activities developed considering a transdisciplinary approach follows. Activities that have been bringing art and disciplines apparently far from each other close enough to work from a unified but large conceptual framework:

(a) The Transdisciplinary Creation and Performance class offered by Concordia University in Montreal.

(b) The Transdisciplinary Workshop realized as part of the Interactive Design and Creation Master program at the University of Caldas, Manizales.

(c) The international symposia Balance-Unbalance that "bring artists together with scientists, economists, philosophers, politicians, management and policy experts, sociologists and engineers from across the world with the intent of engendering a deeper awareness and creating lasting intellectual working partnerships in solving our global environmental crisis".

Art as an engine of change, as a key element that adds and helps to build the web of life. The route of uncharted territories, where certain signs could open new paths or stop us, following our experience and desires but also according to the way we see, we listen, we act.

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