

When a School of Satellites is a School of Photography

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Abstract

In 2010, Díaz Infante founded the Mexican Space Collective, a group of people which objective was to build and launch a satellite piece of art. In the process of doing so, Díaz Infante realized that all the knowledge learned had to be transferred somehow to the Mexican society. He founded in 2014 a concept called “School of Satellites” ESATMX. A virtual school with many campi. Its slogan “too much technology, very little imagination”. This school’s objective is the building of nanosatellites as a learning experience. Each project is an art, cultural and educational project with no distinction at any moment. Díaz Infante is a photographer graduated from Brooks Institute in 1982, and he went through a relative revolutionary school, it had only one subject, photography: 1, photography 2, photography 3. And it only had 2 hours of lecture or crit a week. The School of Satellites was founded the following principle: it is not training is about understanding. We are overtrained on things we do not understand or we understand partially, Culture is a basic tool of converting already “trained” people into a transdisciplinary experience. Building nano satellites are a tool for teaching understanding a concept of mission.

Keywords

Space art, science and art, transdisciplinary, Ulises I, School of satellites, satellite technology

Introduction

This is the story of a virtual campus in which we teach how photographers would build a satellite.

“The future belongs to those who give the next generation reason for hope.” — Pierre Teilhard de Chardin

Intro. Avoid the Confusion. Review Assumptions. Multidisciplinary, Interdisciplinary, Transdisciplinary, not the Same Thing Since 1984

One day I met Ángel Cósamos, a poet, in 1982 and we worked together in an idea that that pushing forward concepts of producing “art” is a problem of “the group”. We had an idea of producing in “collaboration” as a

way of generating unknown results, we were trying to avoid the personal style concept of art in which style is actually a lot of repetition. We needed to stop that catch 22, no to have style and to realize that creativity can be found easier as a group effort. A way of not to know the end result. We were trying to rediscover our use of the hypothesis. A way of reaching the unknown. We founded the Camera Music Group, also inviting Arturo Márquez to join us. We were one photographer, a poet and a musician. The idea, to create music, scores made of photographs and photographic elements, to perform photography. Few basic principles were to be followed, work as a group, not to worry about copyrights, the new technologies are different ways of writing. We ended up working with over 200 people producing concerts that today would be called multimedia performances.

Working as a group is a system that generates a special energy and this is the energy that needs to be shown in an art project. We were coining these concepts 20 years before the “group collectives”, “multimedia” or “copyleft” were popular. Working the unknown makes you have more questions than answers: what is collaboration, what is a group, what is a team in a creative context. How to invite a piano player to interact with someone who will be breaking in pieces a TV set? When creation is free like in Art, the dynamics are different when the purpose of creation has a specific utilitarian problem. Maybe not, maybe everything should be seen as a troubleshooting experience? We were discovering those terms ourselves trying to put together a concert in which we needed 60 photographers on stage. We had to review assumptions as a first order of the day. Multidisciplinary is different from interdisciplinary and it is different from transdisciplinary, but who knows the difference, and who has the eye to notice the difference.

Two basic elements mark the beginning, objective and strategy. It is a way of talking and a way of working. One of the most important things as you work in

transdisciplinary projects is to have your questions clear in your mind, not to assume that terms mean the same to everyone. 1984 is the year when we started working with the concepts of interdisciplinary, as a concept for creating. Again, is interdisciplinary art or science or a specific discipline? That is the question, what are you? As you start, you learn by accident, by trying. Working with others becomes a process of teaching. In a true transdisciplinary effort, no one has the same background, how do you glue them together. Working together is teaching everyone to review assumptions. It is learning from experience like in the Renaissance. The master teaches the pupil. What is at the soul of the project? The term “Transdisciplinary” is a need in a certain creative process. The term “Multidisciplinary” is a need in an industrial process. It is all in the planning, it is the way you put together the group. The creative approach cannot be acted if it is not a creative system. It is learning again, as a group, the term Hypothesis. Learning to make hypothesis through music.

Introduction to the School, 2010

In 2010, I founded the Mexican Space Collective, a group of people which objective was to build and launch a satellite piece of art. *Ulises I*, it was designed to be put together as a collective project instead of a team project. The idea was that a member of the Mexican Space Collective needed to have a sense of a social understanding of his own identity. First, you are part of a family, a city block, a city, you are really a citizen if you belong to a society. Then, you become part of a team. If you are not aware of your geographical situation in a society you do not have a real sense of social purpose. A better way to say this, you have to be eager to be part of a society, to be a citizen, to be part of a team. There is a conflict of thought, we are trained to be competitive not to be collaborative, but we are not aware of that. Capitalism and Neoliberalism have become an atmosphere, an ether against collaboration. We absorb these created habits from home, from school, from the conversation, as an instinct. So, when we assemble a team and we have a series of people taught to be competitive and we are asking them to be collaborative. So, in *Ulises I*, we invited artists, students, engineers, scientists, politicians, administrators and lawyers working together. If left unattended, it can become a dyslexic experience. It was an electric shock. It was part of the success of the process to change the

language or to be aware than a transdisciplinary effort requires rewiring, we will call it teaching. Nonetheless a lot of the people working with us they were not aware that they were in a transdisciplinary event, a lot of them think of the event as a result not as a process. So, they do their part without becoming part of the team. We named this a “latin syndrome”, wanting to reach the end before going by its process. Also, a supposition that needs to be reviewed. Learning collaboration is not a subject! How can you tell people to go against a stream of thought. A behavioral dilemma: is Architecture the right metaphor for collaboration, the army or an orchestra. We chose an orchestra, Gustavo Dudamel, we study the Orquesta Sinfónica Simón Bolívar y La Filarmónica de los Ángeles. We are conceptualizing learning working as a team as becoming a flock. How a score becomes music and how music is a group/team/flock.

Trying to reach self-organization, self-formation, flexible flock formation, independent obstacle decisions remaining in the flock. We started two satellites in two different direction, *Ulises I* had a flow of artists conceptualizing a mission, *Ulises 2* had a flow of engineers conceptualizing the mission. Two different beginnings to explore what would happen.

Mission

We learned that to establish a mission, we need to generate the formality of the language. Without the formality of the language you cannot communicate among the different subsystems of the satellite. Language became important. It reminded me of Fernando Flores and his concept of conversation. If people come from a conversation of competition, you have to change to a conversation of collaboration. Language becomes essential between engineers of different subsystems and the same exercise allows engineers to be able to work comfortably with artist.

“As we talk, we build our reality with the other, it is not an abstract thing. Talking is a way of living together and is the coordination of doing things and emotional content. The conversation is the capacity to construct realities. To operate in language, it changes our shape. We can hurt or love with words. In this relational space, we live in constant requirement or in constant harmony with others. We can choose an aesthetic wellbeing or a continuous negative requirement experience” (Humberto Maturana)

[En el conversar construimos nuestra realidad con el

Panels

otro. No es una cosa abstracta. El conversar es un modo particular de vivir juntos en coordinaciones del hacer y el emocionar. Por eso el conversar es constructor de realidades. Al operar en el lenguaje cambia nuestra fisiología. Por eso nos podemos herir o acariciar con las palabras. En este espacio relacional uno puede vivir en la exigencia o en la armonía con los otros. O se vive en el bienestar estético de una convivencia armónica, o en el sufrimiento de la exigencia negadora continua.”] (Humberto Maturana)



Figure 1. Team of Ulises 1, Mexican Space Collective

The simple story of working together in a satellite, artists and scientists made us realize the wealth of knowledge that the experience yields. In the process of doing so, we realized that all the knowledge learned had to be transferred somehow to the Mexican society. We

founded in 2014 a concept called “School of Satellites” ESATMX. A virtual school with many campi. Our slogan is: “too much technology, very little imagination”. This school’s objective is the building of nanosatellites as a learning experience. Each project is an art, cultural and educational project with no distinction at any moment. We base our transference of knowledge in learning how to do a mission and learning how to build a conversation.

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Juan José Díaz Infante

Photographer, artist, expert in technology, founder of the Mexican Space Collective, founder of the School of Satellites, Mission Director of Ulises 1 and 2.

We are extremely serious