Latin American Forum Legacy

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Abstract

The Latin American Forum was a platform for transdisciplinary and transcultural discussions concretized in series of panels, workshops, roundtables, presentations, lectures, and exhibitions. The forum was operational for four years in the framework ISEA, International Symposium on Electronic Arts: ISEA2010 in Germany, ISEA2011 in Turkey, ISEA2012 in the USA and ISEA2013 in Australia. Since the conception of the Latin American Forum, one of the goals was to prepare for hosting an ISEA colloquium in Latin America. Thanks to the efforts of a group led by Universidad de Caldas finally ISEA is hosted for the first time in Latin America, this year in Manizales, Colombia.

The Latin American Forum was a series of venues that intended to articulate a diversity of proposals ranging from topics such as digital culture, technological art, critical production and historical analysis. The forum also addressed the science and technology studies (STS) field, questioning geographical, cultural and critical perspectives. Latin American Forum participants came from: Argentina, Australia, Australian Aboriginal Communities, Brazil, Chile, Colombia, Germany, Mexico, Navajo Nation, Peru, Uruguay, USA, and Venezuela.

This paper is divided in four sections; the first one is a historical recount of the different Latin American Forums. The second one is a reflection about the importance of the local references in the field of arts and technology. The third one presents a theoretical framework that is a response to Media Archaeology and the last one focuses on the concept of fragment in order to describe and understand Latin American reality.

Keywords

Latin American Forum, Latin America, Variantología Latina, Cybernetics, Media Art, Media Art History.

Introduction

The first Latin American Forum was hosted by ISEA2010. There, the idea of "Variantología Latina" was introduced; it was presented by Siegfried Zielinski in the following way, the quote still represents well the conceptual starting point of the Forum: "The southern part of the two Americas was baptized Latin America in early modern times. By importing academic Europe's Esperanto, Latin thus became the label to characterize South American culture. This culture was defined from the perspective of the Latin-Christian civilization. Active in the center of this intellectual colonizing process, were the elite troupes of the Vatican, i.e. the congregation of the Jesuits. They were sent away from Rome by the pope in order to universalize the world in a single faith. Even the great GWF Hegel still understood South America's identity solely in relation to Christian Europe. Variantología Latina as an experiment is working in an opposite direction. It proceeds from the assumption, that the different countries and regions of South America have developed their own knowledge and technology cultures as well as their own forms of linguistic expressions, their own music, machines and technical images long before and parallel to colonization. The archaeology of South American media could carve out these developments from the deep -time developments of history and have them unfold within a new context" (Broeckmann, 2010).

Latin American Forum 2010-2013

ISEA 2010, Dortmund, Germany

The Chair of ISEA2010 was Andreas Broeckmann, the goals of this participation were two, (1) expose the creative and scholarly work done in Latin America, and to start to prepare a Latin American country to host ISEA in the near future. The LAF program was articulated in four panels: Variantología Latina, Current Media Art Practice, Recent Histories of Electronic Culture in Latin America, the forum had 22 participants.

"Variantología Latina" panelists: Karla Jasso, Domingo Ledezma, Andrés Burbano, Siegfried

Zielinski. The "Variantología Latina" panel explores the deep roots of media history in Latin America, inquiring into phenomena which anticipate the concepts of network, photography and scientific tools before the 20th century.

"Current Media Art Practice-Curators": The panel problematizes the role of curatorial processes in media arts in Latin America, looking for a contextualization in the global context. Participants: Juan José Díaz Infante, Claudio Rivera, Tania Aedo, José Carlos Mariategui, Giselle Beiguelman.

"Recent Histories of Electronic Culture in Latin America": Focuses on the study of practices at the artistic and social levels that are relevant for the media art scene today: Participants: Enrique Rivera, Catalina Ossa, Alejandro Duque, Lila Pagola, Simone Osthoff.

"Current Media Art Practice – Artists": The panel contains a collection of current and fresh media art projects presented by the authors themselves. Participants: Iván Puig, Rejane Cantoni, Brian Mackern, Lucas Bambozzi, Arcángel Constantini (Broeckmann, 2010).

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SEA 2011, Istanbul, Turkey

The Chair of ISEA20111 was Lanfraco Aceti, in Istanbul the second Latin American Forum took place, Juan José Díaz Infante was the chair of the forum and Claudio Rivera-Seguel and Andrés Burbano were co-chairs, the main topic was "Intedisciplinarity at the Centre of Art, Science and Technology in Latin America".

"What exactly is Latin America? Is Latin America formed by 21 countries or are there more? There are two very well defined borders to observe regarding a scientific knowledge and a particular Cosmo vision: before and after the Spaniards; A third layer surfaces as independent Latin America struggles to become a region, as separate states, there is the existence of fragmented knowledge from different regimes; independence, revolutions; *coup d´etat*; Layers on top of layers that have to do of a linear process between socialism, capitalism and the interests of the United States. Latin America has a distinctive vision of what the world could be, and what the role of technology. Latin America is an option an alternate way to see the applications of technology of social expression and organization. For example, Channel "6th of July" a TV Channel with no concession for air transmission, its way to transmit was through the sale of VHS videotapes, sold 4 million copies at the time" (Acetti, 2011).

Participants: Andrés Burbano, Lucas Bambozzi, Gabriel Vanegas, Ricardo Dal Farra, Juan José Díaz Infante, Claudio Rivera-Seguel, Felipe Cesar Londoño with the help of Laura Colmenares

ISEA 2012, Albuquerque, USA

The chairs of ISEA2013 Andrea Polli and Suzanne Sbarge gave an unprecedented support to the Latin American Forum making it a central part of the event, seventy direct participants from ten different countries, as well as twenty guest audience -members gathered for this event in Albuquerque, some of the panels were the following:

"Cybernetics in Latin America", featuring key intellectual researchers Eden Medina, Susana Quintanilla, Eduardo Bayro-Corrochano and Pablo Colapinto. They presented their research projects about the rich history of Cybernetics in countries like Argentina, Chile and Mexico. This was a challenge particularly when it came time to present the investigations on Computational Geometry discovering its relationship with the cybernetic deep history in Mexico. "Public Dialogue" led by Simone Osthoff and Giselle Beiguelman. Simone and Giselle elaborated about the international art context focusing on the dynamic dialogues involving media arts.

"Mapping, Balloons and Kites" featured some of the most active media arts practitioners and activists in Brazil: Lucas Bambozzi, Rodrigo Minlelli (RIP), Bruno Vianna and Felipe Fonseca. The panel was proposed as a historical comment to the fact that several inventors related to the aerospace technologies came from Brazil. Today with proposals like the festival Arte.Mov, a festival that runs 5 times a year in different cities of Brazil, such technological tradition is revisited. Of special interest were the presentations by Vianna and Fonseca, two young participants who have contributed to shape the digital culture in Brazil.

"Open Laboratories," was a window to look at how the politics and ethics of *open source* software has been translated into a series of initiatives of open laboratories for media arts and experimental research in several Latin American countries. The panel featured consolidated scholars like Felipe César Londoño and Ricardo Dal Farra and also opened the doors for young artists like Leslie García, Gabriel Zea and Camilo Marténez. Remarkable is the fact that the moderator Felipe Fonseca has already published a book about the idea of "open labs."

"Code Talkers and Technology" proposed to revisit the history of the Native American Navajo Code Talkers

inviting a representative of the Navajo community to take part in the Forum. Eighty-eight year-old Bill Toledo rendered an outstanding presentation about his experience in WWII as a "coder". This was an attempt to establish a respectful dialogue that affirms the commitment of a new discourse on Latin America regarding of indigenous communities. This panel was possible thanks to the efforts of Esteban García (Poli, Sbarge, 2012).

"Mexican Space Collective" presented their interventions on the celestial and cosmic spaces with the satellite Ulises I. As part of their participation in ISEA the Mexican Space Collective opened an exhibition of the satellite in the Albuquerque Balloon Museum. The Mexican Space Collective was composed by artists Marcela Armas, Gilberto Esparza, Ivan Puig, Arcangel Constantini, amongst others. Juan José Díaz Infante coordinates the project. Such interest in outer space-related matters is not exclusive of the MSC as it was shown in the presentation of Kosmica Mexico, a space art event that took place for the first time in Mexico City right after ISEA2012. The organizer of this presentation was Nahum Mantra. In the media art show the project "SEFT1" by Ivan Puig and Andrés Padilla had a prominent place. The SEFT1 is a machine for exploring abandoned railroads in Mexico as a futuristic exploration of Mexico's past. At ISEA2012 the "SEFT1" made a historic border crossing from Mexico to the USA, highlighting a process for a creative reading of border issues (Poli, Sbarge, 2012).

The Forum operated as a dialogic platform in a dual sense, by promoting the encounter of Latin American artists and thinkers with people from other latitudes, while also confronting the interesting experience of thinking in the familiar when we are away from home. Juan Jose Diaz Infante offered a thorough presentation proposing Mexico City as host for ISEA2015 (Burbano, 2012). Other candidates to host ISEA2015 are Vancouver, Amsterdam and Jakarta.

Beyond those mentioned, participants of the Latin American Forum III also included: Ignacio Nieto, Yto Aranda, John Angel, Coco Fusco, Eugenio Tiselli, Agnes Chavez, Danny Bazo, Carlos Rosas, Priscila Arantes, April Bojorquez, Matthew Garcia, Miguel Palma, Silva Ruzanka, Rodrigo Guzman, Mariana Perez Bobadilla, Fred Paulino, Lucas Mafra, Henrique Paulo Ganso, Mario Valencia, Tiago Franklin, Andriana Ramirez de Arellano, Miguel Gandert, Vicki Gaubeca, Manuel Montoya, Gabriel Menotti, Diana Domingues, Alessandro Saccoia, Ian Clothier, Joana Moll, Heliodoro Santos, Marybeth Howe, Alexander Glandien, Luz Maria Sanchez-Cardona, Vanessa Ramos Valezquez, Jorge Rojas, Lucia Grossberger Morales, Micha Cardenas, Miguel Carvalhais, Josephine Anstey, Ed Osborn, Tatsuo Unemi, Joanna Cheung, Lyn Goeringer, Matthew Hawthorn, Jan Mun, Martin Rieser, Sara Schnadt, Rene Barge, David Dunn, Gustavo Matamoros and Duck Pond (Poli, Sbarghe 2012).

ISEA 2013, Sydney, Australia

The chair of ISEA2013 was Ross Harley who helped to organize the LAF panels supporting many of the participants in their process to visit the austral country.

The first panel was inspired by the book "The Music of CSIRAC, Australia's First Computer Music" by Australian composer Paul Doornbusch. This book had a crucial impact in the understanding of computer music history. In Latin America the contributions to computer music history are not as early as the one described by Doornbusch, however composers like José Vicente Asuar in Chile or Cesar Bolaños in Peru and Argentina, made several important and early aesthetic and technical contributions to the Computer Music field. Participants: Paul Doornbusch, Ricardo Dal Farra, and Andres Cabrera and Andres Burbano.

The second panel, Reconsidering Australian Media Art Histories in an International Context "is an ARC Linkage project undertaken by researchers at the National Institute of Experimental Arts, in partnership with a host of national and international partners, that researches the contribution of Australians to the development of media arts as a contemporary art practice, while at the same time examining the important artistic and technical contributions that have shaped media arts in the global arena. The project aims to propose new frameworks, refute inaccurate 'facts,' question or expand upon theories, and point out unseen associations and critical connections. The potential for online access to collections of media art in all its manifest forms has been the subject of detailed media art history research. RAMAH aims to provide for a deeper knowledge of the histories of media art history in the international context by making accessible documentation and a range of other materials via an evolving online archive".

ISEA2013 RAMAH partnered the Latin American Forum to further the discussion by drawing attention to the multiple trajectories that have sprouted from outside of the usual centres and dominant paradigms.

The Panel Re:imag(in)ing Indigenous media art histories was engaged both Australia and Colombian practitioners to focus on histories of Indigenous Australian artists working with new media, and in particular the inroads and dialogues they have established in international networks. More broadly, the session addressed issues of identity, representation and visuality in the so-called 'Global South'. Panel participants: Brenda L Croft, Jenny Fraser, r e a, Timothy Maybury and Esteban García.

One of the most interesting presentations was in charge of professor Delinda Collier from the Chicago Art Institute entitled "The Tacet Mark as Blackness: Interrupted Currents in African Electronic Art" who examined several electronic artworks from Africa that reflect on electricity, the absence of infrastructure as a key signifier for 'Africa'. "In the electricity-based artworks discussed, disconnection is a 'blackness' that is both textual and mechanical, and includes discourses of development and underdevelopment, and the mechanical connections and amputations of Africa from global technology".

Juan José Díaz Infante presented the "PLAY! Festival": An experiment in augmented reality. This presentation showed via a series of slides different examples of the art and technological pieces that were shown in the festival, how they were presented and how the public reacted.

Nahum Mantra, presented the series of meetings on space culture "Kosmica", This gave to the audience a better insight into the new work being produced by leading Mexican artists related with aero special topics, and enabled conversations about potential collaborations. The material for this presentation came from the work done in ISEA2012 in Albuquerque and the first Kosmica organized in Mexico by The Arts Catalyst and the Laboratorio de Arte Alameda. In ISEA2013 the progress of this series of collaborations within the Latin American Forum was shown.

Without losing the Local References

Recent experiences carried out by collectives of artists, designers, software developers, and engineers make it possible to observe complex reinterpretations of local realities, from critical perspectives, which take into account the universal references, but applied to the local. Networks are now a new way of understanding the processes of creation, especially from the perspective of artistic collaboration, within the framework of an interactive process that links the global with the context. This, however, is not new: in the vanguards of the early twentieth century, the idea of collaboration and networks were already present, mainly in Russian constructivists, German Expressionists, Futurists, Dadaists, and Surrealists, who based their programs and practices on collective creation.

Already in the 21st century, artistic production is directly linked to interactivity, the immateriality of works, telematics works, *open source*, augmented reality, among other processes that invite creators and spectators to explore and carry out systematic research Around the new relations between art, science, technology and society. In Latin America, outstanding experiences such as those carried out by artists and organizations such as LabSurLab, the Center for Experimentation and Research in Electronic Arts CEIARTE, MediaLab Manizales, among many others, generate spaces for dialogue and develop works and projects that reinterpret a Complex reality in sociopolitical fields, seeking, through a creation supported in networks, new ways of understanding culture.

In this line, other perspectives that have to do with memory, heritage, archives, and sustainability make their way in the context of collaborative artistic creations. According to Davis, Nikolic and Dijkema, industrial ecology, which today evolves thanks to computer networks, can be defined as the study of interactions between industrial systems, the environment and sustainability, in order to, from of a multidisciplinary view, to understand the emerging behavior of natural systems. Using this holistic view-point, we hope not only to understand, but also to shape the links between economics, social concerns, and the environment, in order to guide the world towards sustainability. Many artists, interested in these holistic visions of the environment, propose analyzes, activism, and regeneration of ecosystems, some of them inspired by eco-feminism and political struggles against the dominant power. The earliest artistic productions in this category can be seen in landscape studies in European cities, in the views of 19th century savage territories, and in the works of artists such as Robert Smithson, Dennis Oppenheim and

Christo, in the 60. Most recently, efforts by knowledge networks such as Leonardo / The International Society for the Arts, Sciences, and Technology (Leonardo / ISAST), a nonprofit organization led by astrophysicist Roger Malina, Artists, scientists and researchers from many parts of the world through programs with creative and interdisciplinary approaches.

Likewise, events such as Balance-Unbalance, led by the Argentine-Canadian Ricardo Dal Farra, BunB proposes a review of issues related to climate change and environmental crises in the world, with the participation of networks of scientists and artists from different International institutions. Also, the International Image Festival, held in Manizales, Colombia by the University of Caldas since 1997, has been profiling research and creation processes, research and experimentation, from transcendental thoughts that have guided programs such as the Doctorate in Design and Creation and The Master in Design and Interactive Creation. It is precisely on the stage of the Festival that the complexity of contemporary creation networks is observed, in which art, design, science and technology intersect with local realities.

In the regional context, the ClusterLab emerges, a virtual platform that brings together the creative industries of the Coffee Hub, a platform for collaborative exchange to make visible the creations and cultural undertakings that form a fundamental part of the contemporaneousness of the Colombian Cultural Landscape, recognized by Unesco as a World Heritage Site.

Networks, therefore, foster the creation of communities that drive important collaborative developments in local comminutes, however they are also a permanent object of criticism because of the marked fragmentation they generate.

Re-significance

Re-significance is a theoretical initiative to describe an applied media archaeology framework. At the Latin American Forum, we proposed the "re -significance of the media" as a conceptual platform that could be used to investigate and teach media archaeology in an innovative way. The framework introduces how practical research components, such as lab experiences and fieldwork can be applied in workshops or designing academic curriculum. The "re-significance of the media" is a joint endeavor by curators, artists, and archivists to further understand the historical context of innovation and also as a strategy to upgrade old technology-based art based on primary sources research. Re-Significance investigates the history of artifacts to reconstruct them using contemporary technologies. Through the reconstruction, scholars may gain a deeper understanding of the computer systems and their philosophy as a whole. In this presentation, we will discuss re-significance in the Latin American and global contexts: Yturralde, Giorgini, Comdasuar and Zuse.

Media Archaeology and the Re-significance of Media Art
A possible starting point for the study of early computer-mediated works could be Media Archaeology. Media Archaeology (Huhtamo, Parikka, 2011) is a branch of "historically oriented media studies" that "rummages textual, visual, and auditory archives as well as collections of artifacts, emphasizing both the discursive and the materials manifestations of culture." Media archaeology is an open-ended qualitative process that engages with the study of artifacts of media culture. These artifacts could be primary sources such as manuscripts, images, diskettes, magnetic tape and computer code. As digital media technologies advance, many of these artifacts from the early computer era may have become obsolete, making it sometimes difficult or sometimes even impossible to properly "read" computer-mediated work from the last six decades. The disembodied nature of computer mediated artworks poses a great challenge for media art scholars, curators, conservators and archivists who have found great interest on this field in recent years.

Media archaeology alone does not take further steps into the systematic analysis of the computer system as a whole, and for this reason we explored Andrés Burbano's "Resignificance of Media Technology" (2013) as a framework that would allow us to gain a deeper understanding of early computer contributions. In a similar way than Burbano, Francis Marchese (2011) proposes a framework for the long-term preservation by recreating digital artworks through the study of the available documentation about the piece.

According to Burbano (2013), the re-significance of technology encompasses the study of the media artifacts as well as the researcher's own attempt to reconstruct the technologies of the past. Burbano's approach is rooted in Zielinski's concept of "Deep Time", looking beyond the layers of hegemonic history. Studies of decentralized or often forgotten histories are especially relevant in the

context of Latin America, as its own history has been often forgotten or simply "at the borders of history" (Burbano, 2013). Using the Re-significance method, we have been able to recreate contemporary versions of forgotten media art. Examples of the projects are:

Impossible Figure Generator

Jose Maria Yturralde is a Spanish artist who was curious about computers since 1967. Using Spain's first computer, Yturralde collaborated with scientists to produce the "imposible figure generator" at the Centro de Cálculo de la Universidad de Madrid (CCUM). The "Impossible Figure Generator" was a system designed to plot all the possible combinations of variable Penrose geometries. The application recreated through this research aimed to reconstruct the software developed by the team Yturralde-Ramos-Searle and illustrated the context in which it occurred. Our impulse was to understand the Yturralde's work through the re-significance of his creative process. As a result of this investigation, we have created a modern day impossible figure generator, which will allow new generations to access, as well as understand the computational methods used for the development of this early framework. This occurred during Spain's transition from Franco's fading dictatorship to democracy. With a historical mindset, we aimed to document and preserve these materials through a contemporary interpretation of this model. The manuscripts about this project, written by Yturralde (1969), served as the foundation for the resignificance of the Impossible Figure Generator.

Ideal Flow

Aldo Giorgini was an Italian expatriate who developed art and science projects through experimentation with main-frame computers in the late 1960s and throughout the 1970s in Indiana. Based on the idea of "at the borders of history," we looked at the Computer Art movement that unfolded in the Midwestern Unites States, far away from the traditional art epicenters. Giorgini helped establish a small "computer art" scene in the USA, that integrated academic researchers and artists. These artists preceded the "digital age" from the 1980s and their contribution is relatively unknown.

In this study we were interested in the mathematical equations that Giorgini created to visualize the complexity of fluid dynamics. These historical visualizations show deep understanding of natural phenomena through computer simulations (before computer displays were available), while being representative of Giorgini's own artistic voice. Giorgini's algorithms, developed mainly during 1973 to 1978, on fluid dynamics had not been explored before. Rather than focusing on his entire life, we decided to focus on a specific period concerning fluid simulation, which constitutes his most extensive and obscure work. This gap allowed us to look again at this documentation (now hosted at the Virginia Kelly Karnes Archives and Special Collections Research Center at Purdue University) to revisit and reinterpret Giorgini's visually engaging art-science practice through a modern-day visualization tool. Ideal flow was implemented in WebGL, which runs in most modern web browsers without requiring any plugins.

Graphomat Z64

The Graphomat Z64 introduced Computer Aided Design (CAD) in Europe for diverse fields such as geodesy, meteorology, and road construction. Later on, it was used in the textile industry (according to Horst Zuse's site accessed in 2016). Although Zuse himself explains the machines were originally "developed primarily for technical ends," he explained that "the method can also be applied to artistic objects" (Zuse, 1969). Our Analysis of archival records revealed that Konrad Zuse was a visionary who enabled computer artists through his plotter bed design. Artists who worked with the Graphomat Z64 included pioneers such as Georg Nees and Frieder Nake. Zuse's contribution to computing has been overlooked, placing more focus on other contributors that were in the UK and USA primarily.

About a Fragmented Reality

Latin America is a fragmented reality, this chapter presents four of those fragments. First a poet from de Sierra Mazateca that never wrote her poems, she was one of the main poets of the hippie generation; Second, an American citizen that believed in fighting for a Republic, exiled in Mexico because of fighting for a Republic; Third an Argentinian that lives in Germany and generated an homage to Beethoven; Fourth a Chicano artist that lives in Mexico and the USA to his convenience. These are examples of the dyslexic society we live in, we live strange times. Latin America is a breeding soup full of discovery and enlightenment. Not developed means still in development, but not behind development. The structure of wealth does not

limit thought. Latin America potential is not limited by technology. Its thought is more advanced. There is not such thing as a coherent art history. A fragmented reality is a term that I like to describe Latin America as a phenomenon, but also, as its essence.

We have geographical and historical fragmentation that give us a common parallel. The last century we lived through revolutions, military regimes, all sorts of different economical systems. Cuba is not Venezuela and it is not Brazil. Latin American artists have become fragmented in all sorts of different exiles, even in their own countries. Poets were put in jail in Cuba for listening to the White Album by the Beatles. Mauricio Kagel, Argentinian develops his work living in Europe. Some artists live in exile within their own country. This paper is chapter is about the stories of María Sabina, Conlon Nancarrow, Mauricio Kagel, and Guillermo Gómez Peña.

María Sabina, a Latin American, Fragmented Reality Number 1

Long before 1960s counter-culture, an indigenous Mexican healer was creating extraordinary poetry under the influence of psychedelic mushrooms.

I learned about some of the experiments that Roy Ascott was doing with Ayahuasca, some years ago. It made me curious why someone from England would find something fascinating in what is our everyday reality. I was also familiar with the book the "Enseñanzas de Don Juan" by Carlos Castaneda where he offers a new thesis on a mindstate he calls "total freedom" and claims that he used the teachings of his Yaqui shaman as "springboards into new horizons of cognition". That led me to star my own research about mushrooms, I learned about a man called Peter Wolf, at the time of my first session I had some problem with my knee, he taught me how to talk to the mushroom. The "Barranco" Mushroom. I started writing notes about mushrooms, the project´s name is "Notes about a conversation with the Earth". A conversation with the Earth starts with my first encounter with a contemporary Mexican *curandera*, or native shaman that allow Westerners to participate in the healing vigil that is known as the *velada*. All participants in the ritual ingested psilocybin mushrooms as a sacrament to open the gates of the mind. The *velada* is seen as a purification and a communion with the sacred.

The Western knowledge of María Sabina starts with an article in the Life magazine written by Robert Gordon Wasson. Some of her visitors who learned about mush psychedelic rooms were people like Albert Hofmann, father of LSD. Actually Hoffman published with Richard Evans Schultes a book named "Plants of the Gods" which is in part about their visit to María Sabina. Hoffman visited Sabina in 1962 and others came after, Roger Helm, Aldous Huxley, Timothy Leary, Walt Disney, and Alejandro Jodorowsky.

The influence of María Sabina goes beyond borders, she never took credit for her poetry, she always credited the mushroom. "she describes a mushroom vision whereby the 'Principal Ones' – tutelary gods, the lords of the rivers and mountains, ancient invisible presences in nature – announced her mission: "On the table of the Principal Ones, a book appeared, an open book that went on growing until it was the size of a person. In its pages there were letters. It was a white book, it was so white it was resplendent.

One of the Principal Ones spoke to me and said, 'María Sabina, this is the Book of Wisdom. It is the Book of Language. Everything that's written in it is for you. The Book is yours, take it so that you can work.' I exclaimed with emotion, 'That is for me. I receive it." (Rothenberg, 2003). Since her, dozens of other poets from different indigenous communities – Tzotzil, Mayan, Zapotec – have continued to render the world around them in verse. People have begun taking their voices more seriously; they are recognized as contributions to literature, not ethnography. Yet, so far, there's been no-one remotely like María Sabina.

Conlon Nancarrow, Fragmented Reality 2

Was an American-born composer who lived and worked in Mexico for most of his life. He became a Mexican citizen in 1956. Nancarrow is best remembered for his studies for piano player, being one of the first composers to use autoplaying musical instruments, realizing their potential to play far beyond human performance ability. He lived most of his life in relative isolation, and did not become widely known until the 1980s.

Conlon was born in the United States and decide to go and fight against Franco in the Spanish Revolution. Due to that fact, The United States revoked his passport. He decided to become a Mexican Citizen. He was a musician fascinated by machines. He worked on pianola music. It took each composition about a year to be completed, since he did the perforation of the paper himself, but

he also altered the mechanics of the pianola. As some experiments I did with a rented pianola. He worked the pianola to run at least 30% faster. Nancarrow was somehow programming his machines; he was making music that was not for humans to be played. So, in some of his music he would reach the ring going beyond the melody. Conlon Nancarrow is probably within the top 10 contemporary composers of the 20th Century, his fragmented reality makes him difficult to pin in a map.

Mauricio Kagel, Fragmented Reality 3

Kagel was born in Buenos Aires, Argentina, into a Jewish family which fled from Russia in the 1920s (He studied music, history of literature, and philosophy in Buenos Aires (Grimshaw, 2009). In 1957 he went as a scholar to Cologne, Germany, where he lived until his death.

From 1960–66 and 1972–76, he taught at the International Summer School at Darmstadt, he taught at the State University of New York at Buffalo from 1964 to 1965 as Professor of music theory and at the Berlin Film and Television Academy as a visiting lecturer. He served as director of courses for new music in Gothenburg and Cologne (Attinello, 2001). He was professor for new music theatre at the Cologne Conservatory from 1974 to 1997.

Invited by Walter Fink, he was the second composer featured in the annual Komponistenporträt of the Rheingau Musik Festival in 1991. In 2000 he received the Ernst von Siemens Music Prize.

Many of his later pieces give specific theatrical instructions to the performers (Kennedy, Bourne, 2006), such as to adopt certain facial expressions while playing, to make their stage entrances in a particular way, to physically interact with other performers and so on. His work is comparable to the Theatre of the Absurd.

Staatstheater (1971) is probably the piece that most clearly shows his tendency. This work is described as a "ballet for non-dancers", though in many ways is more like an opera, and the devices it uses as musical instruments include chamber pots and even enema equipment. As the work progresses, the piece itself, the opera and ballet in general, becomes its own subject matter. [Similar is the radio play EinAufnahmezustand (1969) which is about the incidents surrounding the recording of a radio play.

Kagel also made films, with one of the best known being Ludwig van (1970), a critical interrogation of the uses of Beethoven's music made during the bicentenary of that composer's birth. In it, a reproduction of Beethoven's studio is seen, as part of a fictive visit to the Beethoven's house in Bonn. Everything in it is papered with sheet music of Beethoven's pieces. The soundtrack of the film is a piano playing the music as it appears in each shot. Because the music has been wrapped around curves and edges, it is somewhat distorted, but Beethovenian motifs can still be heard. In other parts, the film contains parodies of radio or TV broadcasts connected with the "Beethoven Year 1770". Kagel later turned the film into a piece of written music itself which could be performed in a concert without the film—the score consists of close-ups of various areas of the studio, which are to be interpreted by the performing pianist. He has been regarded by music historians as deploying a critical intelligence interrogating the position of music in society (Griffiths 1978).

Guillermo Gómez-Peña, Fragmented Reality 4

Guillermo Gómez-Peña is a Chicano performance artist, writer, activist, and educator. Gómez-Peña has created work in multiple media, including performance art, experimental radio, video, photography and installation art. His ten books include essays, experimental poetry, performance scripts and chronicles in both English, Spanish and Spanglish. He is a founding member of the art collective Border Arts Workshop/Taller de Arte Fronterizo and director of the performance art troupe La Pocha Nostra.

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Authors' Biographies

Andrés Burbano

"Burbano, originally from Colombia, explores the interactions of science, art and technology in various capacities: as a researcher, as an individual artist and in collaborations with other artists and designers. Burbano's work ranges from documentary video (in both science and art), sound and telecommunication art to the exploration of algorithmic cinematic narratives. The broad spectrum of his work illustrates the importance-indeed, the prevalence- of interdisciplinary collaborative work in the field of digital art." Andres Burbano is doctor in Media Arts and Technology form the University of California Santa Barbara. Burbano is currently Assistant Professor in the Department of Design at Universidad de los Andes and is Academic Chair of ISEA2017 and Gallery Chair of Siggraph 2018.

Juan José Díaz Infante

Juan José Díaz Infante (Mexico City, April 19, 1961) is a transdisciplinary artist, photographer and poet. He is the director of the Ulises I project, the first Mexican satellite designed for artistic purposes and created by Citizens.The relevance of Ulysses I has positioned Diaz Infante as a member of the Cultural Committee of the International Astronautical Federation: ITACCUS. The satellite project has been presented in international forums including The Arts Catalyst in London and the Massachusetts Institute of Technology in Boston, among others. Diaz Infante is the current director of the International Festival Play! and was curator in Chief of Transitio_mx03 (2009). He was also the Chair of the Latin American Forum II at the International Symposium of Electronic Arts. His personal work includes experimental poetry, photography, video, installation, multimedia, music, netart and electronic art, he has exhibited in Mexico and abroad. In the month of October 2013 he was honored with the recognition "Mentes Quo + Discovery" in the category "Vanguardia".

Esteban García Bravo

Esteban García Bravo explores computational arts as a researcher, a practitioner and as an educator. He earned

his MFA from Purdue University in 2008, and a Ph.D. in Technology, also from Purdue, in 2013. His research on computer art history and digital media art practices has been featured in the annual meetings of international organizations such as SIGGRAPH, ISEA and Media Art Histories-MAH. His artwork has been displayed internationally in media art festivals, gallery exhibits, museums and artist-in-residence programs. Esteban is an Assistant Professor in the department of Computer Graphics Technology at Purdue University, where he teaches digital imaging, visualization and computational aesthetics.

Felipe César Londoño

Felipe César Londoño is Rector of Universidad de Caldas (http://www.ucaldas.edu.co), and Titular Professor and researcher in art, science, design and new media. Is director of International Image Festival, an event held since 1997, in Manizales, Colombia, integrating art, science and technology. Felipe was co-founder of the Department of Visual Design, director of Master and PhD in Design & Creation, Dean of the Faculty of Arts and Humanities, director of the research group DICOVI - Design and visual cognition in virtual environments and curator of the Monographic Show of Media Art. He has done the following research: Serious game on citizen participation, Interaction, public space and new technologies, design and development of multimedia educational materials in higher education, Digital Design, Interfaces of Virtual Communities, Patterns of Color in Caldas, The World of Visual Design, and Visual Expression in Cities Bahareque, among others. He has published several books, including: "Landscapes and new territories. Mapping and interactions in visual and virtual environments", his doctoral thesis: "Interfaces of Virtual Communities", the research: "Patterns of Color", "DIGITAL DESIGN. Methodology for creating interactive projects", among others.