



ISEA 2019

Gwangju, Korea

Lux Aeterna

June 22 - June 28, 2019

To whom any may concern,

We certifies that Cynthia Villagomez Oviedo participates in ISEA2019, convoked by Art Center Nabi and Asia Culture Institute (ACI), with the research in one of the fields of Art, Architecture and Design entitled "Mexican Electronic Art: Reuse and Reinterpretation of Technology", Permanent Nature publicly presented between June 22 - 28, 2019 on the Academic Program, selected by Peer evaluation.

To place of record is signed on the 29th day of June 2019.

S. C. Gollifer

Sue Gollifer,
Executive Director
ISEA International HQ



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To place of record is signed on the 28th day of June 2019.

Soh Yeong Roh

General Chair

Hoja de programa

Venue	Session type	Time	Program
		11:35-11:55	- 1016. FormLaboratory: Interfacing Technology with Site <i>Leslie Joynes</i>
		11:55-12:15	- 864. Mexican Electronic Art: Reuse and Reinterpretation of Technology <i>Cynthia Villagomez and Villagomez Oviedo</i>
		12:15-12:30	- 291. P@tch: Can We Use DIY Techno-Craftivism to End Armchair Activism <i>Janna Ahrndt</i>
Session 1-3. Digital Heritage #2			
Chair : TBD			
Community room 2	Papers	11:15-11:30	- 263. Transformation and Regeneration of the Chinese Traditional Oil- Paper Umbrella in Contemporary New Media Art <i>Jing Han</i>
		11:30-11:45	- 441. MYSTERIOUS CHINESE MOVABLE TYPE PRINTING FROM TECHNOLOGY TO ART <i>Haoyi Zhang</i>
		11:45-12:00	- 995. Situating Artificial Intelligence Art in Visual Cultural Heritage <i>Harshit Agrawal</i>
		12:00-12:15	- 996. Rediscovering Korea's Ancient Skies: An Immersive, Interactive 3D Map of Traditional Korean Constellations in the Milky Way <i>Sung-A Jang and Benjamin L'Huillier</i>
Session 2-1. VR/AR - Immersive Experience			
Chair : Benjamin Seide			
Lecture room 1	Papers	14:30-14:50	- 851. Toward the Experiential VR Gallery using 2.5-D <i>Sieun Park, Suk Chon, Tiffany Lee and Jusub Kim</i>
		14:50-15:10	- 868. Mixed Reality Art Experiments - Immersive Access to Collective Memories <i>Jens Herder, Shinpei Takeda, Kai Vermeegen, Till Davin, Dominique Berners, Bektur Ryskeldiev, Christian Zimmer, Ivana Druzetic and Christian Geiger</i>
		15:10-15:30	- 656. Conservation of Shadows: Shared Physicality Between Worlds <i>Haru Hyunkyung Ji and Graham Wakefield</i>
Session 2-2. Social Impact and Socio-Technical Systems			
Chair : TBD			



ISEA2019
Gwangju, Korea
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25TH INTERNATIONAL SYMPOSIUM ON ELECTRONIC ART

June 22 (Sat) – June 28 (Fri), 2019
Asia Culture Center
Gwangju, Korea

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Juhan Nam
Jin Wan Park *Editors*

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Mexican Electronic Art: Reuse and Reinterpretation of Technology

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Abstract

The purpose of this research is to show part of the Mexican electronic art scenario, which in many cases is produced with limited resources, low-cost materials and free and open source data and software. What characterizes the most of this artistic works is the concept and the main idea which is related to the Latin American context, because of that, these works of art are unique. The main statement of this research is to find evidence of the importance of the concept despite the materials, more than the spectacle that some works could offer to an audience with unlimited resources. Through this, an analysis of various Mexican electronic art works take place.

Keywords

Electronic Art, Processes, Creation, Reutilization, Reinterpretation.

Introduction

In Mexico Electronic Art has not been studied enough, even though it is a branch of art that has Mexican artists working on the field for more than three decades. The present scenario has lack of spaces for the development of artists projects, there are not enough galleries and museums that are able to show electronic art, on the other hand, there is an on growing number of young electronic artists. That is why the present research focuses on the production processes with lack of resources, as a way to show new artists the possibilities of creation with reuse materials.

Besides this research explores the possibilities of electronic art production by reusing existing materials instead of buying new ones, that makes the concept or the artistic statement more important than the materials itself, avoiding the spectacle that could provide an electronic work of art and giving more importance to smart ideas. That means anyone around the globe could create with electronic sources, no matter if they have, or not have access to cutting-edge technology. Because if people explore analog or digital electronics through art, simultaneously a new world opens up, giving anyone the opportunity to have access to science and technology, which is fundamental in countries like Mexico where the access of that knowledge is not for everybody.

Background of Mexican electronic art

The experimentation with low-cost materials has been common in the present and in the history of art, Art Povera is an example, which was a radical artistic movement that emerged in the late sixties and seventies, where the artists explored a wide range of unconventional processes with the use of nontraditional and everyday materials. Art Povera literary means “poor art”, the materials they used were: clay, cloth, tree branches, waste materials, in such a way that challenged and disrupted the values of the gallery system and the commercialization of contemporary art.

Specifically, in the present Latin American context, in Brazil for example, they have a special term for existing materials reutilization called *Gambilogia* which is the practice of making things through unusual materials and smart improvisation, repairing things or creating with what you have at your disposal, means is a form of creative improvisation that uses electronic-digital techniques. In the case of Mexican electronic art, there are various artists that use obsolete technology and low-cost materials due to the Mexican economic system, particularly in the beginning of their artistic life, but not exclusively because we can find examples of electronic art work that has been developed by well-known artists with lack of resources.

Nevertheless, through the essay called *Postproduction* from the outstanding theorist Nicolas Bourriaud, we can find evidence that the reutilization of materials is a common pattern in contemporary art, he said, the artistic question it is no longer: What is new that can be done? But rather What can be done with...? Speaking about reuse of materials and ideas also. Bourriaud gave an explanation about why the flea market is so important for current artistic practices: in the first place it is important because it brings a collective experience, the chaotic heap of things derived from different individuals, also because in the organization of a flea market the past takes place and through the flea market people have the chance to avoid the industrial commerce and internet sales, finally at the flea market objects from multiples provenances wait for new uses, as Marcel Duchamp said, this is about giving a new idea to an object.

Electronic art production in complex environment

For now, it is necessary to say that the context where a Mexican electronic artist works is complicated. The social, economic and politic conditions add the ingredients of

uncertainty to everyday life. These Mexican adverse circumstances such as poverty, inequity, violence, corruption, drug trafficking, among others, often provides ideas to the artists for their work. The use of subjects related to Mexican context is one of the most important characteristics on Mexican electronic art, these subjects of the art produced in Mexico are based on situations and events that arouse in Mexican environment. It is necessary to say, that most of the time only a Mexican or people involved in Mexican culture can completely understand all the implications and cultural meanings of these pieces; example of that are the works of Rafael Lozano-Hemmer (international artist who born in Mexico City): “Voz Alta”, 2008, piece related to the murders committed by the government in 1968, –for more than thirty years it was forbidden in media to talk about this issue; “Level of Confidence”, 2015, about the tragic disappearance of 43 students in Ayotzinapa, Mexico in 2014 –to this day, no one knows for sure what happened to them; “Displaced Emperors”, 1997, projects the Aztec head-dress of Moctezuma in the facade of the Museum für Völkerkunde in Vienna where the head-dress is kept against the will of Mexicans, despite these, it is necessary to say that Rafael Lozano-Hemmer does not work in Mexico, but knows Mexican culture very well, he creates in other countries like Spain or Canada with their economic support, so Rafael Lozano-Hemmer works are not equal to Mexican art that arises from Mexico’s social and economic limitations.

In addition to that, Mexican electronic artists that produces in Mexico shows another reality. In Mexico the elaboration phase of the production processes might be different. According to the interviews made to electronic artists for this research, there is a small group of artists that produced frequently supported with government grants or other type of economic resources. Nevertheless, there are artists that find ideas in difficult conditions, that means artists adapts their production processes to the existing resources, been capable to produce with very few materials. This research focus on those artistic works to study Mexican electronic art, because it is more emphatic with the existing and general situation.

Moreover, this research focus on electronic Art works from the last decade of the XX century and the first decade of XXI century. The research process consists in exploring and describing to generate theory perspectives, as a research strategy we used direct interview with electronic artists through diverse media, like telephone, cell-phone, email, video conference, etcetera, even personal visit to art studios, or attending art exhibits and presentations to meet the artists.

Mexican Electronic Art, cases of study

In the context of today Mexican electronic art, we are going to analyze works of art that reuse and/or make a different reinterpretation of existing materials. The Mexican artists are: Arcangel Constantini (1970, was born in

Cuautitlan); Ivan Abreu (1967, La Habana, Cuba, now Mexican citizen); Leslie Garcia (1980 *ca.*, Tijuana); Gilberto Esparza (1975, Aguascalientes); Juanita del Carmen Mendoza Ornelas (from *Guanajuato University* under degree studies on Digital Art); τέκτων_{}_debug() Collective from *Universidad Autonoma Metropolitana, Campus Lerma*. These electronic artists use materials from technological garbage dumps, low-cost materials, free and open-source software to produce art.

“3:00 am” by Arcangel Constantini

Anima is a Netart work developed in 2002 by Arcangel Constantini, it integrates several projects with different titles: *3:00 a.m.*, *MR vs DR*, *Azar / chaos*, *Frecuencia*, *Retrovisión*, *Ake/Karas*, *Mas_numeros* and *Multiver.s.o.s.* In all these projects the reinterpretation of obsolete objects can be seen, also the concept of the artist called “continuous loop” where the same images are repeating constantly in small video sequences.

In the case of “3:00 am”, an image appears formed with 25 different segments, inside of each segment a video can begin by clicking above the text “3 a.m.”, instantly sounds from the *Santa Martha Acatitla* flea market in Mexico City emerged, the videos and the audios keep going and going in a continuous loop,

The films of the videos were edited at the time of the recording, they used the infrared night vision of the camera to videotape. The lighting was carried out with a hand lamp, which emulated the buyers of the flea market at dawn. The audio was made by the artist Manrico Montero Calzadias (Mexico, 1973-2018) and emerges from the original sound of the flea market, generated by the constant manipulation of objects: the movement of the bags in which they pack and unpack, the empty cans, and the noise of the dump trucks emptying the scrap metal. Finally, the objects had a relation with the artist's theory of the “conceptual or continuous loop”, that has a relation with the idea of reality and the repeating events in life.

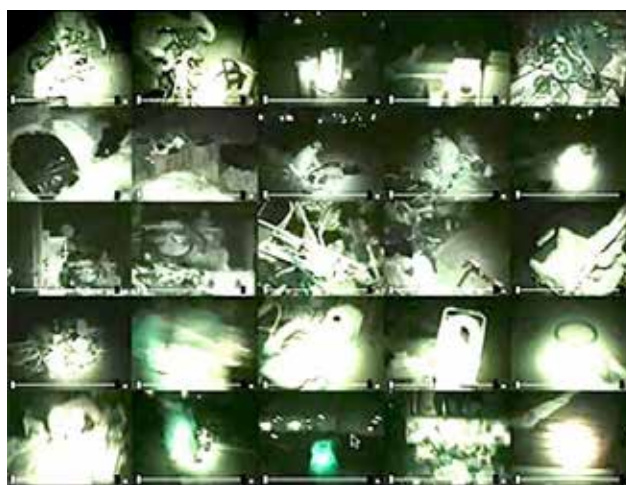


Figure 1. "3:00 am" by Arcangel Constantini, (2002). It is available at www.unosunosyunosceros.com.

"Telematic Sound Weapon", by Leslie Garcia and Astrovandalistas

This work was made by Leslie Garcia within the Astrovandalistas Collective. "Telematic Sound Weapon" (s / f), is a sound installation made using an existing metallic structure in front of *Campo Marte*, which is an equestrian field in Mexico City, used for the practice of equestrian sports and for different military and government events, for example, at the Olympic Games in Mexico 1968, it was the venue for horse riding competitions, inside there is a monumental flag of 50 by 28 meters and a flagpole of 100 meters high; on one side of this field was built in 2012 the "Memorial to the victims of violence in Mexico". However, records have been found in various books and documents (Poniatowska, 1971) indicating that, during the student massacre that took place on October 2, 1968, in the *Plaza de las Tres Culturas* in Mexico, a place also known as *Conjunto Habitacional Tlatelolco*, the lifeless bodies of hundreds of people, most of them students, were buried secretly in the Campo Marte. Leslie García comments the following: "...we found a metal structure of 4 by 6 meters located in front of Campo Marte, a military camp that contains stories of a repressive past that has been forgotten little by little. We intervene the structure with 64 galvanized pipes connected to an engine. This mechanism is activated remotely every time someone writes #BANG-CampoMarte on Twitter"¹. The pipes made an audible sound each time someone interacts on Twitter (video: <https://vimeo.com/46611303>). Finally, the work attracted ordinary citizens, soldiers and Internet users, it also gave the opportunity to talk about this topic.

The "Telematic Sound Weapon" is a work designed to make evident the desire of people to manifest themselves both in the physical space of the piece and in social networks, "A weapon is a device that extends the direction and magnitude of a force. We want to amplify a collective questioning about the role of violence in the recent history of Mexico"². On the work website, a public invitation is made to participate in what they called virtual manifestation exercise, where the complete manual is available if the audience want to make something similar.

¹ Leslie García, "Arma sonora telemática", <https://bit.ly/2xgwrrz>. Query: February, 2015.

² Leslie García, lessnullvoid.cc, 2012, Query: September, 2018.



Figure 2. "Telematic Sound Weapon" (2012) by Leslie García and Astrovandalistas Collective.

Urban Parasites by Gilberto Esparza

"Urban Parasites" was created between 2006 and 2008. The process of creation of the pieces that conform "Urban Parasites" (robots with different names: *Flies*, *Scavengers*, *ppndr-s*, *Inorganic Autotrophs*, *Maraña Mrñ*, *Hung Clgd*, *Dbli*) could be seen in the website of the artistic work³. In the video of the process of production we can see the artist in a dump among piles of technological garbage, two large cranes rearrange the scrap while Gilberto Esparza recues various objects from the waste; later in his study the artist design different robots with these objects, then he shows his ideas to his crew, engineers and programmers separately, then they built the robots, put them on the light cables of the streets and observe people reactions.

The artist mentioned he uses recycled material and frequently goes to a cellar of a well-known telecommunication company (called Telmex), in this cellar he refers saw different objects to build his robots, he wants the robots to perform in an urban environment; a special cage which is very resistant is the exterior of the robot, is designed to keep safe the cables of the robot and allow it to survive. Esparza made his robots to be capable to live outside for long periods of time, could be months or even years, he said they lived in urban environment and are part of the city landscape, while they are moving they produced sounds.

Gilberto Esparza put his robots in the city of Lima, Peru, people reacted with surprise, they laugh when they saw the "Urban Parasites" mounted and moving on the light cables of the city, asking one to other –What was that! The contrary happened in Mexico City, where people just ignore the robots, the artist thinks that might be because in Mexico City people lost the capacity of been surprised due to the fast way of life and the monotony of the existence in big cities; finally, he said it is good that people ignore the "Urban parasites", that way maybe they could live more.

³ Gilberto Esparza. <http://www.parasitosurbanos.com>. Query: January 13, 2013.



Figure 3. Gilberto Esparza, "Urban Parasites" (2006-2008).



Figure 4. Gilberto Esparza (2007). "Autotrofo inorganico", serie "Urban Parasites".

ASML (Art Statement Markup Language), by Ivan Abreu

This piece of Software Art was created by Ivan Abreu in 2003, ASML, it is a language that highlight different texts about art that had been written by art critics, these texts are interpreted by machines, in other words, ASML add data to the texts, making them understandable in the machine context.

Markup language add data or meta descriptions to the texts, making them "comprehensible" in the machines context. Because of the complexity and specificity of the knowledge, there are markup languages that focus on specific context: MathML (Mathematical Markup Language), for mathematics notions; GML (Geography Markup Language), for the geographic information; the well-known HTML (HiperText markup Language), for describing data in the net and many others. ASML is a markup language that allows the machine to understand common entities in the art lectures. Despite of being a scientific project, it is a research about the semantic and grammatical knowledge in the art texts. In some way, these projects try to applicate an

objective point of view to several texts characterized by ambiguity and subjectivity⁴.

Nevertheless, the artist refers that it is not a scientific project, but a research of semantic and grammar knowledge in art texts. What the artist did in ASML is an attempt to give clarity and objectivity to texts about art criticism that usually have the characteristic of being ambiguous and subjective.

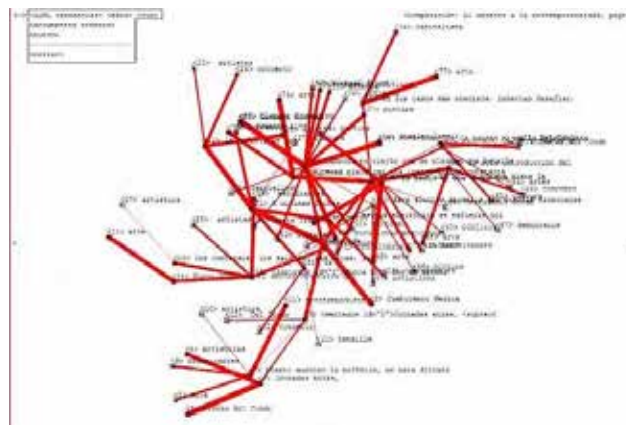


Fig.5. Ivan Abreu, "ASML", 2003.

Ataraxia, by Edmar Soria and τέκτων_{}*.debug() Collective

This artistic development is an electro acoustic piece conformed with assembled multi percussions, electronics and video. According to Edmar Soria, the piece is a constant sound recycling of audible elements that function as an antiphony with the use of sound. Instruments were constructed and assembled from different materials and are used in order to establish a specific range, its spatiality is captured in a virtual way within a multi array system of microphones, the result is a combination of digital and physical resources.

The work was presented on the celebration of the "50th Anniversary of the Leonardo magazine" held in Mexico City on April 19, 2018. The sound artist Edmar Olivares Soria and τέκτων_{}*.Debug () [sic.] Collective, presented "Ataraxia". The project was directed by the teacher Edmar Olivares and constituted an interesting sound exploration from recycled materials, where they experimented with many reuse materials such as chilies cans, nails, wood, computer parts, metal parts, strings and other resources. In interview Edmar Soria said:

"... each piece is cut in different ways, some are perforated to explore different sounds, for example, harmonics [...] we designed instruments in order to have certain resonances and we designed other instruments like this little zither [points to a PC case

⁴ Ivan Abreu. www.ivanabreu.net, 2012, parr.1-2. Query: August, 2018.

with strings]. The idea is to use recycled and industrial materials to build structures that resonate... the main exploration is from physical space. How to place these sounds in space? But not only that, according to the sound characteristics each element must have a special position in the space, so those instruments do not ‘get stuck’ with each other, but at the same time it is possible to distinguish all the layers of sound that are happening.”⁵

The artist and teacher Edmar Olivares mentioned that the project was only an artistic sound exploration of the concept of resonance through splicing resonance and space. The project is an implementation of scientific and technological knowledge applied to the development of instruments constructed in a creative way with recycled materials.



⁵ Interview Edmar Olivares in Centro Cultural Casa del Tiempo, Mexico City.



Fig.6. Ataraxia, (2018) Edmar Olivares Soria and *τέκτων {*.}.debug()* Collective, students of UAM Lerma, Performance on April 19, 2017, “50th Anniversary of Leonardo Magazine”, Cultural Center *Casa del Tiempo*, Mexico City.

The invisibility of the urban marginalized, by Juanita del Carmen Mendoza Ornelas

The work done by Juanita del Carmen Mendoza Ornelas is a real-time projection and simulation of the interactive interpreter that was carried out in September 2017 at Guanajuato University, campus Irapuato-Salamanca.

This artistic work deals with the concept of invisibility, the one that unfolds in the context of social processes. The scope of invisibility that is pointed out in this piece refers to the exclusion of individuals inserted in complex sociopolitical and economic structures inside a third world city. This work shows the social structures where the human presence seems to vanish or does not exist, in this cultures there is domination from one group to other

groups. What the artist wanted to show is the relationship between poor, middle class and rich people, where the richest ones ignore the existence of the others, the artist Juanita Mendoza opens a dialogue and invites the audience to make a sincere reflection on this social issue. The fundamentals of this artistic installation are in the Latin American Philosophy of Liberation developed by philosophers, theologians and anthropologists like Juan Carlos Scannone, Enrique Dussel and Rodolfo Kusch,

It is important for Latin America to bring this issues to art because through this action, audiences can speak about it and deep thoughts can emerge, that could be the beginning of a solution. Juanita Mendoza looked for social equality between the different actors that interact in a society, discrimination is a situation that exists in the present days and through the times due to Spanish Conquest of Mexico in 1519.

The installation consists of a montage of several spaces, one perceptually within the other, as the rhetorical figure of the abyss, it is dynamic for the viewer, where the concept of marginality prevails the multimedia interaction. In the installation appear two spaces where two different social conditions are visualized, in the first one the issue of differentiation and exclusion is addressed, it represents a panorama of a marginal society within a city, there are pictorial allusions, figurative projections, in the second space there is the representation of a cabin that symbolizes the fragility of the division into classes and different social strata which coexist.

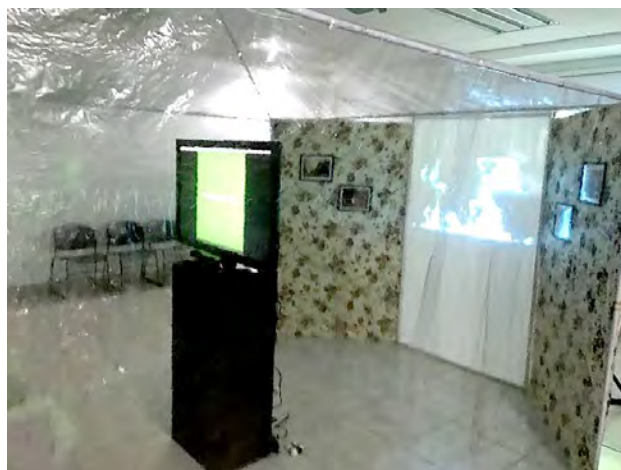


Fig.7. Juanita del Carmen Mendoza Ornelas, "The invisibility of the urban marginalized" (2017), projection, installation, real-time simulation.

Conclusions

Electronic art in Mexico has gone through different phases, which have helped to strengthen it in the national artistic scene, even though there have been different artistic works with the use of electronics, electronic art does not have a preeminent place in Mexican art. Throughout the last decades there have been different forums where electronic art has had spaces for its exhibition, such as the Alameda Art Laboratory; the CECUT Tijuana Cultural Center; the Center for Art and New Technologies, CANTE in San Luis Potosi (the area of new technologies does not exist anymore); the Carrillo Gil Museum; the Multimedia Center of the National Center for the Arts; the Cyberlounge of the Museo Tamayo Arte Contemporaneo (now disappeared); among other spaces most located in Mexico City, all of which brings with it that electronic art is not completely known by the audiences that attend to museums and galleries. A positive thing is that not all electronic artists like to exhibit in galleries or museums, they exhibit directly in public spaces, seeking in this way to reach the majorities, through these practices they also seek to return public spaces to citizens, nowadays most of the public spaces in cities have been occupied by companies and institutions; example of this type of works are Ivan Abreu public works. However, the advance in the knowledge of electronic art in Mexico advances at a slow pace, while in other countries it is well entrenched and even has spaces for the development of work like: "Media Lab Prado" in Madrid, "Laboluz" in Valencia both in Spain; "Ars Electronica" in Linz, Austria; "SymbioticA" in Pert, Australia; the other side of the coin is in Latin American countries where the spaces for project development operate with limited resources and sometimes, the lucky ones, with grants, such as "Platohedro" in Medellín, Colombia or in Mexico City an autonomous place in San Rafael area called "Crater Invertido".

An important fact in this panorama is that Mexican electronic artists have been producing art no matter if they have the economic or material resources, the examples that we saw in this research proved that artistic electronic creation is far from the limits of having enough resources.

Most of Mexican electronic artists refer on interview they struggle at the beginning of their career, but they said, that was not an important reason to stop working on the field they loved: the electronic art.

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Author Biography

Professor and Researcher at Guanajuato University in Mexico since August 2002. She is the author of three books, several book chapters and articles about Art, Digital Art, Creativity and Design. Since 2003 she is the editor of the magazine called *Revista Interiorgrafico de la Division de Arquitectura, Arte y Diseño de la Universidad de Guanajuato*. Has made stays in Spain, linked to the research she has been developing.

Has a degree in *Graphic Design*, a Master degree in *Creativity for Design* by The Design School of National Institute of Fine Arts, has a PhD on *Visual Arts and Intermedia* from Universidad Politecnica of Valencia, Spain, her PhD thesis about Processes of Production of Mexican Digital Art received an award called *Premio Extraordinario de Tesis Doctorales* by Universidad Politecnica de Valencia in 2016.

She is a former Member of Mexican National Research System, Level 1, of National Council for Science and Technology, CONACYT.