## INSTALACION: ARTE CIENCIA Y TECNOLOGIA EN AMERICA LATINA.

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## INTRODUCTION

The idea of the project arose when trying to solve the problem that a viable way to show the amount of information that is in the database, this led us to the implementation of a data visualization program that present this information in a effective and visually interesting so that the spectators have an aesthetic and didactic experience, in the conception of the initial idea, as the work of other artists in the visualization of data, stories like the work of Maximiliano, Schich, and his, animation, Charting, Culture, which I mentioned earlier or the interactive visualization projects created by the Colombian artist and programmer Santiago Ortiz and his team, as well as the work developed by Aaron Koblin, American artist, designer and programmer dedicated to data visualization, virtual reality and interactive audiovisual projects.

One of the great advantages of the project being based on an investigation like this, that in the research work is still young and as it is planned to advance the emerging research on the scene, and not only, the pioneers in these areas, but, those that continued with the exploration in these new media, feeding and contributing with the initial purpose of the work, when larger and more nurtured, the database, the project can be limited to the smallest users of the representative countries and open up currently mayor of creative possibilities and growth at par.

## **ARTWORK**

The installation consists of an interactive projection in which particles are generated with one click connected and classified by color according to the country to which the artist they represent belongs, randomly moving in space, each of them representing a pioneer artist Latin American, when positioned, a label will appear with the name of the artist that will serve to differentiate each one and when you click on it, relevant information will appear related to your work, your contributions, works and together with the click that generated the particle the program will launch a tweet with information synthesized from it. The installation is designed so that the audience in the room interacts with the work and in a playful way learns about the evolution of art and technology in Latin America aided by an attractive visualization of data that makes the instructional process more bearable. The use of Twitter in the work is of great importance because it is intended that the information of the artists reach as many people as possible, taking advantage of the influence and importance of social networks and with Twitter as a global platform for information management is the Ideal way to get information in a clear and fast way, in addition to ensuring that these data not only stay in the showroom but travel and people from all over the world can have access to them.

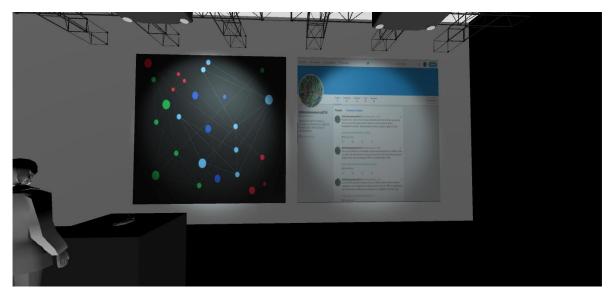
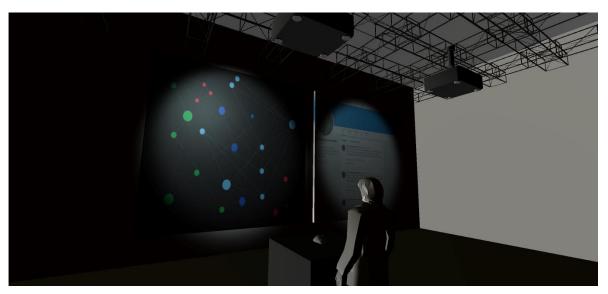


IMAGE 1.



## IMAGE 2.

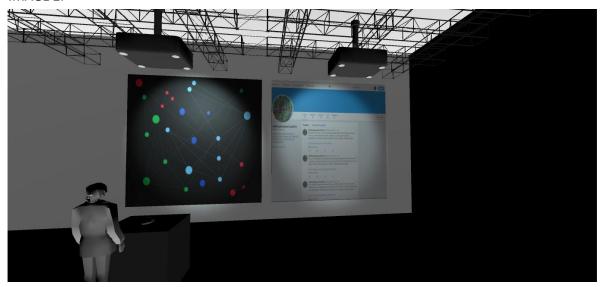


IMAGE 3.

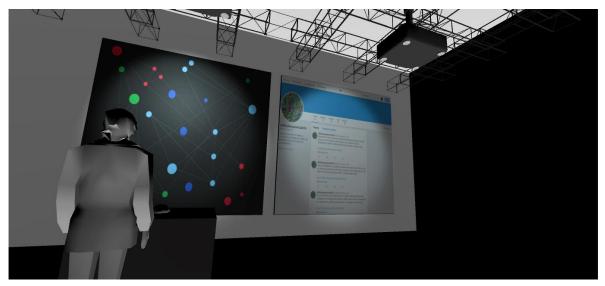


IMAGE 4.

The installation consists of two projectors simultaneously projecting the visualization of the data in the form of particles (left screen Image 1) and the publication of tweets in real time (right screen Image 1). The user can only interact with the left screen with a mouse placed in front of him and through which he can click with a new particle to the installation, which will publish a tweet in real time and that the user can see on the right screen. The new particle will be randomly assigned to a country from which a pioneer artist will also be randomly assigned to publish their information in the tweet.

As part of the process of finding a way to convert all the data collected throughout the investigation into a specific digital art project, the creation of an interactive installation that would be based on the programming language and development environment was considered from the beginning, integrated Java-based, Processing that serves for the creation of multimedia interactive projects of digital design, which turned out to be a very useful tool for our purposes because it allows the creation of graphics, real-time interaction, visualization of data, accompanied by a friendly development interface for us as visual artists.

The first thing that began with the organization of the data, organizing the artists by name, country, date of birth, current artists in which they developed, the information that would be shown to the public, their works and a synthesized version of their data to add to the tweets that were released, for this we rely on the database and Gephi which is an open-source software for network analysis and visualization also based on Java. The data of the included artists are documented and included in the corresponding bibliography, these books have been integrated during the entire research process and are signed by important institutions dedicated to art in different Latin American countries, institutions such as Itaú cultural [3] in Brazil, The Telefónica Foundation or The Torcuato Di Tella University in Argentina or The Alameda Art Laboratory [4] in the City of Mexico. The next thing was to start working on the programming, we developed a main program that is responsible for the visualization of moving graphics and the interaction with the viewer to which we would later add the filtered and organized information of our artists as well as a secondary program that will ensure that each click as well as provide information to the viewer and generate the particles will launch a tweet with the same information synthesized in the characters allowed on Twitter that will complement the experience in real time and the interactivity and participation of the viewer