Rafael Lozano-Hemmer: Exploring Mexican Identity in Interactive Media

by

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Abstract

Rafael Lozano-Hemmer's work is renowned for challenging the boundaries of media technology through the creation of experimental platforms that combine technology and performance. His approach often involves a playful aspect, which compels audiences to participate in public projects that rethink the uses of technology and reconsider communal relationships. Although his interactive-digital artworks may be perceived as merely entertaining or spectacular, they also bear deeper meanings about the artist's Mexican heritage that have so far been overlooked by critics. In this MRP, I analyze three of Lozano-Hemmer's artworks – *Sandbox* (2010), *Nave Solar* (2011), and *Loud Voice* (2008) – to elaborate on how they comment on specific social, political and spiritual issues endemic to Mexican history and identity.

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To Gareth

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Introduction

Rafael Lozano-Hemmer is a Mexican-Canadian intermedia and electronic artist whose work is renowned for creating immersive interactive installations that combine state-of-the-art technology, public art and the performative arts. Lozano-Hemmer's work has been commissioned for the Millennium Celebration in Mexico City, the Expansion of the European Union in Dublin (2004), a memorial for the Tlatelolco Student Massacre in Mexico City (2008), the 50th Anniversary of the Guggenheim Museum in New York City (2009), and the Winter Olympics in Vancouver in 2010. He was also the first artist to officially represent Mexico at the 52nd Venice Biennale in 2007 with his solo show *Some Things Happen More Often Than All of The Time*.

Lozano-Hemmer was born in Mexico City in 1967 to parents who were nightclub owners and he credits his upbringing in this scene to be a major influence in his affinity for performance and staging. Lozano-Hemmer immigrated to Canada in 1985 to study at the University of Victoria in British Columbia and then transferred to Concordia University in Montreal, where he received a B.Sc. in Physical Chemistry. Like many immigrants, the move from one Canadian province to another related to a lack of identification with the first location to where he migrated. Later on, he moved to Montreal because as he recalls, "there was a much more Latin feel. There were large communities of Latin immigrants — Mexicans, Chileans, whatever — but also,

the French culture itself was closer to what I was used to so that made [fitting in] definitely easier" (Rogers 2011).

Trained as a chemist, his transition into the visual arts began during his time in university when he met choreographers, composers, and writers and started doing radio programs with them: "I hooked up with people doing performance art and we did these technological performances. My contribution was directing and connecting different media through technology" (Lafving 2012). This exposure to a variety of disciplines resulted in his work's combination of scientific empiricism and performative experimentation.

In several interviews, Lozano-Hemmer has stated that his work has been inspired by phantasmagoria, carnival and animatronics but is also conceptually informed by a wide range of Latin American individuals, such as the Argentinian conceptual and performance artist Marta Minujin, and the Chilean biologists/philosophers Humberto Maturana and Francisco Varela. Similarly, his work references Mexican personalities such as musician Juan Garcia Esquivel, Guillermo Gonzalez Camarena, inventor of colour television, and Mexican-American writer Manuel De Landa, to name a few.

The artist's main interest is in the creation of platforms for public participation by perverting technologies such as robotics, computerized surveillance or telematic networks.[1] His best-known installations involve a grand scale, are technologically innovative, and provide entertainment, but

often these characteristics divert attention away from broader concepts embedded in the work. Although the use of technology is vital for coordinating the audience's interaction within vast spaces, "the richness of the work comes from its symbolic meaning" (Finkel 2010: 9). Following upon this idea, my research in this MRP seeks to uncover the intrinsic significance and unexplored concepts in Lozano-Hemmer's work, specifically his Mexican cultural references. The artist's Mexican background is mostly addressed in interviews when he describes himself as a *Mexicanuck*, a term that depicts his identity as both "Mexican" and "Canuck." However, it is my view that further allusions to Mexican culture are suggested throughout his work, and the literature so far has unsuccessfully addressed such influences since it is an aspect that may not always be explicit or evident to the greater public. In my research, the digital technology used in Lozano-Hemmer's artworks is understood as both primary and secondary. It is a tool necessary to mediate interaction but it is not the centre of his work. Instead, his focus is on the social dynamics generated within the works, ones that allow symbolic multi-referential meaning to appear.

Technology is ubiquitous in everyday life, and Lozano-Hemmer has stated in interviews that he utilizes digital technology "not because it's original, but because it's inevitable" (Anstead 2009: 56). The artist seeks a convivial quality that is crucial for the conceptualization of his works. He aims for the installations to function similar to "a public fountain or to a park

bench" (Druckery 2003: 35), where people can gather rather than a purposeless use of technology. Although media participatory works typically have a clear set of boundaries, those by Lozano-Hemmer are capable of unfolding new events and narratives in a truly relational manner.

In media interactive artworks, the emphasis is on technology's capacity to prompt specific social encounters. The attractiveness of media installations such as Lozano-Hemmer's pivots on the playful use of technology and on the resulting social experience that transforms the audience from viewers into fully engaged participants. As the artist remarks, "[my] work is about the moment of the event itself and its creation through perception and participation" (Boucher and Harrop 2012). Interactivity in this way can be perceived as what Michael Rush calls "an [intensified] form of visual experience. In fact, it is a new form of experiencing art that extends beyond the visual to the tactile. Viewers are essential, active participants in this art" (2005: 238). On one hand, the audience's personal input is displayed as content, while for the artist the result is a vibrant environment. At the same time, an extra layer of complexity is added to interactive installations when they are presented in public spaces. These will be the type of works discussed in this MRP.

As a whole, Lozano-Hemmer's work exemplifies how contemporary art is multidisciplinary and functions as an expression of juxtaposed ideas and principles that are molded by a variety of factors. Through his diverse

projects, Lozano-Hemmer unifies complex ideas, exposing tensions between the attributes of public space, interactive media and his own inspiration in a way that brings together an eclectic variety of histories and practices. For this reason, it is timely and relevant to explore the ways in which our surroundings are utilized and reshaped by art practices, especially when they involve the participation of an enthusiastic audience. When such processes are analyzed and brought together, it is possible to perceive a multiplicity of rich narratives that clearly comment on larger social, political and spiritual issues.[2]

The interactive installations that best articulate these complex processes and concepts, and are at the center of my research, are *Sandbox* (2010)*, Loud Voice* (2008), and *Nave Solar* (2011). In the following pages, I will examine how these installations individually offer innovative possibilities for technology to bring forward new perceptions of identity, how the subject can be located and defined within modeled contexts, and how such works can re-frame the meaning of the adjacent architecture and site.

Figure 1. Rafael Lozano-Hemmer, *Sandbox (Relational Architecture 17)*, 2010, infrared surveillance cameras, infrared illuminators, computers, DV cameras. Photo by Antimodular Research, courtesy of the artist.

Figure 2. Rafael Lozano-Hemmer, *Sandbox*, 2010. This image depicts participants utilizing an infrared surveillance camera. Photo by Antimodular Research, courtesy of the artist.

1. TECHNOLOGICAL THEATRE: INTERACTIVITY AND PARTICIPATION IN *SANDBOX (RELATIONAL ARCHITECTURE 17)*

In digital art, interactivity is a characteristic of artworks that use technological tools to construct "dynamic environment[s], with the potential for the emergence of new events and insights that unfold as an active collaborative process" (Lovejoy et al. 2011: 15). Although many artists have explored different ways to frame the audience's experience, Lozano-Hemmer's audiences are more open to physically contribute to his intricate hi-tech works because they are encouraged to assemble in a fun and meaningful way rather than to just be a part of an indistinct crowd.

Within art, interactive participation has the potential to "transform people's perception of themselves and their social relationship [and] the audience is all-important in giving meaning and validity" (Willats 2011: 7). Lozano-Hemmer has stated that, in his installations, "participation is valid only if it's out of control, when the audience is tempted and seduced to participate."[3] For the artist, it is important to incite the audience's curiosity to participate in his installations because he values the surprise elicited by their unfolding actions and behaviour. It is through the opportunities opened by encounters delineated by Lozano-Hemmer that his works can reach their full poetic capability. However, it is important to highlight that by including a technological element, the relations that occur among participants are enhanced, but the variety of these seemingly endless actions are limited and

have parameters that align with purpose of the work. At the same time, although Lozano-Hemmer's installations have certain basic underpinnings, the types of dynamics that appear are incredibly complex and behind that complexity rest several multilayered social systems that constantly transform the work. In this section, I will explore how not only are these systems multifaceted and highly dependent on the participants' individual input but they are also reliant on the artist's intricate conceptual strategies.

Lozano-Hemmer's works are technologically and aesthetically spectacular. However, this term refers more to their monumental scale than to their connection with a capitalist-created "spectacle." The use of this term may imply that the artist's installations are "pacifying and divisive [and] immune from human activity" (Bishop 2006: 12); while in reality, Lozano-Hemmer's artworks advocate for a dynamic dialogue, collective enterprise and passionate involvement. Such exchanges can be illustrated by Lozano-Hemmer's public installation *Sandbox* (2010), a commissioned public sculpture that articulated social relations through a level of theatricality and brief, spontaneously choreographed events.

Sandbox was presented in Santa Monica's *Glow* festival in 2010. As stated by the festival organizers, the types of works presented in this festival were "projects [that] invite[d] active audience engagement and exploration and constantly surprise[d] in their unexpected placement in spaces and times not normally reserved for fine art."[4] *Sandbox* consisted of a surveillance

system that simultaneously captured the movements of participants and projected them onto two portions of the beach, the backstage and the front stage. Interaction took place in both areas: in the "backstage," participants gathered around a table that contained two small-scale sandboxes, while an overhead camera captured the participants' hands and upper body gestures. At the same time, these participants could observe ghost-like live projections of the audience located at the opposite stage via the infrared surveillance devices. As participants reached out to touch these projections, their hands were relayed to an area of the beach, which I define as the "front stage." Then, the actions from this front stage audience were relayed back to the backstage participants. In this way, the front stage projections were gigantic in proportion to the minuscule backstage. The actions of both audiences were reciprocative and constantly stimulated anew.

Audience and Technology

Sandbox's relational activities operated on numerous levels. First, interactions developed in two distinct scenarios defined as backstage and front stage. Secondly, there were three possible roles for the audience, be passive, interact or perform. Thirdly, depending on the zone where the participant chose to contribute, they could either instigate an action or follow along someone else's. As a result, when cross-gestural communication arose, true coexistence and dialogue occurred amongst the participants. In this

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sense, *Sandbox's* performative actions were clearly individually meaningful but the work was more compelling when coordinated interactions occurred. For example, one backstage participant lit up a match and his actions were projected onto the front stage. There, a participant reacted and collaborated in the miniature drama: he pretended to be burned by the virtual fire, hopping away from it, in mock alarm.[5]

Within this context, the artist sought to frame the field of interaction and offer a particular set of tools. In *Sandbox*, it is clear that technology played an essential role in coordinating group encounters within such a large space. The interactivity that unfolded depended on the technology's functionality, since these tools invited the users to have particular sets of capabilities such as the manipulation of augmented reality. As a consequence, the audience was seduced into having virtual control of the space. At the same time, the medium was flexible but did not dictate to the audience what they should do. In this case, it was up to the public to take advantage of the technological tools available in order to "activate" the installation, not in a subordinated manner but as a voluntary and collaborative exercise.

In event based media installations such as *Sandbox*, "the artist relies upon the participant's creative exploitation of the situation […] just as participants require the artist's cue and direction" (Thompson 2012: 41). In *Sandbox* however, the figure of the artist was pervasive and implicit but his presence was not required for interaction to occur because the work

depended upon ceding agency to social interactions through their

engagement with technology. Also, it could be said that "because art is made

of the same material as the social exchanges, it has a special place in the

collective production process" (Bourriaud 2002: 41), meaning that since the

very presence of the installation served as an invitation for the audience,

interactions were naturally prompted.

Similarly to dance and theatre, in this immersive environment the use

of non-verbal communication was facilitated through the introduction of

objects, which provided a storyline that permitted the transformation of

everyday artifacts into more social and relational ones, similar to props in a

play.[6] Also, though the participant's activities were limited to partial bodily

gestures, the impromptu performances and contributions could be compared

to improv theatre. The stories that emerged during the audience's

interactions depended on where the participant was located, unfolded in real

time, were improvisational and collaboratively created.[7]

The projection of oversized objects such as jewelry and lighters

simplified the communication between sections. The audience who

introduced objects composed narratives for the ones who utilized them,

which ultimately facilitated relational exchanges. These oversized virtual

objects or props were experienced by many people at once, opening the

dialogue to anyone who felt inclined to interact.[8] These objects demonstrated

how, participation was cheerfully welcomed, encouraged by other

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participants, and improvisional. During this exchange system, the objects that people contributed naturally caused wonder and imaginative plots. The playfulness of the interpersonal engagements, along with individual virtual transcendence and total immersion, made this collectively constructed experience captivating. *Sandbox*'s exploration of the practice of social relations also demonstrated that even though the artist provided certain parameters, any participant could still effectively use the complex tools to coordinate compelling and amusing theatrical performances. As a result, this interactive work created an environment of genuine collaboration that constantly reinvented itself on the basis of its performers.

Performing Surveillance

Conceptually, *Sandbox* sought to redesign a section of the Santa Monica beach into a playground by generating an animated topology. The framing of the work as a "sandbox" spoke directly to the type of playful and relaxed actions that could be performed within this context. Lozano-Hemmer's recognizes that, through of his education and background, science is like art because it is "a place of very intense experimentation and absolutely weird and beautiful phenomena" (Boucher and Harrop 2012: n.p). In this piece, his analysis of social behaviour can be compared to the observation into a virtual petri dish in the way that it almost systematically dissected human behaviour in a "miniature" scale.

Although the elements of the piece provided the audience with pleasurable sensual experiences, its playful framework is challenged by the use of tracking technologies. The participants' physical involvement, along with the artist's design, placed individuals under a meticulous examination, which aligns with surveillance tactics of close watchfulness. It could be said that, in this piece the use of infrared surveillance equipment addressed contemporary concerns regarding the inclusion of hi-tech spying techniques into the lives of ordinary people, especially in the placement of such technology at border crossings, streets and shopping malls. In addition, when describing this work, Lozano-Hemmer reminded us that this specific type of surveillance technology functions similarly to the one utilized at the US-Mexico border to track illegal immigrants. On one hand, *Sandbox* comments on technology's political and ethical implications. On the other, given his opportunity to display this work in the city of Santa Monica in California, *Sandbox* strategically references this state's ongoing and challenging debates regarding the crossing of undocumented and unauthorized illegal migrants from Mexico:

> Each day, approximately three thousand Mexican and Central Americans enter the United States illegally by walking across the southwestern border. The federal government has moved ploddingly during the last fifteen years to deal with the growing wave of illegal immigrants. In the early 1990s, the U.S. Border Patrol (now part of the Department of Homeland Security) instituted Operation Gatekeeper in California to ramp up enforcement efforts along the borer. High-tech walls and thousands of new Border Patrol agents have fortified the urban borders. Everyone agrees that U.S. border and immigration

policies aren't working and must be reformed. The details of such reform, however, remain up for debate. (Adler et al. 2007: n.p.)

As expressed by this study, illegal migration is fundamental to debates in the United States, and it is not surprising that this issue frequently results in antagonistic stances. One position that often arises involves racist and discriminatory practices such as the creation of local Minutemen groups, who conduct vigilante patrols of the border. For other citizens, the issue exposes the Mexican economic reality that "between one-third and two-fifths of Mexico's people would immigrate to the United States if given the opportunity" (Castaneda 2011: 148), engendering empathy. The subject of Mexicans crossing the border is exceptionally complex and polarizing, and arises often in the discussions of local residents, politicians and advocacy groups.

The reference to sand in this installation can be considered an allusion to the Californian desert. In this way, the installation enacts a version of the close surveillance that immigrants experience as they attempt to cross through the arid territory between Tijuana and San Diego. The reason why southern California and Tijuana are at the centre of immigration reform conversations relates to the matter of geography. Even though Texas has the longest stretch of a shared border with Mexico, California has the shortest. In fact, because of California's population, wealth and available jobs, it is one of the busiest illegal crossing points in the world and Tijuana serves as the last

"safe" destination before the risky journey into the United States for many Central and South American migrants.

These associations with illegal migration shift the understanding of the technology utilized in *Sandbox* from a promoter of collectivity to an instrument of imperialistic power. Given the presence of infrared surveillance technology, the audience was placed into an ominously scaled instance of reconnaissance and virtual capture. With *Sandbox*, the artist unmasks the power inherent in video and amplification technologies repurposing surveillance into an elaborately staged game. Despite its playfulness, Lozano-Hemmer's *Sandbox* has the capacity to implicate local sociopolitical concerns by stimulating the audience to re-imagine and uncover experiential insights into the issue of migration.

In interviews, the artist has stated that his installations attempt to bring back the aura of singularity to the work by "creating irreplaceable moments in time and space."[9] Due to the ephemeral nature of participatory installations, it is true that Lozano-Hemmer's *Sandbox* did not only create a space where social engagements could occur, he also offered the audience a lively environment where communion and complicity among participants was constantly being reconfigured. This installation allowed the audience to experience a once-in-a-lifetime performance that, when closely analyzed, restaged the way illegal migration operates, and in so doing illustrated the major problematic dispute between Mexico and the United States.

Figure 3. Rafael Lozano-Hemmer, *Synoptic Caguamas*, *Subsculture 4*, 2004. Glass bottles on motorized wooden table. Photo by Antimodular Research, courtesy of the artist.

Figure 4. Rafael Lozano-Hemmer, *Nave Solar*, 2011. Projectors, computers, surveillance cameras, PA system, steel-aluminum-plasterboard sphere. Sketch by: Cy Randon. Photo courtesy of the artist.

2. THE STAGING OF ART AS AN EXPRESSION OF IDENTITY: *NAVE SOLAR*

The concept of identity is a complex ideological formation that relies on a

variety of personal impressions, feelings and opinions rather than external

facts. As described by gender theorist Judith Butler, identity is "performative;"

and it is the effect of "consistent and repeated invocations of rules" that are

delimited within culture (1990: 144). Although identity is a slippery concept,

in art practice it is possible to grasp aspects of artists' identity or subjectivity

via their conceptual intentionality since it reflects unique qualities and

beliefs ultimately rooted in heritage and culture.

Dialogic Identity Formations

Lozano-Hemmer's work is complex in the sense that his installations can

often be approached in two different ways. One is by focusing attention on

participation and the multifaceted social relations that unfold during their

display, and the other is by analyzing the ideas that informed the artist's

concept.

In order to unpack how Lozano-Hemmer's works speak about his

Mexican heritage, it is important to highlight that my understanding of

Mexican national identity is similar to that of the artist. I was born and raised

in Mexico City and share views that are particular to Mexican-Canadians. My

approach to identity aligns with what theorist Amelia Jones describes as

"mirroring," a dual process where "the self is always predicated on difference,

on the positioning of an Other who serves to render the uniqueness (…) of the Self" (2012: 20). In many ways, my analysis of the artist's identity is similar, a perceptual negotiation between his allusions to Mexican culture and how they resonate in my own identity.

To define the particularities of what it means to be Mexican is a challenging endeavor given that it depends of a variety of subjective individual and regional stances. However, some definitions can be drawn from how relationships between individuals occur and what cultural commonalities are shared. Also, when these characteristics do not fall under clear cultural stereotypes, they are rarely evident to individuals that are not immersed in the day-to-day dynamics of a culture.

Mexican art is known for its use of vernacular forms of expression that stem from a perceived fondness and enjoyment of kitsch and folk culture: "in Mexico, kitsch is not an affectation. It's the result of the unthinkable coming together naturally. It dissolves borders, opens up aesthetic territories and reveals a way of life" (Fernandez and Gonzalez 2011: n.p.). In artistic practice, kitsch and folk, understood as a "paradoxical mixture of confronted cultures," can translate into unprecedented aesthetic relationships that are often humorous and playful (Fernandez and Gonzalez 2011: n.p.). In Lozano-Hemmer's work, his negotiation between characteristics of Mexican national identity, social identification and contextual narrations is synthesized through titles, theoretical inspiration and historical references. Art historian

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Maria Fernandez describes Lozano-Hemmer's work as a "convergence of multiple views of history exposing interrelations and unexpected linkages while avoiding the development and illustration of a linear narrative" (2001: 77). Lozano-Hemmer's playful adaptations of vernacular Mexican traditions and concepts enlarge the aesthetic scope of the work and reveal his experience of Mexican popular culture. For example, in his work *Synoptic Caguamas* (2004), the artist utilizes thirty beer bottles commonly known as *caguamas* (40's in North America), and configured to resemble "a large motorized Mexican cantina table."[10] As described by the artist, this kinetic sculpture "is a primitive and absurd attempt to make tangible the mathematics of recollection and thought."[11]

The use of the *caguama* bottle has social connotations in Mexican culture. Firstly, these bottles are extremely popular because they are inexpensive; secondly, in popular slang they are synonymous with anything "big," given their large size. For this reason, it could be said that the artist's use of this iconic bottle for *Synaptic Caguamas* expresses his empathy with Mexican folk aesthetic. In a small scale, the characteristics of this installation hint at the broader characteristic of the ambivalence of Mexican vernacular art that "goes from tacky to sublime" (Fernandez and Gonzalez 2011: n.p.). This sculpture fluctuates between the profound aesthetics of fine art and everyday elements, concealing seriousness and clever humour.

Lozano-Hemmer's installation *Nave Solar* (2011) is a work that

continues an interest in popular culture, which he describes as "poetic or connective"(Brangham 2013: n.p.), meaning that the artist paid particular attention to organically joining the installation's technological requirements with characteristics of the installation's display site. Given *Nave Solar*'s complexity, this installation can demonstrate how the artist intertwines a variety of ideas related to his Mexican identity.

Nave Solar was designed for the former Convent of San Diego, a sixteenth-century building (formerly a site of the Spanish Inquisition) in Mexico City that was recently transformed into its contemporary incarnation, the *Laboratorio Arte Alameda* museum*. Nave Solar* takes its name from the "nave," which is an architectural term that refers to the central part of a classic Catholic church; an area intended to accommodate the congregation, and Lozano-Hemmer's installation was located in this section of the former convent. The word "solar" alludes to the space's relation to the interactive "Sun" placed above the nave.

Site-specificity as a characteristic found in Lozano-Hemmer's *Nave Solar* has two angles. One aspect focuses on the audience and underlines how "the uniqueness of a discreet interaction between participants" (Druckery 2003: 31) is unrepeatable, therefore specific, and the second one concerns the logistics behind the design for this space.

Nave Solar is an interactive installation composed by a six-meter diameter spherical screen that hangs from the ceiling. From this object, a

rope is hung to the floor level of the space. Two simultaneous audience-produced videos are projected: one onto the sphere, which consists of a real-time simulation of the activity that occurs on the surface of the sun; the other consists of the audiences' reflection. The sun projection was generated by the public's movement and depended on the amount of activity perceived within the exhibition hall. This projection included recent imagery obtained by NASA's solar observatories and was carefully programmed mathematically to produce the visual effects of turbulence, flares, ejections and sunspots.[12]

When no one was participating in the installation, the projections in the sun-like screen were slow and calm. When there was movement, the projections became more turbulent, causing "the Sun" to rotate along its vertical axis. The rope is key to the work, for it was placed so that visitors could grasp it and swivel around the space. Subsequently, a tracking system detected the movements of participants, which were then used to generate images of smoke and mapped onto the main wall. Afterwards, the virtual smoke accumulated on the ceiling of the space. The auditory aspect of this piece also responded to activity and it could be described as an unsettling white noise, ambient sound, or echo. Given these complex technological and structural aspects, *Nave Solar* is conceptually dense and oneiric in its materiality and presentation. The work occupied the exhibitionary space in an all-encompassing manner in such a way that the church was transformed into a true immersive environment. However, this environment was not

static but dynamic, and functioned comparably to an ecosystem. The role of

the participants was similar to organisms that interacted with each other in a

way that it affected and transformed their environment.[13]

Mexican References: Popular Culture, Religion and Nostalgia

In order to examine Mexican aspects found within Lozano-Hemmer's work it

is necessary to relocate the figure of the artist back into the centre of the

aesthetic analysis. Amelia Jones in "Seeing Differently, History and Theory of

Identification and the Visual Arts" explains that individuals are "always

already an ideological construction and intimately reliant on social, political,

and economic formations" (2012: 21). The artist's national identity and

cultural identification can be analyzed given the fact that cultural

environments always influence individuals.

In the case of Lozano-Hemmer, when these antecedents are embedded

in the design of the artwork, they provide poetic vitality. For example, *Nave*

Solar is conceptually informed and framed by a wide range of sources, the

most significant being the Santiago de Compostela Cathedral's censer known

as "the Botafumeiro," French physicist Leon Foucault's pendulum theory (it

demonstrated the effect of the Earth's rotation), Edgar Allan Poe's *The Pit and*

the Pendulum, and Luis Manuel Pelayo's television show. The Botafumeiro is

a highly ornate, 80 kg metal censer suspended from chains. Its incense is

burned during special worship days in Roman Catholic services. Lozano-

Hemmer's association between *Nave Solar* and the Botafumeiro is clear: once the participants held to the rope and began the oscillatory movement they acted as the smoke expeller. With regards to the reference to Leon Foucault's theory, along with the described censer, set the visual model for the type of pragmatic bodily executions that Lozano-Hemmer anticipated. These varied allusions reflect the extent to which his personal narrative is inspired by his scientific background. Simultaneously, these notions are not politically neutral, for they bear socio-economic associations that add layers of complexity to his body of work. As a whole, the artist's practice speaks from a diversified sensibility that ranges from the field of the social sciences to Mexican sentimentalism and nostalgia for mid-twentieth century culture. In addition, the contextual narrations framed by this work are organized in a symbolic logic that derives from the religious (although playful and relaxed) nature of contemporary Mexican culture.

Lozano-Hemmer suggested that the actions executed during *Nave Solar* could be also interpreted as a witches' gathering.[14] It is characteristic in these demonic gatherings to revere a malignant subject, however, in this case the object at the centre of the reunion is the celestial object. As a whole, this interactive staging could be interpreted as a symbolic "worship" or pagan rite that had an overpowering sensory effect. In *Nave Solar*, the artist managed to transform this exhibitionary space into a ceremonial precinct by constructing a ritualistic atmosphere. This effect was staged through the use of virtual

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smoke, dimmed light, reverberating sounds and most importantly, through

the assembly of individuals who, reunited around a central object, wait to

perform. In this way, the artist juxtaposes a sense of sacredness with that of

the profane illustrated by the combination of Catholic religious connotations

and witchcraft and inserts them into a mystical high-tech interactive setting.

This construction illustrates the pervasiveness and central role that rite and

ceremony had played in everyday life in Mexico and how the religious

sensibility is syncretic. Octavio Paz, Mexico's Nobel Prize winner and author

of "The Labyrinth of Solitude," he describes a unique characteristic about

Mexican culture:

> [Perhaps] both our Spanish and Indian heritages have influenced our
> fondness for ceremony, formulas and order [...]. Perhaps our
> traditionalism, which is one of the constants of our national character,
> giving coherence to our people and our history, results from our
> preferred love for Form [...]. Our devotion to Form, even when empty,
> can be seen throughout the history of Mexican art from pre-Conquest
> times to the present. (1985: 32-33)

This passage by Paz explains that he perceives that Mexican culture has a

tendency towards transforming social interactions into rituals. Similarly,

politician and academic Jorge G. Castaneda observes that in Mexico a wide

variety of performative systems exist to the point that "everything is a ritual,

[perhaps as] a substitute for facing up to awkward realities" (2011: 132). For

Paz and Castaneda "ritual" can be understood as organized social expression,

while in the culturally-specific context of the *Laboratorio Arte Alameda*,

"ritual" is comparable to structured action. Following the ideas of Castaneda

and Paz, it could be said that in *Nave Solar*, the artist partially anticipated that, given the participants' affinity towards performance when confronted by this work, it would result in their enthusiastic action.

One important Mexican reference that is not always evident in this work is Luis Manuel Pelayo's TV game show. Pelayo was a celebrated TV host, actor and voice-over personality who in the 1970s hosted the daily game show *Sube Pelayo Sube* ("Climb Pelayo Climb").[15] The show included a combination of modest but highly entertaining games such as "the greasy pole," and the acclaimed *arriba papi pa'rriba* ("up up daddy up!"), which consisted of climbing a slippery ramp. The type of physical activity necessary to play these games required the contestants to perform improvisatory audacious actions (often without adequate protective gear). As they were on live television, they had little or no time to rehearse. In these contests the mandate for the participants was simply to approach the obstacle and exert yourself.

In Mexico, the sentimental attachment to the figure of Pelayo relates to his illustrious career and presence in radio and television. Pelayo is also dearly remembered for his participation in the groundbreaking radio show *Kaliman*, in which he gave voice to the main character, the first Mexican comic book hero. Such cherished popular references trigger nostalgia among those individuals who share those memories, in particular those individuals who grew up in Mexico during the 1960s and 70s, when this show was

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broadcast. In practice, the relation between the reference to Luis Manuel Pelayo's *Sube Pelayo Sube* games and *Nave Solar* is that Lozano-Hemmer activates specific Mexican references while reworking the idea of the game and absurdity. Similarly to Pelayo's games, the artist suggests that when the participant is confronted by an unknown setting the body should operate and act fearlessly and spontaneously, and thus gain a joyful experience.

The importance of the role played by the technology in *Nave Solar* is that it facilitates an otherwise complex semiotic and emotional relation among participants, as well as between the work and the audience. The audience's temporal projections of their individuality, along with the staging of art as an expression of the artist's understanding of Mexican culture, is only one of the many ways in which to frame identity within exhibitionary spaces. However, these characteristics continuously shift and remind us of the impossibility of singular definitions of perception within contemporary media practices. According to Maria Fernandez, Lozano-Hemmer is "one of few artists who engages history, specially as it relates to the conditions of post-coloniality" (2001: 77). His Mexican references reveal an ambivalence that is characteristic of Mexico as a hybrid culture that often shifts between a perceived love for the foreign and a fervent nationalism rooted in indigenous mythology. The poetic connection between the Mexican national character and the processes of *Nave Solar* is that both are expressed in subtle gestures that turn into metaphors, manifesting larger elements of identity such as

religion, popular culture and society. In *Nave Solar*, the artist revealed some insights into how he sees Mexican life, which is humorous, nostalgic and passionate, while rendering an eerie portrait of the audience.

Figure 5. Rafael Lozano-Hemmer, *Loud Voice, Relational Architecture 15*, 2008. Xenon robotic searchlights, megaphone, live FM radio transmission. Photo by Antimodular Research, courtesy of the artist.

3. PERFORMING COLLECTIVE MEMORY: *LOUD VOICE, MEMORIAL FOR THE STUDENT MASSACRE*

> We Don't Want Olympic Games! We Want a Revolution!
>
> – popular student chant (c.1968)

On October 2, 1968, the Mexican government orchestrated a mass killing of students and civilians that attended a peaceful rally in Plaza de las Tres Culturas (or "The Square of the Three Cultures") in the Tlatelolco neighbourhood of Mexico City. The fatal student massacre was the culmination of several months of confrontation between students and the Mexican government. Students from around the country allied in a group called The National Strike Council as a reaction against the escalating censorship and harassment perpetrated by government officials. This group of students coordinated protests to promote social, educational, and political reforms that ideologically aligned with those of the majority of the population, which provided them immediate support.

On that day, speeches were planned at the Square of the Three Cultures where civilians, bystanders and students alike gathered. The protesters were unaware that police and a special military unit called the "Olympia Battalion" had surrounded them. These squads were positioned in adjacent buildings, one being the residential complex building named "Chihuahua." Other armed groups took the adjacent Santiago de Tlatelolco church, as well as the nearby tower that held at the time the Mexican

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Ministry of Foreign Relations (today's Tlatelolco Cultural Centre). It has been

alleged that the first shots came from the latter. The killings continued

through the night when the neighborhood got its electricity and telephone

service cut off. The government restricted access to emergency services in

order to keep the evidence hidden away from the broader population and the

press. Under the cover of darkness, the government removed the corpses to

undisclosed locations. The next day, the press was ordered to minimize the

occurrences of the previous night and so reported only a handful of casualties,

calling them self-provoked and afflicting only the rebellious students. It was

later known that the foreign press present at the rally was also threatened

and had their equipment confiscated and destroyed, as recalled by one Italian

journalist: "I saw many wounded, and lots of blood (…). I'm also amazed at

the stories in your newspapers. How bad your papers all are – so afraid to

speak out, so afraid to express any sort of indignation!" (Poniatowska 1975:

276). It is a popular belief that the real reason for this act of repression was

to keep the country in "apparent" peace and avoid bad press since the

country was hosting the 1968 summer Olympic Games that year and the

inaugural date was only ten days away.

The outcome of that night was the imprisonment of thousands of

political prisoners, arbitrary arrests and thousands of vanished citizens. Until

this day, there is no official version of how the events unfolded but in recent

years efforts have been made to declassify this episode of Mexican history,

and to make accountable those responsible. Since 1968, every October 2nd features commemorative demonstrations around Mexico City that often culminate with a ceremonial gathering at The Square of the Three Cultures. Students from National Autonomous University of Mexico (UNAM) and its associated institution The School of Chemical, Industrial, and Electronic Engineering (ESIQIE),[16] as well as survivors, victim's families, civilians and rioters attend these demonstrations. Unsurprisingly, crowd control police commonly known as *granaderos*[17] follow these conglomerations closely. In these gatherings, the attendance of *porros,* a group of rioters historically and socially linked with UNAM are expected to provoke confrontations with the police. During these demonstrations, the presence of rioters often results in hijacked public buses, fights and vandalized public monuments. Such disturbances reflect only one aspect of how socially sensitive and politically charged this day continues to be for the Mexican people.

Relational Architecture

Lozano-Hemmer coined the term "relational architecture" to describe the way his public works transform the architecture selected for the project through the use of technology. Lozano-Hemmer defines relational architecture as "the technological actualization of buildings with alien memory" (Druckery 2003: 29). The way structural transformations occur is not through a permanent physical modification; instead, buildings are altered

through processes that require media technologies in order for the people in the street to be involved. The resulting effect is what Lozano-Hemmer defines as an alien memory, "something that does not belong there" (Gladman 2002: 60), but that temporarily appropriates existing structures through light, projections or sound.

In general, in order to create architectural disruption the audience is required to physically engage with the technology made available by the artist. It is characteristic that Lozano-Hemmer carefully plans how the interaction could take place and, although it is clear that he cannot personally control or direct the audience, he always intends that such actions embrace unique characteristics of the site.

Lozano-Hemmer's artworks have been presented in many contexts, but he is best known for those works presented in public spaces, which emphasize inclusivity and monumental scale. Electronic media environments such as *Loud Voice* are attractive to audiences because they provide an opportunity to actively appropriate and manipulate the immediate surroundings in real-time. Aside from the inherent significance prearranged by the artist, these types of works increase their layers of meaning by incorporating the historic importance of the site. In the case of *Loud Voice*, this installation intensifies its complexity even further by addressing the location's political aspects.

In 2008, the Tlatelolco Cultural Centre of UNAM commissioned the public installation *Loud Voice (Relational Architecture 15)* to commemorate the 40th anniversary of the student massacre of 1968, which involved many of this institution's students. Envisioned by the artist as a memorial, this installation aimed to encourage participant-generated content to celebrate and honour the memory of the civilians killed during the confrontation. The work was installed in the Square of the Three Cultures, which is a site already rich with historical and political overtones. The square takes its name from the architectural structures found at this location, making reference to three periods of Mexican history. This site contains the remains of Aztec temples, a colonial Catholic church and a modern building complex.

The installation consisted of a megaphone placed on the ground floor for participants to speak into. As they spoke, their voices were amplified and transformed into a sequence of flashes of four 10kw Xenon robotic searchlights positioned on the roof of an adjacent building. If there was silence, the light was turned off, and as the voices got louder so did the light's brightness. When no one participated, archival recordings were played that included statements from survivors, interviews with academics and politicians, music from 1968, and radio art pieces commissioned by the University's radio station, Radio UNAM.

In one way, *Loud Voice'*s specificity is evident given The Three Culture Square's inherent historical framework, which evokes characteristics of the

location's association with the massacre. Although context is an intricate construct, the work took advantage of the location's physical characteristics of being an open space commonly used for neighbourhood gatherings. The artist's contextual envisioning was key for the audience to develop a sense of community since the work deeply depended on references to precise spatiotemporal circumstances. The work added a layer of complexity by directing powerful searchlights to some of Mexico City's architectural symbols, which I will discuss later.

The spatial and temporal dependency of this work is such that it would not make sense to perform and present it in a different location, or even to restage it at a different time. The Square of the Three Cultures is synonymous with the student massacre of 1968.

The combination of the audience's activity and agency in *Loud Voice* gave them the ability to engage with this square's history in a new and powerful way. The effect was visible in how the participants' statements were so denunciatory and focused on their lived experience of this oppression. This collective performance made the piece extremely valuable and emotive to the residents of Mexico City.

Collective and Individual Memory

Since official evidence of the students' massacre was destroyed, all that is left to record the history of this tragedy are the individual stories of witnesses,

relatives and civilians. Given how engrained this event is in the memory of many residents of Mexico City, it is key to address this sensitive historical episode in an engaging manner. Lozano-Hemmer's conceptual approach for the memorial was to reconcile historical meaning with physical presence by presenting local memory as documentation.[18]

Drawing from his characteristic use of searchlights in his *Pulse* series, Lozano-Hemmer offered this light as a tool for engagement.[19] The megaphone permitted citizens to voluntarily bring their individual narratives to a public forum. The participants' singularity was embodied through the empowering projection of their voices, which in turn drew the attention of passersby away from the chaotic environment of the city into the square, carefully balancing the vast space with individual actions. Physically, this interactive memorial appropriated public space momentarily, via negotiations with scale and by using the existing architecture as scenography. One way in which this installation temporally re-contextualized the esplanade was through the "reconceptualization of history [understood here as] circular and fluid, rather than chronological and fixed" (Tuer 2005: n.p.). By sharing and interpreting experiences, the participants' voices evoked, re-framed and actualized events from their past in an denunciative-gestural manner. Through the engaging form of storytelling, participants bridged cultural, political and economical divides, especially when they took place in the environment where those actions occurred. In *Loud Voice*, a type of oral knowledge was developed, one

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that "[reminded] us that our social spaces are never neutral [and] that they are inhabited by memories of all sorts" (Druckery 2003: 23). The ability to tell stories allowed participants to transfer their individual knowledge into the social context of the installation.

For some participants, this platform was perceived as a valuable opportunity to connect with their community and for that reason it was crucial to address the situation within certain parameters. For example, a number of statements had a denunciatory tone, proving that there was a sense among participants and audience alike that this gathering had the potential to be symbolically meaningful.[20] The type of content was self-regulated by the participants, which denoted their personal insight towards the installation's theme and contextual framing. Consequently, the statements, despite being mostly improvised, aimed to be properly structured and presented solemnly, as demonstrated by one declaimer:

> My parents wouldn't let me come that day, so that's why I'm still alive and here with you. I'm very moved by this situation. Today we need to continue fighting and participating and to not give up. I thank you [all] for this opportunity to be heard.[21]

The audience and the participants that were gathered by *Loud Voice* could be compared to symbols of history or as material "archives" that were capable of shifting between past and present. The community of Tlatelolco's storytelling became integral to making artistic practice a site of social intervention and a type of cultural resistance.

The Volcano, The Pyramid and the Square of the Three Cultures

Apart from its technological, performative and interactive aspects, *Loud Voice* incorporated a radio-art component. The live performance at The Square of the Three Cultures was linked to the frequency of 96.1 FM Radio UNAM, giving anyone within range real-time access to the performance.

As described by the artist, his use of radio-technology as a medium was inspired by the Stridentist Mexican Movement, in particular Xavier Icaza's *Magnavox* manifesto. The Stridentist or *Estridentismo* movement was an early Mexican avant-garde movement that arose in 1921, parallel to the Mexican Muralist Movement. Related to Dadaism, Futurism, and Ultraism, Stridentism was a movement centred on different strategies in order to create urban disturbance. The very name of the movement refers to city noise and its followers promulgated new urban sensory values and were devoted to mechanical aesthetics.

Icaza's *Magnavox*[22] or "loudspeaker" manifesto is written in the format of a short play that aimed to "call for a profound exploration of national identity" (Rashkin 2007: 9). The main character is a humble man who stands on top of The Sun pyramid of Teotihuacan and listens to speeches that come from giant loudspeakers that emerge from the crater of three of Mexico City's nearby volcanoes. The first loudspeaker appears from the Popocatepetl volcano[23] and the speech is given by Jose Vasconcelos, one of Mexico's most influential reformists, who defined Mexicans as a "Cosmic

Race;"[24] the second speech is given by the character of an Italian journalist,

whose loudspeaker comes out from the Iztaccihuatl volcano;[25] and the third

speech is given by Vladimir Lenin, whose megaphone surfaces from the Peak

of Orizaba. The last speech is the most important. It is given by the character

of Diego Rivera, who in a patriotic manner calls the listeners to "do Mexican

things and to express Mexico" (Brushwood 1986: 166). Rivera's speech is

powerful and incites a response from the text's internal listeners. Although

Rivera speaks without technological mediation, "Rivera's speech provokes

applause from the crowd and dramatic seismic reactions from the landscape

itself" (Rashkin 2007: 9). *Magnavox* is an example of Mexican post-

revolutionary aesthetic activism and its relevance resides in the innovation of

a manifesto being presented as a performance piece. As a manifesto, it rejects

simplistic formations of nationalism and promotes new ideas.

The association between *Loud Voice* and *Magnavox* originates in

technology as a central metaphor. The emphasis on the interplay between

theory and praxis reflects that both performances are meant to be seen as

well as heard: "[the] loudspeakers which emerge out of Mexico's volcanoes,

[convert] the country's natural landscape into a giant, if ambiguous,

communication event," (Rashkin 2007: 9). At the same time, the distribution

of *Loud Voice'*s elements make a distinct allusion to *Magnavox'*s staging. The

positioning of the megaphone forces participants to stand similarly to

Magnavox's main character: in front of the volcano, symbolized here by the former Foreign Affairs Ministry's building.

The speeches given by Vasconcelos, Lenin, the Italian journalist and Rivera are represented in this installation by four light beams. Three of these lights were located on the top of the Ministry's building and one was situated on ground level. That light was located where the participants stood, and it projected its beam onto one of the Ministry's façades. The three upper lights embraced the whole city symbolically: one was directed towards the Zocalo, the main square in the heart of the historic centre where all the relevant social, political and cultural life of Mexico City takes place. The second faced the Basilica of Our Lady of Guadalupe, built near the hill of Tepeyac where Our Lady of Guadalupe is believed to have appeared to indigenous Saint Juan Diego Cuauhtlatoatzin. The imposing structure of the Basilica is a constant reminder of Mexico's Catholic fervor, "to be 100% Mexican, one must be Catholic" (Castaneda 2011: 139). The third light pointed towards the Monument to the Revolution, a mausoleum for the mythic national heroes and a landmark monument.

With regards to the development of characters within a theatrical space, both Icaza's and Lozano-Hemmer's works favour the use of loudspeakers because of their ability to project and amplify the human voice, which facilitates the transformation of individuals into actors. Icaza's characters are explicitly charged with symbolic, political and nationalistic

meaning and are personified by the sound that comes from the loudspeakers. Similarly, the synched megaphone located on ground level represented the participants of *Loud Voice* as characters. The main actor varied, depending on which participant stepped up to the megaphone. Conceptually, *Magnavox* and *Loud Voice* share their political and artistic objective of recuperating the country's historical memory, as well as placing art at the service of the population and theatrically favouring the "fourth wall."

In *Loud Voice*, the audience can adopt three stances: to be a spectator at The Square of the Three Cultures, to remain a passive radio listener, or to perform by speaking into the microphone. When choosing to participate, the type of self-expression can define the individuals as either the patriotic Rivera or "the humble man." Evidently, the most compelling examples of participation emerged when the participant's speech was enunciated in the voice of a manifesto as "we," one of the genre's favoured communicative forms. This imperative plurality incorporated the speaker and audience into one, fulfilling the artist's aim towards social amelioration, as exemplified by young woman who articulated a heartfelt speech that said:

> We can't forget the martyrs and those who fought for a better future, we can't just chant *Never forget October 2nd!* We need to be aware of what really happened, and its true importance. So this is a call to action for everyone, old and young, interested in freedom and democracy, to be aware and not become complacent.[26]

In this sense, *Loud Voice* like *Magnavox* searched to place participants in a position where, similarly to the Rivera character, they could express their ideas regarding the political life of Mexico.

The theatricality and interactivity of *Loud Voice* challenged the notion that an installation occupies only a single location in space in time. The work's dimensions physically integrated and exposed different locations throughout the city via radio and light projections. This installation embraced the immediate architecture surrounding the Square of the Three Cultures as well as architectural monuments central to Mexico City's identity. Lozano-Hemmer's work, understood as a site-specific installation, uncovered the Square as a "ready reservoir of unique identity" (Kwon 2002: 55) by reframing the memories of the community, dislocating time and presenting them as the facts that had been long obscured by official accounts of history.

Conclusion

In this MRP, I have explored how Rafael Lozano-Hemmer's artworks approach social interactivity through a variety of methods. While such works are aesthetically striking and playful, they also expose how technologies can occupy and transform public space. My goal throughout this research has been to re-examine the artist's oeuvre in order to foreground and explicate the subtle references to Mexican culture and identity. It is my view that such references are so rich that, when unearthed and articulated, can change the critical perception of his work. By seeing these artworks through the lens of Mexican heritage, they are transformed into more profound, even political, statements.

Through the analysis of three case studies, I have demonstrated that the artist addresses several of Mexico's key subject matters in society, religion, and politics: *Sandbox* staged Mexico's illegal migration issue, *Nave Solar* symbolically enacted Mexico's hybrid spirituality, and *Loud Voice* showed how local political memory could be reframed as history. This level of complexity is a reminder that artworks such as Lozano-Hemmer's, even when ostensibly playful and carnivalesque, contain multilayered significance and can be dramatically re-interpreted through in-depth analyses.

1 Rafael Lozano Hemmer Official Website, *Biography*. Available at:http://www.lozano-hemmer.com/bio.php

2 See Bishop (2005, 2012) for further information on socially engaged participatory art.

3 *The Participatory Condition*, International Colloquium, Musee d'art Contemporain de Montreal, Rafael Lozano-Hemmer keynote speaker, November 15, 2013.

4 Santa Monica Glow Festival (2010), *About*, Available at: http://glowsantamonica.org/about

5 See Bullivant (2006) for further information about interactive spaces and Lovejoy et al (2011) for how the audience creates meaning through the use of digital technology.

6 For more information about improvised performances as artistic practice see Iversen (2010) and Doherty (2009).

7 These activities can be seen on the artist's video documentation of the project at: http://www.lozano-hemmer.com/sandbox.php

8 See Simon (2010), Cook et al (2010) and Shanken (2009) for more information on social participation in media artworks within exhibitionary spaces.

9 See note 2.

10 Rafael Lozano Hemmer Official Website. *Synaptic Caguamas*. Available at: http://www.lozano-hemmer.com/synaptic_caguamas.php

11 Ibid.

12 Rafael Lozano Hemmer Official Website. *Nave Solar*. Available at: http://www.lozano-hemmer.com/nave_solar.php

13 See Foster (1996) and Hiller (2005) for more information on the dynamics behind site-specific projects and the creation of the artist/audience relationship through identification.

14 In this video the artist used the term "*akelarre*."Laboratorio Arte Alameda (2011), *Machina, Medium, Apparatus*. Available at: http://www.lozano-hemmer.com/nave_solar.php

15 All translations are those of the author unless otherwise indicated.

16 School of Chemical, Industrial, and Electronic Engineering/ Escuela Superior de Ingenieria Quimica, Industrial y Electronica (IPN) also referred to as "poli."

17 *Granaderos* is the name designated to Mexico City's tactical police corps. Their main function is crow control but they are often accused of abuse of authority. In 1968, one of CNH's demands was the abolition of this group.

18 See Thompson (2012) for information regarding art forms that use aesthetics to affect social dynamics.

19 For more information on Lozano-Hemmer's use of light as a medium see Sutton (2013).

20 See Kester (2011) for more information on contemporary art practices as process or activism.

21 Rafael Lozano-Hemmer Official Website, *Loud Voice, Memorial for the Tlatelolco Student Massacre,* Available at: http://www.lozano-hemmer.com/voz_alta.php.

22 Also referred as *Magnavoz* by authors J.S. Brushwood and E.J. Rashkin

23 Popocatepetl means "The Smoking Mountain" in Nahuatl and is Mexico's most hyperactive volcano, located in the neighboring state of Puebla but visible from Mexico City.

24 For Vasconcelos the mestizo ethnic blend was considered inclusive and certain to be successful, since it brought everyone together "capable of true fraternity and of a truly universal vision" (Bartra 2005: 64-67).

25 The name *Iztaccihuatl* means "White woman" in Nahuatl, it is located north of the Popocatepetl volcano.

26 Statement available via the artist's video documentation of the project: Available at: http://www.lozano-hemmer.com/voz_alta.php. Emphasis added.

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