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UNIVERSITY OF SUSSEX Aide Violeta Fuentes Barron Ph.D. in Creative and Critical Practice

Creative Interventions in Digital Borders:

The coevolution of technologies and individuals in digital-physical Mexico City

<u>Abstract</u>

This thesis proposes a set of visual and technological practices for materializing digital borders. Mexican Culture and Mexico City are used as the basis of a critical media analysis that explores the ways in which culture, technology and individuals co-evolve.

With an interdisciplinary approach bridging Media, Communication and Cultural Geography, I examine modes of online communication as explored through observational analysis and iterative creative practice. My practice-led research operates as both action and theoretical reflection on the work of Nigel Thrift (space and the city), Mark Graham (internet geography), Guy Débord (psychogeography), Eduardo Navas and Matthew Fuller (art and technology) in order to expand knowledge across disciplines.

Mexico's complex positionality on the map (being both represented in Latin America whilst forming part of North America) and the particular technological innovations generated from this location provide a new perspective on the field of Media Studies, which tends to centre its analysis from a U.S.-based or European viewpoint. A focus on creative interventions that combine Mexican culture with Western elements and that mix elements of pop-culture with Mexican tradition highlights the complexities of a situated socio-cultural analysis in an era of global media. In this study, technologies and individuals are seen to coevolve based on the limitations of the geographical spaces in which they are intertwined; yet in a time of networked media cultures, cultural expression expands beyond the boundaries of its space of origin.

Chapter I presents a spatial analysis of digital borders using psychogeography as a creative intervention. Chapter II addresses a specific media technology, Mexican memes, and uses magic(al) realism to discuss memes as an extension of self. A particular quality of the creation and re-appropriation of memes in Mexico involves humour as a default communication mode. Chapter III describes the liveliness of Mexico City as a media ecology, by looking at the city in a moment of crisis, the 19th September 2017 Quake in Mexico City. A creative intervention addresses and contrasts the experience of the quake in the physical place against an online experience in order to analyse the relationship between emotional affect and technology. Finally, Chapter IV discusses the application of media practice to the study of Digital Borders by discussing the iterative process of creating a digital art installation. Creative interventions (as exposed in previous chapters) demonstrate the evolution of cultural expressions online. The limitations of creative expressions are materialized as Digital Borders.

This project uses theory as a creative tool to produce analysis through practice. The role of practice that informs my work is deeply rooted in the use of visual analysis, interviews, online data and ethnography which create meaning through the act of making. Practice becomes both action and

reflection: creating videos, consuming online content, experiencing the quake, and learning new software techniques all form part of an iterative process for the analysis of the creative interventions that individuals bring to technological interactions.

Creative Interventions in Digital Borders: The

coevolution of technologies and individuals in digital-physical space in Mexico City

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Statement

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

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Introduction

Tools are intrinsic to social relationships. An individual relates himself in action to his society through the use of tools that he actively masters, or by which he is passively acted upon. To the degree that he masters his tools, he can invest the world with his meaning; to the degree that he is mastered by his tools, the shape of the tool determines his own self-image. Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision. (Illich, 1973, p.21)

Tools are intrinsic to social relationships; it was only after studying communications and digital media as an undergraduate, and doing a master's degree in digital media that I even began to understand to what level and complexity this statement was true and relevant to activities performed on an everyday basis. Individuals relate to their environment and create bonds or social relationships by using the tools they find in that environment. Since environments are different depending on factors such as location, weather, access to technology, culture, etc. this also means that social relationships differ depending on the individuals who perform activities to be social, the environment in which they perform it and the tools or technologies they have at their disposal for sociability.

My tool for analyses is technology (or technologies) and my interest is in analysing the relevance technology has on social relationships, more specifically to analyse the relationship between individuals and technologies. I use the term 'technologies' since these will vary depending on the environment. For Mexico City, technologies including internet access, computer quality and smartphone qualities will vary depending on location and access, social status and geographical movability. For example, internet speed will vary depending on the geographical zone of the city but also depending on the service that the individual can acquire to provide that service. Some individuals depend mainly on data due to the services which are not yet able to reach their residence and allow them to access the internet. Others depend on optical fiber since they live in the high social status areas; some others, if they need to move around the city and travel on public transport, will choose to use a more basic or older phone in case of robbery.

Mexico City individuals relate to themselves in action to their society through the use of technologies that they actively master or by that they are passively acted upon. In this thesis, I embark on the journey of using creative interventions to analyse and perceive

sociability and its characteristics formed through individuals and technologies, and the way that individuals learn to use their environment and overcome digital borders imposed on them. Creative interventions are how this research invests in the meaning of coevolution of technologies and individuals and shapes the environment of space as digital-physical in Mexico City.

These creative interventions are both practical and conceptual. Practical in the way that they become a digital art installation and conceptual in the qualitative analysis of those topics explored in each intervention. The creative represents and allows both a renewed interest in recovering interdisciplinary practices and a desire to create a space for new methods and creative approaches.

This thesis came to life out of an interest in perceiving and analysing the coevolution of technology and individuals in everyday life. Coming from a research background in digital media, and amid much talk and discussion on the ubiquities of technology, I became interested in discovering and understanding the role of individuals in those ubiquities, and the presence and connections they create with technology in mundane activities. In creating this thesis, I analysed memes, an earthquake, and meandered online, taking metaphorical walks.

These commonplace activities at first glance might not seem to have much to do with the scholarly analysis of digital media studies. However, in each case, for example while walking across a city or experiencing an earthquake, during these 'normal activities,' individuals are intertwined with technologies in a creative process, providing rich material for analysis. This thesis frames the perception and coevolution of technology and individuals through creative practice.

In this way, creative and critical practice become the heart of this research by using a creative outcome to present the research in a digital art installation. The research does both: creativity together with theoretical work to process and further understand the connection between individuals and technology, generating a pathway to explore and shed light on previous research from a different angle.

In this thesis, I examine the potential of creative interventions, demonstrating how critical-creative work can challenge the conception of digital borders in digital-physical

space while calling into question dominant disciplinary identities, perception of spaces and perception of sociability.

Drawing on my own experience staging a digital art installation of creative interventions in digital borders, I speak both of the opportunities creative engagements present and to the capacity of disruption after perceiving those digital borders. Finding compelling the limitations of analysis on critical-creative work within digital media, as applied exclusively to Mexico City, I advocate for the development of a creative praxis that would work at the exclusionary boundaries of digital-physical space, boundaries that creative work necessarily encounters, and which form the core of this research.

The digital art installation described in Chapter 1 uses re-appropriation of both customs and traditions, as well as learned interactions with technology acquired from Mexico City. This research is in part a depiction of Mexican culture, looking at how individuals in Mexico City interact with technology specifically in the digital-physical space depicted. The depiction of this relationship or interaction between individual and technology is then perceived through the limitations of that physical-digital space.

Websites become inaccessible based on geographical location, there is a disruption (in the form of a digital border) that individuals overcome when they access by alternative means a digital space reserved for those occupying the physical space of Mexico City. Overall, this thesis encompasses and defines a set of visual and technological practices to be able to materialise digital borders through creative and critical practice.

Coming from a Mexican background, my interest and understanding of my own culture merges with my interest in media technologies. I am also interested in the development and use of these technologies, which we mostly receive through our northern neighbour, the United States. Despite the origin and manufacture of the technologies being the same, I perceive a different use of those same technologies, the adaptability of individuals is different according to the environment they are in, and individuals are also good at accommodating different circumstances from those for which the technology was designed.

Through the development of this work, an interdisciplinary approach was taken to bridge media, communication and cultural geography. Talking more specifically, I examine online communication modes as explored through observational analysis and

iterative creative practice. My practice-led research operates as both action and theoretical reflection, using work mostly dealing with space and the city (Nigel Thrift, 2005, 2007, 2014), internet geography, psychogeography (Guy Débord, 1955-1987), remix art and technology (Eduardo Navas, 2013, 2015; Mathew Fuller, 2005; Gómez-Peña, 2014).

As a point of departure and analysis, Mexico City is also deliberately chosen due to its complex positionality on the map. Grounded in the middle of a country that is already in the middle of the map, the word Mexico originally comes from the *náhuatl¹ 'mexitli'*. This is derived from '*metztli'*, which means moon, '*xictli'*, which means navel, and '*co'*, which means place; this translates as something like 'the omphalos of the moon'. Since times past, Mexico City has been referenced as the centre or middle ground between places. In my work, these two places that Mexico City bridges are sometimes grounded as the middle place between the United States and Latin America, and sometimes as the middle place between the north and south of Mexico enclosing the capital, located in the middle of the territory.

On one hand, we have Latin American customs and cultural ideas that permeate Mexico City, customs and traditions that Mexicans share with their cultural brothers to the south, with whom we share a similar historical background in terms of colonisation and independence. Together we share a mix of gastronomic and world perceptions reflected in customs and ideas. When a Mexican is abroad, they can easily befriend other Latin Americans since they share a cultural past and present. On the other hand, particularly economically, Mexico forms part of North America, being part of the economic block along with the United States and Canada. As a result, the influence and exchange of goods between countries gives considerable exposure to what are commonly called 'American traditions', and knowledge of products and brands as well as consumption of their material and immaterial goods. Although Mexicans resist or sometimes even deny their relationship or similitude with Americans, not only do they consume American goods and products but also, they are avid consumers of American movies, TV programmes and sports, such as the NFL league.

This dichotomy dictates that while Mexico City reflects and identifies with Latin American culture in cuisine, expected behaviours in everyday life, ways of perceiving

¹ Náhuatl is the language spoken by the Aztecs in central Mexico prior to the Spanish conquest.

life and acting according to Latin American cultural traditions, shared language and more, it is also very much influenced not only by its northern neighbour's ideas and economic consumption of goods, but also their world-view ideas perceived in the media, such as movies, consumer products and way of life.

In claiming this positionality, in tandem with the technological and creative innovations generated from Mexico City as the capital of Mexico, I aim to provide a new perspective on media studies and strengthen the intervention of the geopolitical bias of media studies. The tendency of media studies is usually to centre the analysis from a US-based or European viewpoint. Such is the case, for example, with the analysis and origin of memes delivered by Limor Shifman (2013) in her book *Memes in a Digital World* since they quite certainly originated from the US. Nevertheless, the aim of having a diasporic perspective and grounding point is to reflect on the origin of ideas and traditions that have already become intertwined between different cultures in which both have influence. For example, Mexico City has a cultural Latin American side (which in itself represents a mix of cultures from pre-colonial times) and a Western economic side (which also encompasses knowledge and admixture of different American products and goods). This mix in positionality allows for an original perspective.

In other words, Mexico is the US's direct neighbour, geographically, and encompasses a richness in culture that pre-dates colonial times; this allows for a focus on creative interventions that combine Mexican culture with Western elements, which at the same time mix elements of pop-culture with Mexican tradition. My research, therefore, highlights the complexities of a situated socio-cultural analysis in an era of global media.

Throughout the development of each chapter, the reader will understand how technologies and individuals are seen to coevolve based on the limitations of the geographical spaces in which they are intertwined. Yet, in a time of networked media cultures, the reader will also be able to see how cultural expression expands beyond the boundaries of its space of origin.

Chapter I discusses the application of media practice to the study of digital borders in the form of creative interventions, by discussing the iterative process of creating a digital art installation. The chapter focuses on how this digital art installation developed and came into being after much prototyping and experimenting with new hardware. It also analyses those techniques both to visualise and, most importantly, materialise digital borders. In addition, it narrates the creative participation of individuals during the exhibition of the installation that creatively expresses the use of culture and technology in everyday life.

Chapter II addresses Mexican memes as a specific media technology, a cultural-transmission element chosen to discuss memes as an extension of self, aided by magic(al) realism. This chapter grounds Mexican culture's reliance on humour as a key element for expression and for coping with everyday life situations, either for entertainment or life-changing experiences. The chapter aims to explain the qualities behind the creation and re-appropriation of memes in Mexico, and how such activities make use of humour as a default communication mode.

Chapter III presents a spatial analysis of what I define as *digital borders*, using psychogeography as a creative intervention tool and grounding theoretical background. In this chapter, I describe how psychogeography allows my creative practice to expand in terms of generating creative approaches and metaphors to explore digital space. This selected digital space is commonly known as the internet, and through psychogeography, one is able to explore the internet as one would a physical space. After framing the walking metaphor and describing my experience as a Mexican living abroad, I will then reflect on the impact of physical changes on access to my own culture and on how digital borders came to fruition.

Chapter IV describes the liveliness of a city like Mexico City, perceived as a media ecology. During my research and experimentation on borders, a strong earthquake hit Mexico City on 19 September 2017. I decided to use this unexpected moment of crisis to look into the use of technology, and compare the experiences of those who were present in the geographical place of the earthquake in Mexico at the time, and my personal experience, which was completely perceived through technological means due to my geographical location being Brighton, UK. A spontaneous moment of crisis thus allows the reflection and comparison of our use of technology in everyday life, and how culture and individuals have an impact on the way we make use of that technology in times of crisis, in this case, Mexicans experiencing and living the earthquake in Mexico

City, and Mexicans experiencing the earthquake through online means. The creative intervention addressed here contrasts the experience of the earthquake in the physical place against the online experience, as previously mentioned, in order to analyse the relationship between emotional affect and technology.

Therefore, Chapter I reflects on my creative practice and highlights the main interventions that I have undertaken in the installation. The subsequent chapters addressing memes, the quake of 19 September 2017 (19S) and digital borders analyse creative approaches as applied to specific situations in the world.

Methodology

This thesis uses case studies as the main analytical tools or methods to explain and sustain my own understanding of and reflection on the coevolution between humans and digital technology. These case studies apply specific cultural elements of everyday life in Mexico and analyse their coevolution, as well as the conditions in which this takes place.

The novelty of the work lies in the perception and analysis of the coevolution of culture and technology perceived through a new scope, which encompasses Mexican culture (complex due to the duality existing in cultural practices and appropriation and the consumption of Western culture, explained by its geographical location between the US and the rest of Latin America). This analysis is then applied to my perception of digital borders and how these tend to be dealt with by others, either consciously or unconsciously. Therefore, location and dislocation of place allow us to perceive and enrich our knowledge of how individuals coevolve with technology, and in what elements we can perceive these changes in everyday life.

Each chapter works in unison but is also completely independently from each other, having its own multimodal ethnography. Each creative intervention addressed in Chapter I co-relates to each following chapter and is encompassed in the project of my digital art installation, the materialising of digital borders. As a whole, this thesis and project make use of theory as a creative tool to produce analysis through practice.

Finally, before embarking on this critical narration, it is important to mention that the role of practice that nurtures my work is deeply rooted in the use of visual analysis, interviews, online data and ethnography, which create meaning through the act of making. Practice becomes both action and reflection: creating videos, consuming online content, experiencing the earthquake, and learning new software techniques, all form part of an iterative process to analyse the creative interventions that individuals bring to technological interactions. As such, this thesis works in unison with the previously mentioned digital art installation, but also as independent chapters with their own purpose and research.

Chapter I

'Creative Interventions in Digital Borders: a digital art installation'

Materialising digital borders through Mexico City

An artist may use digital technology to convey a message but from there, the message may transcend the medium to express outside ideas such as the affects (sic) of globalisation upon the individual. (Langdon, 2014, p.18)

'We make art because we love it, and doing good with it is an effect we welcome' (Gómez-Peña, 2014, min. 5:12)

Introduction:

The purpose of this chapter is simple yet complex: to document and theorise my own creative work. To do this, in this chapter I will explain how I use digital technology as a creative practice to express how individuals interact and coevolve with each other in Mexico City, and the role of Mexico City's presence in the coevolution between individuals and technology (Hayles, 1999).

During the explanation of my work there will be an emphasis on cultural elements present in the use of technology, specifically from and about Mexico City. Similarly, I borrow the perspective used by Haraway in her Cyborg Manifesto regarding the need to reconstruct socialist-feminist politics:

One important route for reconstructing socialist-feminist politics is through theory and practice addressed to the social relations of science and technology, including crucially the systems of myth and meaning structuring our imaginations (Haraway, 1985, p.33).

In this chapter, I apply Haraway's route of reconstruction through theory and practice. Practice in the description of my own creative practice process through a self-created digital art installation and theory in further developing the concepts and ideas incorporated in my installation are exemplified and addressed theoretically throughout the following chapters.

By using theory and practice to address the social relationships that exist between individuals and technology, I will then describe and articulate the social relationships of individuals, particularly related to Mexico City and technology used in Mexico City. This crucially includes the systems of myth (given the history of the country and construction of Mexican identity that is heavily influenced by myths and pre-Columbian

traditions intertwined with Euro-American Western ideas) and meaning (meanings that are personal or shared across sub-groups depending on their access and appropriation of both culture and technology) that are structured in the imaginations of individuals who, for this work, are related culturally to Mexico City.

The work produced through my research is described as interventions that blend academic research work and creative practice in innovative ways. The blending aims to address the complexity and balance that I sought between doing creative work while creating and doing research.

The juxtaposition of disparate objects and ideas has, after all, often been viewed as an intrinsic aspect of creativity (Barrett & Bolt, 2010, p.7).

By looking at seemingly different ideas, such as the presence of borders in a non-physical space, I aim to use juxtaposition both in the creation of my installation and juxtaposition in the use of theoretical approaches (for example, applying psychogeography to explore a digital space) to induce creativity.

First of all, I looked to define and theorise my understanding of borders and the important links these have with geographical location, specifically when talking about Mexico City. This is due to its positionality with both Mexico as a country, on the one hand defined as Latino when connected to the south of the American continent by culture, while at the same time being a neighbour of the US and connected economically to the north of the continent as part of North America, due to the economic treaties with the USA and Canada.

Overall, this chapter will describe an event based on documentation of the digital art installation that took place from 6 to 9 January 2020 with a prototyped exhibition that took place on 5 June 2018. The exhibition was open to the public and took place at the Attenborough Centre for the Creative Arts, located at the University of Sussex, Brighton, UK. Careful consideration was given to the users' engagement with both the interface and the physical space of the gallery, from how they would move through, and participate in, the installation. The design is also thought through and mediated; this allows for willing and unwilling interaction between the audience and the concepts reflected in the installation.

Description Based on Documentation:

First, I needed to find a creative way to give materiality to the immaterial of the digital. By creating and defining my own research question on how to materialise what I now call digital borders in and through Mexico City, I ended up with a final result 'Creative Interventions in Digital Borders: a digital art installation'.



Figure 1.1: Creative Intervention 4 – Back view of the Installation

Source: Fuentes, 2020. Photo by Olga Saavedra

Therefore, my documentation started by questioning digital borders both academically and creatively. From there, my creative practice fed into my academic findings just as my academic research fed into my creative practice. Every idea, prototype, or new learned digital technique, as well as theoretical readings, were recorded in personal notes and an online journal. These documented every aspect of my personal exploration and journey² to perceive digital borders, using Mexico City and Mexican culture as a basis for my research due to my familiarity with both the culture and the place.

Having a constant interplay of ideas coming from both geography and digital media as areas of knowledge applied in creative art research 'created conditions for the

² A personal blog on all documented research and prototyping is available at: https://violetaf07digitalmedia.tumblr.com/.

emergence of new analogies, metaphors and models' (Barret & Bolt, 2010, p.7). These explored and created new digital outputs and cultural approaches that reflect and allow us to deepen our understanding of the coevolution of individuals with technology.

My Own Method of Creative Research:

If I had to explain my method of creative research using simple words, I would describe it as a method that looks into what happens when I use things others have made or created online as material to express and create my own art. Being a layered analysis, I first aim to add to the conversation regarding the power of the internet and people making things on it. Creativity flourishes both in creating content by online users and in the use of those creations to further remix and re-appropriate those creations to give a personalised meaning to my understanding of the relationship between human and technology.

Regarding remix and re-appropriation, it is important to mention the direct influence that my work has had from *Remix studies* being 'the result of a long process of rich cultural production directly informed by computing technology' (Navas, Gallagher & Burrough, 2015, p.1). Remix studies branch out of remix culture and are an 'organic international movement that began around the late 1990s' (Navas et al., 2015), closely linked to open-source and do-it-yourself (DIY) activities that became relevant on the internet around that time.

In addition, in my work you can see how relevant it is for me to use remix studies since these come from the description of being an 'organic' movement. I am interpreting the term organic as being formed without a specific purpose but for the mere fact of coming into existence, which in itself will have an effect later on. Such is the case when memes become organically viral, for example. Remix studies are also part of my method since they deal closely with open-source software. This open-source software allowed me to explore new techniques previously limited to having access to relevant software either for editing or creating audio and video. DIY activities are also a key part, since the internet is full of teach-yourself tutorials, but also because it has implications on how to approach and how to interact with software, a practice much encouraged and reflected on in the foundation of Creative Commons in 2001 by the copyright lawyer and activist Lawrence Lessig, who contributed to making the term 'remix culture' popular:

The fundamental concept of remix culture is based on the act of using preexisting materials to create something new as desired by any creator—from amateurs to professionals. (Navas et al., 2015, p.2)

People have been making things online for a while now; they have also developed research on thinking about the meaning of making things. My own creative research method takes the part in which people make things online, and analyses the meaning of making those things. I thus analyse the making of things online by creating new content, using the fundamental concept of remix culture, and using theoretical approaches that reflect on the impact of giving materiality to those previously theoretical ideas in the form of a digital art installation.

I share Gauntlett's idea that 'making is creating' and that 'thinking and making are aspects of the same process' (Gauntlett, 2011, p.11). My process of creative research is a process of discovery and having ideas *through* the process of making.

According to Gauntlett (2011, p.10) three main concepts explain how making and thinking are aspects of the same process. The first one is that 'making is connecting because you have to connect things together to make something new'; the connection of things being brought together can therefore be of materials coming together to create a new material, ideas coming together to expand on previous knowledge, or both materials expressing ideas that in this case gave materiality to digital borders. The second is that 'making is connecting because acts of creativity usually involve, at some point, social dimension and connect us with other people', (Gauntlett, 2011, p.10) either while creating or while exhibiting to the public and hearing people's response to the piece. The third says that 'making is connecting because through making things and sharing them in the world, we increase our engagement and connection with our social and physical environments', meaning that through making I was able to further understand and engage with both the social and physical aspect of being Mexican, of Mexico City as an environment, but also by treating the online and the digital as part of the environment.

Taking Gauntlett's developing method of 'creative research', I became the main recipient who is asked to *make* something as part of the process. The idea was that by going through the thoughtful, physical process of making something, in my case the creation of a video, code, audio, a meme map, or a remix of all of those, an individual is

allowed to reflect, and to make their thoughts, feelings or experiences regarding digital borders manifest and tangible.

Since creative arts research is often motivated by emotional, personal and subjective concerns, it operates not only on the basis of explicit and exact knowledge, but also on that of tacit knowledge. (Barrett & Bolt, 2010, p.4)

On a basic level, a constant of my work and creative research relies on digital experimentation and understanding of theory, first through a reflection of my own experience. My personal experience and cultural background are always present and impact the creative process. My research experimented with the relationship and my understanding of the dichotomy of digital and physical space.

Previous research tended to separate the physical from the digital by calling digital space 'cyberspace', but we have moved beyond that. Both physical and digital space tend to morph into each other, so I wanted to understand on what terms we have now related to technology as ubiquitous, and the consequences that this has had on our relationship or understanding of digital space. Since we came from a past that always aimed to differentiate between being 'online' and 'off-line', were we trying to create a divide where there is no longer one?

This idea is related to a personal experience that, although not planned, became the trigger of my research and later allowed for the creation and materialisation of an installation in digital borders. The situation unfolded thus: I was trying to access video content that I frequently consumed online in Mexico City, and wanted to keep on watching and consuming after moving to study abroad to the United Kingdom. After a quick online search, I managed to find the video and stream it for a couple of minutes; I then paused it to quickly do something else. On returning, my video was no longer there and the screen tab had only the following message on display: 'this content is not allowed in your country'.

This message triggered instant reactions and questions that then stimulated my research, such as: Why was I allowed to watch for a couple of minutes before getting this message? What other content could there be online that I was not being 'allowed to see' due to my geographical location? Why does the message assume this was MY country? Does it mean that if I could somehow show proof to the site that I was an international

student I would get back access to what I consider 'my' content? Most importantly, what are the implications for cultural access online and consumption of content to frame content as 'mine'? Was I relating mine as Mexican content? Mexican culture? And what would be the implications if I decided to consume that same 'not allowed' content on an alternative website?

A visual metaphor I created was having a computer to which, upon having my access to specific content restricted, I could somehow show my passport and the computer would react accordingly. The computer would then 'see or scan it' and decide to release or assign me content based on my passport and visa restrictions. The metaphor, therefore, allowed me to see how, although internet content seemed to portray the idea of being global, it actually has specific mechanisms in place in which geographical location guides what content gets displayed in which ways and, most importantly, who gets access to what.

My research is, therefore, interested not in the content restrictions *per se* but in an individual's relationship to the content they consume and how this content becomes part of their everyday life. Not having access to my usual video consumption suddenly made me aware of the cultural relationship I had created with that content, and the consequences of assigning cultural belonging to that suddenly restricted (because of my location) content. Is technology limiting access based on where I am regardless of who I am or who I perceive myself to be? Or is the idea of delimiting countries and creating physical borders also present in the digital realm?

Rather than engaging in a critical argument on an individual's right to access specific content regardless of location, I became intrigued by the limitations and access to my own culture. The most important idea behind this was the simplicity with which I could access the same content on 'alternative' websites, since I already had practice in doing so when back in Mexico City. I, therefore, started to take a closer look at how people interacted with 'restricted content' and their ability to access 'alternative' websites to consume content, finding alternative solutions to technology-imposed restrictions.

To address each of these individual yet related ideas, I decided to create a multi-faceted installation that could materialise what I ended up calling digital borders. To achieve my purpose, this installation had a first mock-up or prototype phase on 5 June 2018. From

then on, the changes in the prototype materials and learning of new techniques developed the final installation that took place in January 2020 at the Attenborough Centre for the Creative Arts, located in Brighton, UK.

Some of the theoretical and practical elements that allowed me to develop my installation come from personal research, together with my study of modules from the Department of Music, Film and Media³, such as Interactive Project Development, Activist Media Practice and Expanded Media. Modules for the MA in Digital Media, together with other modules I attended in the informatics department, such as Object-Oriented Programming, Web, Design and Applications, and the seminar on Human-Computer-Interaction. The difference between departments regarding the purpose of technology, as well as the approach to creative making from both departments, is also expressed in the creation of the piece.

Personal research was documented using both a physical and a digital diary in the creation of mood boards, ideas diagrams, collection of visual and acoustic material, research and learning of open-source software, and constant prototyping to position the work in relation to digital media theory. A variety of software was used to create the final installation, including Processing (which allowed the incorporation of art and theoretical learning through coding) to create and experiment. The use of hardware, code, video, audio and image (sound and set design) involved Adobe Photoshop, Adobe Premiere, Adobe After Effects, Audacity (open-source version of Adobe Audition), Makey-Makey (connected with Processing to create a responsive board), Arduino, Bare Conductive (sound trigger paint), SuperCollider (software running on top of Ixi-lang to use as live-coding software), and Painting with Light (video-mapping software).

Documentation in the form of video⁴ and professional photography is a vital part of this thesis. This is because clear and careful consideration was given to the user's engagement with both the interface and the physical space of the gallery, how they would move through, and participate in, the installation. The aim was to portray a well-designed installation that allowed for willing and unwilling interaction between the audience and the theoretical concepts explored more in-depth in the following chapters.

³ Now called the Department of Media, Arts and Humanities.

⁴ 'Making of' available at: https://vimeo.com/464823052 Installation trailer available at: https://vimeo.com/464822757



Figure 1.2: (Left) Development of Installation Diagrams
(Right) Visuals exploring digital borders made with Photoshop

Source: Fuentes, 2016. Screenshot

What first started as a task to explore and visualise internet content as one would a physical space in the first stages, turned into developing an installation that could allow one to perceive and document how individuals interacted with the piece to become aware of the existence of digital borders. Interacting with the piece is then crucial to materialising and giving physical presence to the virtual idea of digital borders.



Figure 1.3: Installation Prototype Documentation of 5 June 2018

Source: Fuentes, 2018. Photo by author

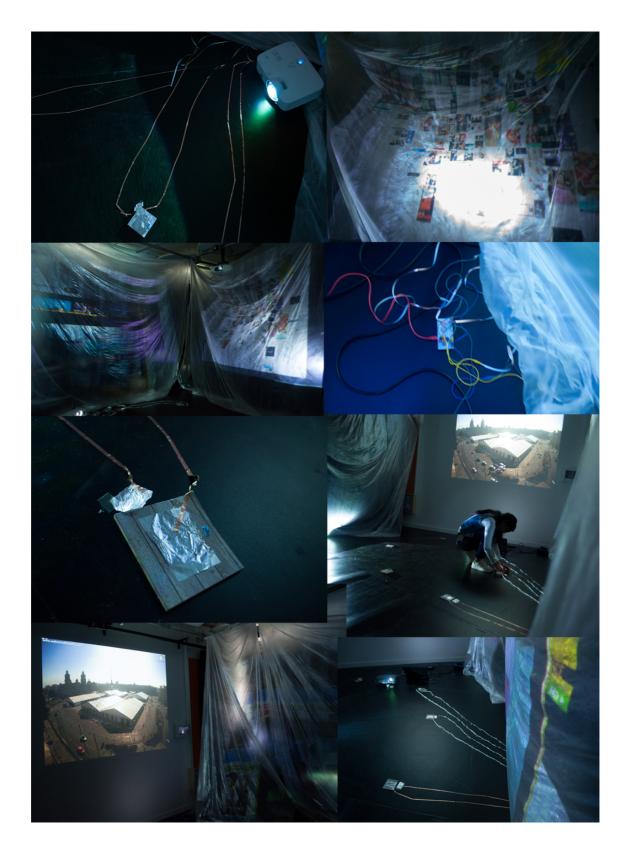


Figure 1.4: Installation Prototype Documentation of 5 June 2018

Source: Fuentes, 2018. Photo by author

Give Materiality to the Immaterial of the Internet:

Copyright lawyer and activist Lawrence Lessig contributed to making the term "remix culture" popular when he founded Creative Commons in 2001. The fundamental concept of remix culture is based on the act of using pre-existing materials to create something new as desired by any creator-from amateurs to professionals. (Navas et al., 2015, p.2)

Having a keen interest in the long process of rich cultural production directly informed by computing technology, I found a place to express and interact with theory and creative practice in *Remix studies*, defined by Navas et al. (2015) above as the act of using pre-existing materials to create something new, what is commonly known as copy and paste.

Remix studies branch out of remix culture. This was an international movement that appeared organically; it began around the late 1990s by being closely linked to open-source and DIY activities that became relevant on the internet around that time (Navas et al., 2015, p.2). Similarly, my practice remained always closely linked to open-source software and DIY activities, since this reflected broader access and fewer restrictions in terms of access cost-wise. It also gave similar access to those materials and content available at the time in Mexico City, where the norm is that there will be little or no budget at all, so you might as well make the best out of what is already available and what you can get your hands on.

On the other hand, the selection of DIY materials and taking pre-existing material to create something new spoke closely to how I saw culture was being transmitted by individuals in Mexico City. Referencing content from other sources and creating a new version, adding on tradition or culture in a pop reference, for example, meant content expanded into creating something new, which at the same time archived the old, and was used as a reference point.

The freedom and similarity in practice in Mexico City of being able to take any form of pre-existing material online in the form of videos, images and sound meant creation and recreation, purpose and re-purposing, giving new meaning to old references or reappropriating to create something new. My work makes use of that re-purposing to create meaning by juxtaposition. Placing elements right next to each other allows

showcasing where I find similarities between the objects, while enhancing their differences at the same time.

My prototyping approach in the use and exploration of materials to give a surface to the immaterial, as well as learning new digital techniques, varied from learning how to read code and remixing pre-existing code, doing video-mapping, projecting remixed videos on walls, learning to run creative software like Processing, Arduino experimentation, etc.⁵

Beginning with the way I perceive physical space around me as a Mexican, I began to think of the internet as a similar space that could also be explored in the same way. Little by little, I started to observe and document the similarities I found in physical space that, in turn, were used or portrayed in digital space.

Since remix 'became appropriated to encapsulate the tendency to recycle material in all media' (Navas, 2012, p.20), this meant I was able to recycle all media while I could explore my perception on the internet using all kinds of materials (sound, image, video) that sparked a cultural connection to being Mexican.

By dealing with remix culture at the level of visual culture, in which remix is dealt with as an aesthetic to validate appropriation, remix allowed the sampling of existing material to give a new meaning, working on the understanding that all new content comes from an existing reference to previous content. Such is the case with the meme as an expression of remix culture, in which the creation of the meme is made by copypasting other content online. However, its meaning and context depend on a personal interpretation based on the individual sending the meme but also the recipient's knowledge of the content being shared, as well as the platform on which it is being shared.

Remix culture uses experience (lived daily) and assimilation of content (mostly consumed online) to give way to the creation of a new personal (and at the same time shared) understanding of culture in the form of interests, values and norms. These personal interests are sometimes organised within a cultural sub-group while being

⁵ More documentation of this process is available at http://violetaf07digitalmedia,tumblr.com/

informed from a global to a local basis, such as how viral videos or online trends become popular online to how each place performs them locally.

Conceptualising and Naming Digital Borders:

Digital borders, culture, space and individuals react with and through technology. Access to content based on location can hinder the experience or perception of our culture while browsing online (digital borders). Memes tend to represent both physical and digital versions of our perceived culture, and space perception carries an emotional effect, an effect that translates and operates differently physically and online (19S), among other qualities.

Materialising digital borders in Mexico City uses those concepts in addition to my personal experience of relocation from Mexico City to Brighton in the UK. Therefore, the installation also uses my experience of Mexican culture online and/or lack or difference in experience when moving abroad. Constant consumption of online content was therefore key to illustrate and exemplify how and where I perceived Mexican culture, and the differences or obstacles I found while in the UK.

A first reading allowed us to first understand the differences between customs, behaviours, space/distance expectations and noise constraints that existed when contrasting both locations. Second, I realised that these experiences were also shared, learned and reinforced through everyday engagement with technology, in the way in which we engage with technology (the kind of technology we have available also influences this), but most importantly (for the purposes of this chapter) in the selection of content consumed online.

For example, Mexico and the UK may share the use of Facebook, WhatsApp, YouTube and Twitter as social media applications, but how those are used at times and the content that gets shared on them is personally fed and curated by individuals, reflecting elements of their own culture:

Like the pre-multicultural art world of the early 80s, the new high-tech art world assumed an unquestionable "center," and drew a dramatic digital border. And on the other side of the tracks, there lived all the techno-illiterate artists, along with most women, Chicanos, Afro-Americans and Native Americans in the US and Canada, not to mention the artists living in "Third World" countries. Given the nature of this hegemonic cartography, those of us living South of the digital

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border were forced to assume once again the unpleasant but necessary roles of wetbacks, undocumented cyber-immigrants, digital viruses, techno-pirates, and virtual coyotes (smugglers). We were also shocked by the benign or quiet (not naive) ethnocentrism permeating the debates around art and digital technology, especially in California. (Dixon, 2015, p.162)

To materialise digital borders in Mexico City, I draw on the similar practice of Guillermo Gómez-Pena (2014), a performance artist, activist and educator who has given an effective and valuable voice to issues around access based on borders and issues concerning the digital divide. His creative and artistic work is closely related to the digital border created by what he calls techno-illiterate artists, who were mostly women, Chicanos, Afro-Americans, Native Americans and artists living in 'Third World' countries. Being an artist who encompasses this idea and who belongs to the 'third world' (but also uses this background to give a different approach to the theoretical existence of borders), I aim to further expand research and bridge the gap that comes from the ethnocentrism permeating the debate around art and digital technology, while at the same time creating a voice to issues around access based on borders, specifically on how we are adapting and creating new ways to interact with technology based on those restrictions. How we are forced to assume the role of technopirates due to our access restrictions, to the point that they become normalised, and how the existence of being able to perceive technology from the role of the wetback⁶ or the techno-pirate, is bound to change the environment in which both technology and humanity operate and how they interact with each other.

Creative Interventions: Practice as Making and Expected Interaction:

Creative work within the university and research environment is often referred to as practice-led research, practice-based research, creative research or practice as research. The terminologies are a means of characterising 'the way in which practice can result in research insights, such as those that arise out of making a creative work and/or in the documentation and theorisation of that work' (Hazelle & Dean, 2009, p.2). I thus share the idea that we do not see practice-led research and research-led practice as 'separate processes, but as interwoven in an iterative cyclic web' (Hazelle & Dean, 2009, p.2).

⁶ A Mexican living in the US, especially one who crossed the border sometimes without a work visa, so named from the practice of swimming the Rio Grande to reach the US. (Knowles, 2005, par. 1)

Similarly, it is important to take the time to briefly articulate how the word *intervention* is being used in this thesis, addressing Rita Raley's use of the term as:

a theoretical justification of tactic: since global revolution is no longer possible, critical interventions must necessarily take the form of tactical interventions, which raise consciousness by disturbing the dominant modes of representation and signification. (Baetens, 2010, p.130)

For the purpose of this thesis, creative interventions in digital borders are, then, aiming to disturb the dominant mode or representation of the border online. By materialising the border in the form of translucent tulle fabric, we are then able to disrupt the border perceived in the use of glitch. Creative interventions aim to raise consciousness not only on the existence of digital borders but also on the creative outcomes that exist thanks to an individual's aim to overcome those borders to access content, as well as expressing my creative approach to the materialisation and disruption of the digital border.

Another term to take into consideration is *iteration*. To iterate a process is to repeat something several times (although probably with some variation) before proceeding, setting up a cycle: start-end-start. The creator must choose between the alternative results created by the iteration, focusing on some and leaving others behind (temporarily or permanently). In a research phase, this can be viewed as a selection based on empirical data or an analytical/theoretical fit; in a practice phase, the choice might be aesthetic, technical or ideological, or somewhat random. Iteration is particularly relevant to the sub-cycles but also to the larger cycle. Artists themselves have the capacity to explore and explain complex theoretical issues that can have significance across broad areas of knowledge.

Materialising digital borders by means of fabric being projected on with the use of video-mapping came as an idea when visualising the immateriality of the internet. The immaterial is thus perceived in the translucent qualities of the fabric, which seems at one point to manifest the video being projected and at others to let the video go and trespass the physicality of a wall. The wall created by the fabric is thus a visual window into how borders are perceived online.

Expected interactions by the attendees to the installation are performed on the following:

- hand-made floor triggers, which activate at random when exploring the space to simulate stumbling upon a Digital Border;
- projectors on both walls and translucent fabric to materialise digital borders via the see-through material;
- videos depicting the physical space in the form of a live feed of Zócalo, in Mexico City, and virtual space in the form of Mexican Digital Content on a loop;
- sound coming from the live feed, which allows us to give materiality to the 'liveness of the city', changing both visually and acoustically depending on the time of the day or access to the city's natural soundscape.

All these elements working in unison aim to express a personal remix artistic approach to physical-digital space in Mexico City.

Creative Intervention 1 – Mexico City: Physical-Digital Space:



Figure 1.5: Creative Intervention 1 – Mexico City: Physical-digital space of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

This first creative intervention addresses perceptions of space in both the digital and physical realms using, for the physical, a wall projection of Mexico City's live feed. The audio of the live feed was not controlled, it changed in accordance with the image, depending on the time in Mexico (real time). This live audio feed also became the background noise for the whole space.

The live projection of Mexico City is available to the public and streamed on a 24-hour basis (Proimamex, 2011); this video feeds live sound and situates the piece in Mexico City. The source of sound and place is an ichnographically significant place in downtown Mexico City known as Zócalo. The sound and image vary according to the time in which the installation is performed, since the live feed of the city allows for a constant change in the visual and sonorous landscape.



Figure 1.6: Creative Intervention 1 – Live feed form webcam in Zócalo of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

Right in front of the wall projection, we find the digital version of space on a 21" looped video of Mexican memes (related to culture in Mexico and which became viral); these appear and glitch until they form a map of Mexico. The memes are projected on tulle

fabric displayed in the middle of the room so people can walk across the fabric and see the reflection on both sides exemplifying the permeability of the border.

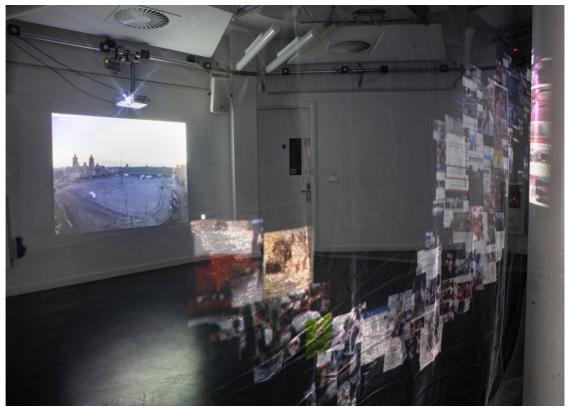


Figure 1.7: Creative Intervention 1 – Map of Mexico made using viral memes of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra



Figure 1.8: Creative Intervention 1 – View from behind tulle fabric of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

The 'wall' created opposite the live feed of Mexico City (made with translucent fabric) has the role of projecting internet content relevant to the city. This is a meme map or collage created from digital content shared in Mexico City, collected over four months. It includes the US presidential election and Mexican perceptions about the 'wall discussion', together with other visuals, all incorporating part of a Mexican digital culture; they were shown randomly and kept looping on this side of the wall via a projection.

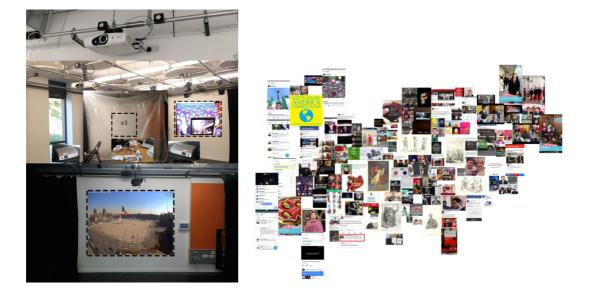


Figure 1.9: Installation Mock-up and Meme Map collection sample made in Photoshop

Source: Fuentes, 2016. Screenshot

On the floor (Figure 1.10), we find a hand-touch interaction created with bare conductive paint that triggers sounds of Mexico that correspond to specific sounds of the social imaginary of living in the city. Hand touching ensures that people explore the space, by moving across the projections on the wall and tulle fabric, and engaging in movement and seeing the interaction from below.



Figure 1.10: Creative Intervention 1 – Sound triggers spelling M-E-X-I-C-O of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

Creative Intervention 2 – Formal and Informal (Acceptance/Resistance to Regulation):



Figure 1.11: Creative Intervention 2 – Formal and informal neighbourhoods, screenshot of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

The next creative intervention addresses the associations that happen between exploring physical and digital space using Cuevana and Netflix as the main representation of formal and informal spaces to watch online movies. The metaphor aims to reflect on the differences and expectations that one associates with regulated and unregulated space, with the difference and associations we made, for example. The most obvious of these is juxtaposing the wealthy and less wealthy, from a space that is happy to be regulated to the point of exclusivity, such as Netflix, to the informal such as Cuevana that resists both commercial and governmental regulation and operates more on the 'informal' side of things.

The intervention is a dual projection of video loops side by side, to allow for a comparison of both places.



Figure 1.12: Creative Intervention 2 – Audience shadow on a projection of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

The projection on the left (Figures 1.11 and 1.12) depicts a high-end shop in one of the top neighbourhoods in Mexico City; at times, this glitches into the top video-streaming

platforms to compare their similarities in terms of place, behaviour and access to space. The place looks well taken care of. Streets and flora give the impression of a high-class neighbourhood, similarly to how movie streaming places have an interface designed to look polished which follow a high-quality standard. The expected behaviour is then associated with that status and access to the space that is shown; for example, how, in some high-class neighbourhoods, people are not allowed to enter unless they give proof of living there. In shops, although 'open to everyone', there is an expectation of which type of person will enter the stores; those who enter who do not fit that standard will tend to be frowned upon or even be constantly watched from afar by security. Similarly, online high-class movie streaming websites need to be paid for before access is granted to them; their interfaces reflect those places and behaviours online.



Figure 1.13: Creative Intervention 2 – (Left) Polanco vs (Right) Cuevana Neighbourhood

Source: Fuentes, 2020. Photo by Olga Saavedra]

On the right side (Figure 1.13), a video loop (also reflected on tulle fabric and then bounced back into the wall) depicts the opposite, a neighbourhood with mild graffiti on the buildings in which the flora and streets (although not that shabby) reflect a slight difference in the type of place and behaviour accepted there. The place, in this case, is

filled with advertising: when the video loop glitches to showcase the digital version of the space, we find that same advertising filling the space, but it has now changed to websites that tend to stream movies illegally and that are also filled with a wider range of ads.



Figure 1.14: Creative Intervention 2 – Lateral View on tulle fabric of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

Illegal movie websites (like their physical counterparts) are not accessed by everyone, the interface is not high-class, and at times will not follow the rules of good design. In addition, the websites are constantly filled with unsolicited pop-up ads for unrequested products, unrequested since we are constantly tricked into clicking on them by accident. The outcome of the clicking and the unexpected display of an item or product is one of the reasons individuals sometimes prefer to avoid these sites at all costs and access the 'legal' version for fear of clicking or downloading non-requested files or viruses. This decision to avoid the sites for fear of the unexpected, though, is sometimes not an option for the lower stratum of society. For them, and for those who learn how to navigate these places, the 'tricks' of how to deal with constant pop-up ads, or blocking websites and knowing when a website is pretending to showcase a movie but might well be a

virus, are abilities that one learns, just as one experiences and develops street smarts. Learning when to go and at what times it is safe, learning to not showcase fancy items while on the street, how to react and where to look, are some of the many examples.

Creative Intervention 3 – Live Coding with Mexico City Sounds:

In terms of sound design and experimentation creating an acousmatic soundscape, this started with the collection during the fieldwork of what I commonly described as 'Mexican sounds', a term applied to specific Mexican landscape sounds present in Mexico City, each giving reference to a specific activity taking place in it. These are the sounds and activities associated with Mexico City as known by those familiar with the city, mostly in the form of street food vendors or services like water, gas, collection of old products, junk, clothes, among others. These sounds were specifically selected because of their ability to locate a service or product in a space without giving an exact reference to the place, but rather, operating in its proximity. Individuals who want to engage with the sound or take part in the activity that the sound triggers need to either go out and look for the source of the sound or wait until the sound is in the vicinity.

Carrying significant cultural weight in the collective imaginary, my installation sounds are used to locate and disrupt digital borders. In the first stages of the installation, sounds were triggered together with floor pedals to cue the sudden change in visual content; nevertheless, on further development and exploration, and after I had the opportunity to participate in an International Conference in Live Coding that took place in Morelia, Mexico in 2017, I was able to experiment with the idea of music created by the correlation between machine/technology and humans, or music created by code. The idea caught my interest, since I could not only apply sound coming from physical space, but I could also design a soundscape of 'digital Mexico City space' with the implementation of live coding by using Mexican sounds as samples to create a new score through the use of Ixi-lang Software (Magnusson, 2013). This software operates on top of Super Collider but gives a much more friendly or basic interface with which to engage.

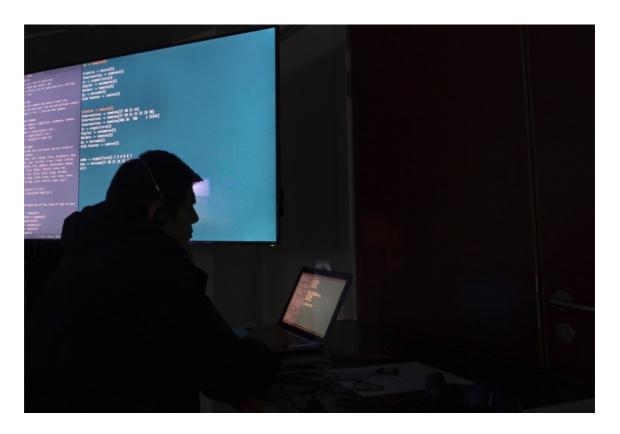


Figure 1.15: Creative Intervention 3 – Live Coding with Mexico City Sounds of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

As previously mentioned, this third creative intervention uses Ixi-lang (Magnusson, 2013) and seven carefully chosen samples of Mexico City sounds that express a specific task or event taking place in Mexico, easily recognised by those who have lived in the city. Like their physical counterparts, the sounds being listened to in the whole space, and fed by the live streaming video of Zócalo in the city's downtown, aim to recreate that natural cacophony by using live-coding software to create their digital counterpart. The station holds a computer with multiple earphones attached. The screen is projected (Figure 1.15) onto a TV screen and the display is a split-screen showcasing, on the right, the live-coding software loaded with examples for people to interact with. On the left, a display of basic instructions on how to add or create their own sound allows the audience to interact with the piece, either by taking a close look at what people are writing (the names they decided for their code or which sounds they are sampling), by engaging in the creation of code, or by listening to one of the five earphones provided.

This notion of sound as both situated and ambient, abstracted from the concrete ground, raises questions of source. It thereby fleshes out the relationship between the 'real'

referent for the digital border helping in the materialisation and visualisation of an invisible wall, or a border that exists but we cannot see. In this case, much like the sound we cannot locate due to its digital form, much like the soundscape, we are aware of the border's existence but cannot exactly locate its origin until we come face-to-face with it in the form of a message of restricted content.

```
ALT + Right Key (white = on)
                                   Interventions -> camotes[17 2777
                                                                                21 25 32]
//To silence a line of code press
ALT + Left Key (red = off)
//YOU CAN:
//Play with numbers and space in each line
//Copy and paste each line and
                                         Fuentes -> car
add different numbers
//Change { } for [ ] and see what
happens
//SAMPLE SOUNDS:
basura, camotes, organillero,
secompran, tamales, mercado,
                                   kill
ex. name -> organillero{1 4 65 }
name2 -> organillero[1 4 65 ]
name3 -> camotes[1 6 43543 23]
//EXPERT MODE:
//write down this instruments and
use instead of sample sounds:
[ bar, bass, bell, bengaX, bling,
brushsnare, casp, caspRLPF, clap,
                                                                          24 68 21 16 6 7 2 9 6 ]
clarinet, cling, cling2, crackle,
deepdubsynth, drop, dubbass,
dubchordpad, dubpad, elbass,
flute, fmbass, fmsynth, glass,
                                                                    13 28 42 64 ]
hat,
       LF UTF-8 Plain Text ☐ GitHub → Git melissa -> mercado[8 8 5 23
```

Figure 1.16: Creative Intervention 3 – (Left) Instructions of installation (Right) Sample of code created and performed on Ixi-lang during the installation of 9 January 2020

Source: Fuentes, 2020. Screenshot

The names of the sampled sounds, *basura*, *camote*, *organillero*, *secompran*, *tamales*, *mercado*, *camion* (Figure 1.16) are taken by the audience and samples. Curiously enough, some people decided to sample using their names (e.g. Melissa ->), while others decided to use previously created sounds but change the numbers assigned to each, which meant a different sample sound would be created. On a more advanced level, people comfortable enough with the piece decided to add more sounds on top of the seven samples; these included piano, flute, clapping, etc.⁷

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⁷ A sample of the audio created during the installation is available in the Creative Portfolio

The outcome of the participatory component of the sound design aims to engage the audience in a level of creation and collaboration in the acousmatic soundscape. The end is to share in the creation and materialisation of a digital Mexico City space. The audience contributes and creates sounds for the archive because, much like the rest of the installation, a remix of both a personal and artistic approach to digital-physical space in Mexico City is taking place. However, whereas in other interventions the audience is merely interacting with the visualisations created by the author, in this intervention the audience is given the ability to engage and create or form part of the installation by creating their own remix and live-coding acousmatic soundscape; this will, in exchange, evolve and change as the installation and the audience engage with it through time.

Creative Intervention 4 – Materialising digital borders:



Figure 1.17: Creative Intervention 4 – Materialising digital borders of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

This creative intervention encompasses various personal and artistic representations of digital borders. Using my own culture, which lives in the place and reflections on how I perceive Mexican culture online, I collected visual material to then experiment and learn techniques to express and materialise those borders. The intervention uses remix

and overlay effects of both physical and online space to be reflected throughout all the videos displayed in the projection that reflects on tulle fabric from a different angle, forming an arc to emphasise the presence of the fabric.

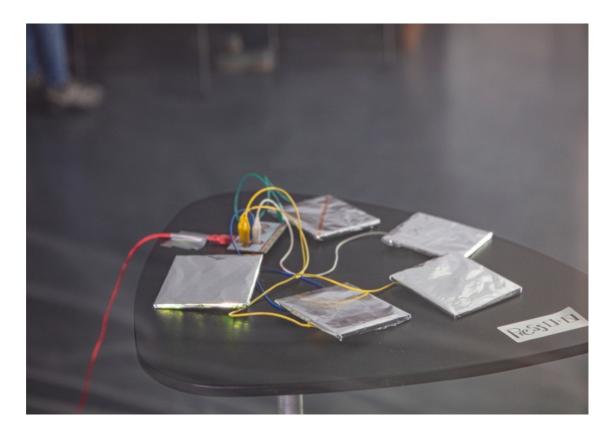


Figure 1.18: Creative Intervention 4 – Makey-Makey hand-made touchpad of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]

The core of this installation is the interaction. In order to engage the audience and participate in the selection of video loops that will be displayed, a hand-made touchpad (Figure 1.18) was created using conductive materials and cables attached to a Makey-Makey hardware board. Previously, both floor triggers and video selection resulted in too many elements in one installation; the splitting up of this interaction into two areas allows one to focus on the change of video taking place and the elements depicted therein, rather than distracting oneself by moving around the space to trigger the change of video, as shown in the previous installation. As such, this installation includes a table to allow the interactivity to become a part of the installation, but also for others in the audience to just sit down or walk around the tulle fabric, observing the change in images and the meaning behind each element depicted in the remixes.

```
DigitalBorders2_VIVA V
      import processing.sound.*;
     Movie myMovie, myMoviel, myMovie2, myMovie3;
      import processing.video.*;
     SoundFile file;
     void setup() {
        //size(1920,1080);
        fullScreen(); //size();
        myMovie = new Movie(this, "Border_Gif_Final.mov"); //movie is created here but will loop and appear in draw
       myMovie = new Movie(this, "sampleMercado.wav"); //movie is cri
//file = new Movie(this, "sampleMercado.wav"); //**SOUND**//
myMovie1 = new Movie(this, "Spotify_Videos02_Final.mp4");
myMovie2 = new Movie(this, "WalkingOnlineRemix.mp4");
myMovie3 = new Movie(this, "Youtube_Gif_Final.mov");
 10
11
12
13
14
15
16
17
18
19
20
21
22
23
     }//close of the setup corchete
      void draw() {
        if(key == CODED) { //**might need to change or add to function only when key is pressed**//
            if (keyCode == UP) {
              mvMoviel.stop():
              myMovie2.stop();
           myMovie3.stop();
25
27
28
29
30
31
32
33
34
40
41
42
44
45
46
47
48
              myMovie.loop(); //se queda aqui si la paso arriba carga desde el inicio pero no se ve
           image(myMovie, 0, 0);
} //close of if (KeyCode
        else if (keyCode == DOWN) {
          myMovie.stop(); //will have to add stop for other movies later or create array?
          myMovie2.stop();
          myMovie3.stop();
          //rect(30,20,55,55);
myMoviel.loop();
          image(myMoviel, 0, 0);
} //close of if (keyCode == DOWN)
        else if (keyCode == LEFT) {
          //quad(189, 18, 216, 18, 216, 360, 144, 360);
          myMovie.stop();
          myMoviel.stop();
          myMovie3.stop();
          myMovie2.loop();
        image(myMovie2, 0, 0);
} //close of if (keyCode == left)
else if (keyCode == RIGHT) {
          //triangle(288, 18, 351, 360, 288, 360);
          mvMovie.stop():
          myMoviel.stop();
          myMovie2.stop();
           myMovie3.loop();
           image(myMovie3, 0, 0);
           //file.play(); //**SOUND**//
```

Figure 1.19: Creative Intervention 4 – Processing code used to display looped videos

Source: Fuentes, 2020. Screenshot

The board detects a closed circuit when two hands engage in touching the pad; the coded sketch (Figure 1.19) on Processing software is the one in charge of telling the computer which video should change and remain in a constant loop.



Figure 1.20: Creative Intervention 4 – Walking online remix video of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

The first video (there is no particular order in the description of the material or hierarchy of importance between each piece) showcases a walking online journey, depicting the beginnings of explorative work using psychogeography to explore how one could immerse oneself in exploring a digital space as one would a physical space. The video (Figure 1.20) depicts the travels of a user exploring different websites simultaneously. On top appears an overlaid image of feet physically traversing the screen, walking across as the exploration takes place.



Figure 1.21: Creative Intervention 4 – Trespassing the border remix video of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

The second video showcases the physical border between the USA and Mexico, remixed with different content, in particular with the YouTube message of 'content not available in your country' that simulates the digital border created in a similar way to the physical wall between borders.

The third video shows the trespassing of that same border. A remix looped video glitch between the representation of borders and an overlay of the use of VPN (Figure 1.21) and the trespassing of that border represented in the jumping of the wall by immigrants. A VPN is a digital application that allows someone to 'trespass' the border through the simulation of being in another geographical place of your choice.



Figure 1.22: Creative Intervention 4 – Spotify platform remixed with Mexican playlist/culture of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

The last video is a Spotify mock-up of the audio streaming platform. The interface (Figure 1.22) contains elements of Mexican culture, and instead of recommending playlists according to personal interest, the playlist space is filled with looped videos that represent Mexican moments of culture associated personally with me. These memories, though, include physical locations I visited, and memories of events that took place without my taking part, but that now form part of the story of the city (such as the earthquake). I thus curate the moments of culture since they present video-memoirs chosen to be preserved for the future: whether I was present or not, the memories hold importance in the creation or depiction of Mexican culture.

Conclusions:



Figure 1.23: Creative Intervention 4 – Back view, overall Installation of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

'Creative Interventions in Digital Borders: a digital art installation' was devised as an installation to allow those who interact with the piece to, first of all, become aware of borders, and from there to perceive the close relationship between exploring the web and exploring the city.

This installation depicted a digital play in which visual and sonic voices represent the voice of the physical and digital cultural elements coming together. The merging of physical with digital space is shown in a remix appropriation of how I perceive and experience borders, and what is often said about Mexico City. Digital happenings are as important as physical happenings to the identity of the city, Mexican identity and the context in which it is portrayed.

Sound and unexpected triggers also play an important part in visualising digital borders given their ephemeral form. Digital borders are unexpected when looking for specific content, and a person is only made aware of the limitations and restraints in content

based on location and language after their encounter with a message that restricts access to the given webpage or content reproduction.

Similarly, another important element in the installation is addressed in the specific Culture of Noise in a city the scale of Mexico City. With a population of 20 million (INEGI, 2017) and the constant noise of cars, people, aeroplanes, and so on, sound plays a big role in the exploration of Mexico City. I would like to focus specifically on cultural sounds, particularly those familiar to those who live in Mexico City and experience them daily. These sounds all encompass the particularity of being spontaneous or unexpected, a similarity shared with how digital borders are perceived; they also place the individual in a location. Sounds such as those produced and performed by street vendors can let others in the proximity know the type of food being sold, but not the vendor's exact location, since it is constantly moving and can only be located by following the sound and trusting the proximity of the sound to encounter the vendor.

Based on this idea, in which sound pinpoints space, giving a clue to the proximity without giving a specific location, a sonorous landscape is thus created to encompass a more vivid Mexican cultural imagery, now superimposed onto digital realms by employing software to remix these sounds recognised by individuals into a new score using technology. This digital score, like its physical counterpart in Mexico City, gives the cue to a similar recognition of space in the digital realm.

The response received from users interacting with the piece during and after the installation showcased that the planned engagement and design of both visual and soundscape, as well as the floor plan on how to explore the installation, helped individuals to move through and experience each intervention separately, but also as a part of a whole due to the evolving interaction as they moved through the space. According to the audience, the level of engagement with the piece is also an important element to stand out, since the incorporation of cultural elements of Mexico City meant that users familiar with Mexico, or with similar customs in other Latin American countries, could easily relate to and identify with the visual metaphors. For the European and British audience, however, a more walk-through experience of the installation was needed for them to engage with concepts such as the formal and informal restrictions based on neighbourhoods.

Guiding the audience through each individual intervention and allowing them to interact with the fabric, visuals and soundscape meant that the materialisation of digital borders and the implications of those materialisations spoke to the audience and addressed theoretical ideas explained further in detail in the following chapters.

In conclusion, the showcased digital art installation in ACCA from 6-9 January 2020 was an exploration of Mexico City and its cultural aspects, as a case study to research the perception of digital borders. The outcome is an exploration of creative interventions made by constantly learning new techniques in which the correlation of technology and remix could represent technology as an everyday extension of our bodies. Sound and visual elements recreate space. The human and technological creation of content and the interaction between the two is the core of each intervention. Resilience is expressed by both individuals and technology, regardless of the lack of resources or border limitation experienced in everyday life.



Figure 1.24: Creative Intervention 4 – Right view, overall Installation of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra]



Figure 1.25: Creative Intervention 4 – Audience participants of 9 January 2020

Source: Fuentes, 2020. Photo by Olga Saavedra

Chapter II Mexican Memes

An Extension of Self, Jokes as a Source of Communication

The joke should be considered a literary, humorous and fleeting form of great cultural and social value; good jokes are so successful that they transcend borders, erase prejudices and go beyond cultural circuits; they spread, travel and are translated more quickly than any story, movie novel or television program. (Barajas, 2009, p.24)

For as long as I can remember, I have been surrounded by funny images in the digital realm. When phones were green-screen text only, people found ways to create images based on symbols to reply to a message. Once phone screens started showing colour and animated images, tiny gifs could be downloaded and shared manually via infrared and later Bluetooth. Over time, I realised that humorous expressions have always been part of how we communicate, so when memes⁸ appeared, it seemed a natural progression. It did not take long before each group and individual adapted the memes to fit their own culture and appropriated the images to fit their own messages. Since then, I have been intrigued by the way memes communicate a message as observed through the scope of my own culture; what we share, how we share and why we share it, but most importantly, in which space we are sharing.

For the terms of this chapter, memes' significance or evidence of their relevance and cultural dominance is not numerical. However, the view count share and likes to be considered viral indicated that it had to appear on repeated occasions on social media feeds, as well as in my research in personally curating the memes that addressed constant repetition virality:

At present, the things that computers do continue to be pretty much the things that people have told them to do. [...]the interesting aspects of online technologies are still what people do with them. (Gauntlett, 2009, p.152)

Therefore, my interest in memes and showcasing these specific memes as good examples to understand humorous aspects of everyday life in Mexico City, comes from a share of interest with Gauntlet's research on which focus should be on the things that people do with online technologies such as memes.

⁸ 'Internet meme is commonly applied to describe the propagation of content items such as jokes, rumours, videos, or websites from one person to others via the internet' (Shifman, 2013, p.362).

Memes become a good example to understand the humorous aspects of everyday life in Mexico City since they form what David Illich describes as 'convivial tools' that 'can be freely used, or not: do not require particular qualifications; and allow the user to express his meaning in action' (Illich & Lang, 1973, p.22). Like memes, all of the elements present in my installation therefore conform and had origins as convivial tools, as Gauntlett would say, 'insofar as it offers the opportunity for free and unconstrained expression and sharing of ideas and culture' (Gauntlett, 2009, p.156). Images in the form of memes, sound, and video elements are all unconstrained expressions of creativity that aim to share an expression of Mexico City ideas and culture without a specific economical goal. The fact that the images, sound and video are not moderated by institutions or services, nor require a specialist to access the knowledge expressed but are being freely shared on social media to then be re-appropriated by me as artistic curator, means they are not an 'industrial tool'. They are, therefore, a free and unconstrained expression of the use of technology by Mexicans in the capital and the way they share ideas.

Illich and Lang employ the term *Tools for Conviviality* (1973) to talk about how society needs tools that encourage individual creativity. Therefore, memes encourage individual creativity and societal expression. Gauntlett (2011) applies the term to further talk about Media Studies 2.0 and the way in which elements of it belong and hold both positive and negative effects in the use of technology, to which I will focus on this chapter on the effect of these same memes.

From their early and basic creation to their ubiquity on the internet, I have been interested in understanding, analysing, creating and curating memes across time. Over time, and after much observation based on the research for this thesis, I have realised that memes not only have the capacity to be analysed and observed phenomenologically, but also that they carry cultural understandings and expressions of self. As such, memes became my everyday life influence and research focus. The online consumption of memes ensures being kept in the loop⁹ and understanding where memes originate; this means sometimes one has to track the origin of the meme by spending

⁹ However, being kept in the loop comes with a saturation of opinions, memes and critics' voices, out of which none comes from an actual expert (especially online), but everyone shares with the purpose to continue belonging.

time on social media, doing online research of current events to see what memes emerge, and observing and curating those same memes for further analysis.

Talking specifically about the space in which we share memes, I mostly use the term 'digital space' to describe where the meme originates and is shared among others using digital devices such as computers and mobile phones, where the propagation of the meme remains via digital devices, as well as when the meme was created based on a digital idea or concept originated online, which is currently trending but remains in online situations only.¹⁰ In contrast, I use the term 'physical space' to describe when memes transcend the digital realm by either becoming a product,¹¹ poster or to be used in everyday life situations in Mexico, meaning they have bridged the digital to become part of the physical. Also, I use 'physical space' when the idea behind the meme is an actual representation of a moment in the life of Mexicans that was then digitalised to become renowned in the form of a meme.

This interest has led me to consume and share memes as both research and pastime. Over time I have witnessed how some memes have adapted, how they evolved and changed through time to fit a specific message, and most importantly, how they created a shared cultural space, a space that is not limited or restricted by types of memes fit for either physical or digital space. Instead, they became part of a shared cultural space that expands and moves across both spaces, digital and physical. Memes prove they are part of one overall space, one that continues creating and propagating Mexican culture.

This chapter serves as an observational cultural analysis of Mexican memes. Before going directly to the specific characteristics of Mexican memes, however, it is important to first define and briefly explain where the term meme comes from. Coined for the first time in 1976 by the biologist Richard Dawkins, meme was used to define gene-like infectious units of culture that spread from person to person. The term was coined in the roots of imitation as an evolutionary principle to explain the 'spread of ideas and cultural practices such as melodies, catch phrases, fashion and technology' (Dawkins, 1976, p.190). From then onwards, the word was used to address imitation or something being imitated. Fast-forwarding from the origin and use of the word in academia to the

¹⁰ For example, the creation of the *ayuwoki* (explained on *Détournement* memes), which originated in an internet forum.

¹¹ In the form of bootleg, more information in Section 3 – *Détournement* memes.

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widespread use of the word as internet vernacular,¹² 'internet memes are defined here as units of popular culture that are circulated, imitated, and transformed by individual internet users, creating a shared cultural experience in the process' (Shifman, 2013, p.367). Therefore, I characterise memes as digital images that carry expression and interpretation of a specific situation, used by users to communicate their perspective on political and social views on everyday life by appropriating, or re-appropriating, content found online.

Mexican memes specifically selected for this analysis share the characteristic of being grounded in humour. I have selected them purposely since in Mexican society, humour is one of the main outlets for dealing with the realities of everyday life, used as a tool of support and resilience in the midst of day-to-day disasters or unexpected events, since it has social, human and psychological functions (Barajas, 2009; my own translation). Humour is so engraved into Mexican culture that some argue whether 'we hurt when we laugh or we laugh when it hurts' (Barajas, 2009; own translation), meaning that the line between the origin of laughter and the causes for it always shift and change. For Mexicans, laughter is a lifestyle. Making light of the things that we practice in everyday life not only enables us to understand the mechanisms that operate behind them, but it also allows us to better understand and create a critique based on the practices we have experienced.

Moreover, humour is what makes the basis of a successful meme in the digital realm, specifically in Mexico. Therefore, humour is the unit of culture (of Dawkins) that allows cultural content to spread from person to person. In other words, memes are used as a platform to share and learn elements of Mexican culture, and humour is what defines their relevance or importance to survive or stay relevant over time.

This being said, it is also noteworthy that the memes we share form an extension of cultural elements present in everyday life, situations we identify with and experience on a daily basis. In the words of McLuhan (2001), memes become an extension of self since they are, like all new technology, an evolutionary extension of how we express and communicate. This extension, in particular, relies not only on technology such as mobile phones and computers but also social media applications, shifting according to

¹² Funny enough, this seems to have been transmitted from biology to internet vernacular, much like its own definition, as a shared term that spreads from person to person.

how that same technology changes and evolves. This is why memes also change shape or ways in which they are shared (both in social spaces and social situations).

The purpose of memes and the environment they create allow our communication processes to change accordingly, sometimes saturating our senses by means (or nowadays need) to have a visual aspect in everything. For example, a written response to a text that includes a gif image or a meme, now requires other sensorial elements for us to understand but which we are now adapted to see and use. Therefore, we do not see the saturation they cause in us and the new areas of perception they create since we are able to incorporate analysis of an image, localise the image into its own context, and then see how it fits into our new conversational context. Overall, making memes is an extension of self across space.

However, this extension of self also comes with the creation of a new environment in which those memes are shared and understood among users. Any meme environment comes with its own rules and interpersonal relationships that expand across both physical and virtual spaces. This new environment is sometimes within some other environments with their own rules, much like the internet as an environment that affects our senses, or WhatsApp and Facebook considered as environments in which memes are shared. Given that the internet has changed the way we relate to each other, WhatsApp and Facebook also have their own particularities, and memes act as a final layer of environment that creates and places the visual above other sensorial reactions. Every new technology therefore alters and creates new invisible borders of what can and cannot be perceived; we over-develop some senses and leave others without use, creating new areas of perception and new areas of 'blindness', much like in McLuhan's words:

Every new technology is an evolutionary extension of our bodies. The evolutionary process has shifted from biology to technology in an eminent degree since electricity. Each extension of ourselves creates a new human environment and an entirely new set of interpersonal relationships. The service or disservice environments (they are complementary) created by these extensions of our bodies saturate our sensoria and are thus invisible. Every new technology thus alters the human sensory bias creating new areas of perception and new areas of blindness. This is as true of clothing as of the alphabet, or the radio. (McLuhan, Szklarek, McLuhan, & Szklarek, 2010, p.70)

This is as true of clothing as of the internet. Digital Media¹³ is nowadays pervasive as an environment, with areas of invisibility and *sensoria* saturation¹⁴; nonetheless, it remains as an extension of our sensory bodies. Digital media is complex: it creates environments within environments, and therefore memes create a new set of interpersonal relationships (the code in which memes are shared during conversations) on top of the internet as an environment with its own rules and creation of interpersonal relationships. With the internet as environment, memes represent the digital cultural unit of humour and expression of self, used by Mexicans as an extension and propagation of cultural elements.

In Mexico, memes extend our senses by being part of the digital (with their correspondent saturation of *sensoria*) and by being an extension of a way for communicating our traditions from one person to another. Therefore, memes have become and remain an important part of Mexican culture, humour being the keystone of expression in Mexico.

Contemplating the messages shared or the cultural units preserved through memes, it can be seen that actually, within the digital environment, 'only memes suited to their sociocultural environment spread successfully while others become extinct' (Chielens & Heylighen, 2005, p.1). This statement is proven true given that the memes that become the most popular, or which are regarded as having more viral¹⁵ appeal, often come from the most mundane events of everyday life: the events that concern all users sharing those memes, memes that can reflect on the most basic experiences of everyday life as portrayed in the images, relatable images, either by personal experience or because there is a personal relationship to the cultural element expressed in the meme. Following this chain of thought, it may come as no surprise that, for example, a 'Meme expert' who quit his job to focus solely on uploading and posting memes on his Instagram account, is now regarded as an official meme curator in Mexico City. During an interview,

¹³ Microprocessor-based devices that encode data in discrete units, including all modern electronic media (new media), such as computers, the internet, smartphones, etc. In some contexts it refers more narrowly to computer-based communications technology, and especially mass media, as in digital broadcasting (digital television, digital radio) and digital publishing media (e-books), particularly in contrast to the 'traditional' medium of print or to analogue broadcasting. (Chandler & Munday, 2016a, par. 1)

¹⁴ The concept of sensory invisibility is highly present as one of the characteristics of Digital Borders discussed in Chapter II.

¹⁵ 'Viral' is used here as being similar to 'memetic', but in this case it is used as the action of being distributed massively and repeatedly online.

Eduardo Granja¹⁶ mentioned that after all the years he has spent curating memes, his analysis on what gets shared the most reveals that 'we [Mexicans] laugh about the most mundane, about a meme of the food your mom makes, about friends getting drunk at a party' (Vidal, 2018; own translation). This reflects that the level of virality or capacity to survive as a cultural unit online (in other words, for a meme to remain relevant) relies solely on addressing the most mundane and day-to-day in a way that the majority of users can relate to and either share or add to that content.

Internet memes are grounded in mimicry and remix since 'almost any user-generated video that passes a certain threshold of views inspires a stream of emulations' (Shifman, 2013, p.365). This is an activity that, in the digital realm, is now accessible to anyone since 'digital technology and a plethora of user-friendly applications enable people to download, re-edit, and distribute content very easily' (Lessig, 2008; Manovich, 2005, p.365). Memes are the digital cultural units that are mostly spread and imitated by downloading content to then create jokes in the form of text, video or images to the extent that one may argue that 'we live in an era driven by a *hyper-memetic* logic,' (Shifman, 2013, p.365) in which all the content we see most of the time comes from a replication or a previous emulation of something else. The original is thus lost or not relevant in the digital realm, since hyper-memetic means a constant emulation and creation of new content reflecting the previous one.

Hinting at Dawkins again, we find that the content inside memes is much like genes. In addition, Dawkins argues that the gene is immortal:

Genes are immortal in the sense that the coded information they contain is reproduced, replicated with almost total fidelity generation after generation such that there are genes identical to what they were hundreds of year before[...]Genes are immortal, not the DNA[...] the coded information is potentially immortal, that means the difference between a successful gene and unsuccessful gene really matters.[...] the genes that make it are the ones that are good at it, and good at it means good at controlling the processes to make bodies which have what it takes to preserve those genes and pass them on. (Dawkins, 2014)

In the world today, memes operate much like genes, to the point that in the above quote, the word meme could be used instead of gene and its core would remain intact. The content of memes, regarded as coded information, is immortal as a cultural unit since

¹⁶ Posting on Instagram under the surname @memelasdeorizaba

memes express and mimic Mexican traditions reproduced generation after generation. Therefore, memes are immortal; not the physical artefact in which the image is stored, which can easily perish, but the content or idea they contain. This means successful Mexican memes are the ones that have humour and everyday life situations depicted at their core, common enough to be worth of constant replication and emulation.

Memes in the world, and specifically in Mexico, remain relevant because they are good at what they do. Making a joke and making people laugh is what preserves them over time, allowing them to stay relevant and understandable since they share the joke and the cultural information with it. Similar to how a virus spreads and duplicates among its hosts, memes duplicate and spread across digital platforms using machines and users to disperse and multiply.

Interestingly enough, it is the user who selects the type of memes that get spread, meaning that we should regard people as actors of cultural transmissions (Conte, 2000; Shifman, 2013, p.12). The user's role is crucial to the type of memes that will become successful because 'the dissemination of memes is based on social norms, perceptions, and preferences that are crucial in memetic selection processes' (Shifman, 2013, p.12). The way in which something is regarded, understood and interpreted is crucial to distinguish successful memes from the others, social norms on how these are shared, or the context in which they are shared. This process also sheds light on why those memes in particular became viral, and the preferences users have at the time of choosing to become a host or imitator of the meme. Overall, perceptions and social norms are learned through cultural reinforcement, either by experience or by repetition. This reinforcement can also take form through memes portraying those same norms and perceptions under humorous tones, helping the perception or cultural experience to remain but also to be passed on to others.

Nonetheless, using Mexican humour as a cultural form of expression carries the difficulty of interpretation for outsiders from that social group and those not familiar with that type of humour, creating an invisible border. For example, what is perceived as funny in a social group might seem inappropriate to another and vice versa. Such is the case of accidental falls, which based on my own experience in Mexico, is a sincere source of laughter that starts with the person who fell and those around the individual. This response contrasts with other places where silence is needed to first show concern

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for the person who fell. Nonetheless, I will aim to overcome this invisible cultural border and to cross the divide by first explaining the cultural grounding of humour in Mexico, which to me seems perfectly summarised in Eduardo Granja's words when interviewed by Mariana Vidal:

The more problems and obstacles there are in everyday life, the more we look for humour as consolation. That's why I believe Latin America has really good jokes, especially Mexico. A Joke's themes or genre may vary, come and go, but it will never stop existing since Mexican wit is inexhaustible. (Vidal, 2018; own translation)

Humour has been studied and described from a philosophical, artistic and psychological point of view, passing from Aristotle, Sigmund Freud, and beyond, each coming up with their own definition and classification of humour.¹⁷ I will focus on three main theories that describe the characteristic by which humour is associated with pain in the form of laughter, joy at the expense of others' misfortune, laughter found in the release of tension, and laughter caused by incongruousness between a concept and a situation. These three characteristics are commonly present in memes since they are derived from humour and, while more than one characteristic can be found per meme, the selection and division of memes for the purpose of this chapter follows another rationale.

I have mentioned how humour functions as a *resilience tool*¹⁸ for Mexicans, and just as Mexican literature has its own characteristics to define it, humour addresses personal traits shared by users, characteristics that situate them in a moment. In this case, the context of our study is memes shared in the digital space that become viral, and elements that depict and define the way in which humour in digital space is being expressed to remain relevant among users.

As Barajas (2009) states, each country cultivates different forms of humour, which means they also convey specific cultural features. Mexican memes use elements from the three main theories to transform laughter into a resilience tool that allows users to deal with everyday life. Therefore, memes have become a specific cultural means by which Mexicans communicate, discuss and express everyday life sentiments.

¹⁷ For more information see Relief theory (Sigmund Freud, Herbert Spencer), Superiority theory (Plato, Aristotle, Hobbes, and Descartes) and Incongruous juxtaposition theory (Kant, Kierkegaard) (Morreall, 2016).

¹⁸ I'm using the term 'resilience tool' as the device (in this case humour) used by individuals to adapt in the face of adverse conditions, using laughter as the main capacity to overcome or adjust easily to misfortune to keep a normal everyday life in the midst of chaos or crisis.

At the moment, meme analysis and research tend to be focused on English speaking communities, or on memes in the English language. For example, memes were first defined in the book *Memes in Digital Culture*, written by Limor Shifman (2013), who specialises in digital culture and offers an overview study on the power and potential of memes. In the book, she addresses the first images ever to be described as memes that were born in and based on English speaking communities. Nevertheless, I would like to bridge this gap by analysing the particularities that arise from the use of Mexican memes, because Mexican memes are in Spanish but often address American culture. These memes display characteristics that make them belong to one culture as well as appropriating global influences.

In other words, Mexican memes appropriate elements of Pop Culture (mostly coming from American influences) to create new memes but also to address elements of Mexican culture that give a sense of belonging and differentiate Mexican memes from others. Think, for example, about memes that address and appropriate content from a Hollywood movie. As the movie was consumed and shared by a vast majority of online users probably in the English language, and memes in English will be created around them addressing just a specific movie scene or dialogue, that same meme could then be re-appropriated to fit a specific cultural event or situation in Spanish, adding cultural characteristics to the meme or using the meme in a specific situation of everyday life.

The criteria for analysis here include language, type of meme, humour addressed in the meme, its context, and the appropriating culture. Furthermore, users that share and create memes need to 'agree' or understand, to identify with those characteristics. Users are not conscious of how they realise the types of language, meme or humour addressed in the meme or context being shared, but they make evident that they understand the characteristics in the meme by choosing to share it and propagate it further.

Mexico and Humour:

Sigmund Freud noted that we express our fears, anguish and prejudices, our most profound yearnings, both as individuals and as a society, through humour, meaning humour holds great power in the dissemination of self and understanding societal behaviour. On the same note, Portilla (1984) mentions that mockery and laughter can serve as a key to understand essential features of the human condition or to penetrate the

spiritual structure of people. So, with both these definitions it can be concluded that humour holds the key to the social and cultural expressions of self, and that humour helps to understand key human features of individuals. In the case of Mexico, that key feature holds closely to Mexico and Mexicans' suffering, perceived as an opportunity for mockery.

If, as John Lennon said, it is true that people who suffer the most are the ones with the best sense of humour, then Mexico should be a world humorous power, since suffering is a constant in the daily life of the country throughout the centuries. (Barajas, 2009, p.215; own translation)

Mexican humour therefore comes from inner personal and external suffering of the country as a whole, suffering that comes from past and present elements, ranging from pre-Hispanic sacrifices, colonisation, theft of resources by corrupt politicians, natural disasters, poverty and inequality, to name a few. Suffering has been present at almost all moments in the development of a country as a nation and of its identity. Therefore, to achieve the ability to mock ourselves we need to first distance ourselves from the tragedy; as time passes we are able to overcome it through laughter. 'A lot of great minds agree in associating humour with sadness, melancholy and the most irrational mechanisms of our mind' (Barajas, 2009, p.12). For his part, Barajas asserts that for Democritus, laughter and profound sadness shared origins; this is why melancholy is usually associated with humour. It was believed that tears coming from laughter had the same origin and shared the same condition as tears of sadness.

'It is through humour that man [sic] can achieve certain relief, either minimum or momentary, for his psychic pains' (Barajas, 2009, p.22; my own translation). Mexicans are no exception. The constant arising of threats, both external and internal, has forced Mexicans to turn to humour as a defence mechanism against reality, to resist tragedy. Humour is a resilience mechanism that holds people together, regardless of the conditions and characteristics of the tragedy to overcome.

Therefore, Mexican humour originates in and takes its characteristics from tragedy:

Humour culture in Mexico is rich, complex and has a strong personality...André Breton talks of Mexicans taste for black humour; Octavio Paz on Mexicans laughing about death; Monsiváis and others' on machista humour; Portilla has

written a phenomenology on Mexican *relajo*¹⁹...Octavio Paz, Antonio Alatorre and others on *albur*²⁰ language; Portilla, Paz and others on *cantinflesco*; Monsiváis on involuntary parody; among many others. (Barajas, 2009, p.25; own translation)

Given this, I have chosen to retain the original language of certain words and terms that cannot be directly translated into English without losing significant meaning, since they are culturally-specific. Therefore, to avoid losing their cultural characteristics, the original language (in this case Spanish) will be used together with a brief explanation on the cultural characteristics the term is giving or adding to the whole. Such is the case of terms created based on Mexican culture, such as *cantinfleo* that, according to the Royal Spanish Academy (RAE), comes from a famous Mexican fictional character called Cantinflas and is now an official term or word defined as 'speaking or acting in a crazy way without saying anything of substance', more perfectly exemplified in any speech delivered by Mexican politicians.

On the other hand, we have the use of the term *relajo*; this expresses a behaviour in which seriousness is avoided and unwanted. Relajo is generally performed as a group, based on actions that go against the stipulated rules; for example, shouting in class after the teacher has asked for silence and left the classroom. Relajo tends to also go against the established or expected behaviour in a situation, adding mockery and jokes that are closely related to the term *echar relajo* (Portilla, 1984, p. 53) and is also a term widely known and used by Mexicans. Moreover, and Mexican-specific, but which can also be found under different names in other Latin-American cultures, we find albur or the game of albures: 'this is a verbal combat made out of obscene allusions and doublesense (usually with a sexual reference), which is practiced a lot in Mexico City...' (Paz, 1950, par. 20) to the point that it is a skill learned, sometimes at a really young age. In school you are therefore encouraged to quickly learn what words to avoid saying, or which way you say them: specific phrases or words that could incite double entendre, which usually comes with a mockery towards the person that said the words without realising it. This late realisation will come then in mockery from others in the form of a specific whistle sound or verbal response that clarifies you have used double entendre.

¹⁹ In Mexico, '*relajo*' means a behaviour in which seriousness is avoided, generally as a group, based on actions that go against the stipulated rules or estimated behaviour in a situation, mockery and jokes are closely related to '*echar relajo*' (Portilla, 1984).

²⁰ The game of 'albures' -this is, the verbal combat made out of obscene allusions and double-sense, which is practiced a lot in Mexico City... (Paz, 1950, par. 20).

Having a diverse, rich and complex humour culture, I would like to focus on one of the main traits that distinguish Mexican humour, included in the types of humour previously mentioned. One of the first records that trace this peculiar trait of how Mexican humour operates dates back to the 16th century, shortly after the conquest of México-Tenochtitlán (Fernández, 2012, p. 2), when some of Hernán Cortés' men were upset over the little profits received, and spent their nights painting slogans against the conqueror on walls of the Novohispana capital. The wording of these slogans drew people's attention due to the *agudeza* and light-heartedness with which they were written (Fernández, 2012 p. 2). The term *agudeza* in English is close to 'wit'²¹. It emphasises the facility to understand the hidden nature of things, especially of those that are complicated or confusing, in a clear and assertive way so as to think with ingenuity to the answer to a question, the solution of a problem or a difficulty. *Agudeza* is therefore applied to responses that incorporate Mexican culture elements in the form of a smart saying that is both witty and funny.

Although I am sure *agudeza* as a means of expression has its origin from pre-Hispanic cultures, due to colonisation, records for these manuscripts are either unavailable or in need of translation by specialists. In the case of *albur*, for example, there is a translated text called *Cuecuechcuicatl 'canto travieso'* or 'naughty song' (Johansson, 2011, p.14); this was translated from the original *Náhuatl* by Spanish friars in the 16th century in order to meet the 'other' in their pre-Hispanic context, a text that constitutes what could be the first ritual manifestation of the *albur*.

Nevertheless, what we can argue is that *agudeza* in humour is one of the main traits that has origin in pre-Hispanic times and will be preserved from then on as a Mexican trait of humour. This is because it allows humour to be expressed in either of their derivatives, such as black humour, *albur*, *cantinflesco*, humour that is able to address death, etc.

With the purpose of linking *agudeza* closely to memes, we can use Dawkins' definition of immortal genes and coded information contained in memes to argue that *agudeza* is the element that allows for humour as a cultural unit (now in the form of meme) to pass on through time. 'Internet memes are altered deliberately by human creativity' (Dawkins, 2013, min. 4:26); therefore, *agudeza* reflects human creativity.

²¹ The ability to relate seemingly disparate things so as to illuminate or amuse (Oxford Dictionary).

If it is set as a major premise that *agudeza* is a Mexican gene, and as a minor premise that 'memes spread though human culture as genes spread through the gene pool [...], memes do the same as genes only by different roots and they potentially survive bodily death just as genes do' (Dawkins, 2013, min. 2:07), it may be concluded that memes survive bodily death, not because they are contained materially in the technology they use, but because the ideas they share and pass on (as coded information) to other users is then learned and collected by users as part of their culture to keep on creating new imitations of memes. Therefore, *agudeza* perceived as a gene has made it successfully, passing genes on from pre-Hispanic times, adapting to fit new extensions of technology (such as digital memes), while remaining relevant with the ability to be quick and spontaneous in the joke.

Given that 'memes spread through human culture as genes spread through the gene pool' (Dawkins, 2013, min. 2:07), memes allow Mexican culture to spread and let others learn and hold on to their culture. By sharing memes, users reinforce and claim understanding of a culture or event people are discussing online.

What allows for *agudeza* in humour is the knowledge and closeness to customs and traditions of the object being critiqued. Whoever wants to critique Mexican society using humour needs to understand the country's flaws and virtues. The correct use of this knowledge causes pride and embarrassment in the form of a joke and reflects on the situation being currently lived.

In summary, Mexican humour has evolved through time: the historical constant is that it has preserved its *agudeza* to express and rebel against the group in power or injustice perceived. The main difference being that, at present, humour is mostly expressed and communicated using a digital medium (mostly social media), in the form of memes. Therefore, memes have become an extension of self in the way in which humour is expressed.

Humour can then be used as a shared cultural characteristic to depict what being Mexican is like, from general to particular. Humour is used in an anthropological dimension; it becomes the mirror upon which a society reflects. Either realistic or exaggerated, such visualisation provides a sense of belonging to a community by way of understanding what is stereotypical or exaggerated. These points of commonality can

only be decoded by those who share the traditions, knowledge, and are part of the society; such elements become tricky and complex when the digital is added into the mix.

Mexican culture bases its social practice of expression and critique on humour. Memes allow this social practice to expand into digital and physical spaces; nowadays, memes are one of the most used forms of expression for everyday events. Memes have become a common tool for communication among users; for example, the way users respond to each other on an online conversation could be based solely on meme references. Their permeability in everyday life comes to the point that newspapers and other official media outlets tend to have their own meme collection of the week regarding events that took place during the week.²² Moreover, marketing companies, as well as video-editing styles, now follow the latest trends and way of expression of memes, copy them and present their content in the format of the memes popular²³ at the moment. Their permeability is so total and visible that there is a Meme Museum located in Mexico City.

The term 'subirse al tren del mame' (get on the train of [mame], own translation) is the vernacular expression (born and created to talk about the digital space) for being part of a trending meme fever, and for expressing how the sharing user is now part of the wave of users talking about it. 'Get on the train' implies an interaction is taking place, the kind of interaction, or 'the train', refers to what everyone is currently talking about and spamming online, which could be either sports, politics, funny videos, daily life events, etc. Memes as cultural representation are pieces that buoy up and will always surround the 'tren del mame'.

Memes as cultural components must 'be viewed within traditions, not as a modern invention' (Jenks, 1993, p. 2). Memes, although born in the digital realm, are now viewed as a tradition of Mexican culture, and they are part of the medium, so users keep

Memes tend to have an especial section in newspaper websites; articles in those sections could be addressing the creation of memes around an event that happened during the week, showing the ones that were shared the most (and their relevance, since that proves people are discussing) or the picture used in the article could be a meme that adds humour to the article. Examples: (1) https://www.eluniversal.com.mx/espectaculos/cine/tunden-fans-de-spider-man-con-memes-sony, (2) https://aristeguinoticias.com/0901/mexico/a-falta-de-gasolina-usuarios-llenan-su-tanque-de-memes/, (3) https://www.excelsior.com.mx/trending/donde-esta-la-letra-x-robada-en-xalapa-asi-la-buscan-en-redes/1330845#imagen-2

²³ Example of editing cuts, overlapping images and sounds available at: https://youtu.be/e0bbSWECviQ

laughing at themselves, at their customs, traditions and the inconsistencies throughout the nation. Memes have become an extension of humour; as such they have extended from the digital space to permeate the physical space, becoming an online and offline expression tradition.

This analysis uses an archive of memes that became viral among Mexicans. All memes share viral aspects in the form of constant repetition and appearance on sharing feeds across Facebook, Twitter and WhatsApp platforms. The meme analysis is divided into three main categories based on topics. These include:

- memes discussed and shared between users regarding Trump and 'the wall' englobed as memes with a political background;
- memes about everyday life and Mexican culture addressing Mexican Magic(al) Realism and preserved in the form of a meme in digital archives;
- memes addressing *Détournement* techniques.

Given the enormous task of selecting memes from a galaxy of existing elements, I have chosen to select (at times at random and some others by manual curation and selection²⁴) specific memes for each category that fit the characteristics I wish to exemplify and convey. Either discussing Trump and the wall, commenting on the last Avengers movie, or laughing at viral videos shown in *Mexicans of Late Capitalism*²⁵ or Instituto de Bellos Memes,²⁶ users are constantly engaged and giving their opinion and sentiment on social and political issues. The theoretical message is to convey how memes and meme characteristics from the digital world are an extension of self, but also how they have now permeated or extended into physical space and have become part of everyday life in Mexico City.

In other words, the purpose of this study is to create a narrative about how specific memes work in Mexico, but more importantly, to express and articulate what I see memes doing on an everyday basis to become an everyday life tool of expression. Slowly but steadily, memes are becoming the default response and expression of real sentiment towards a specific event or crisis taking place in Mexico: being political,

²⁴ This means I have undertaken the task of looking at, archiving and curating memes through the years, and of reflecting on their evolution as well as on the thematic that becomes viral or remains famous for a short period of time.

Famous Facebook archive of funny memes available at: https://www.facebook.com/mexicansoflatecapitalism/.

²⁶ National Institute of Beautiful Memes (word play using the name of a famous national art institution called INBA, National Institute of Fine Arts) available through @INBMoficial.

cultural or social; being at times expected or unexpected. Memes are usually expected after an event and during an event taking place. Memes are created to keep on reappropriating Mexican culture and customs with events and elements from culture taking place both in past and present. A football match, political elections, Trump elected president, an unexpected quake, viral video, and more, have the capacity to create memes, but most importantly, all memes are created to address and express those events and hold a specific type of humour. Humour that sheds light on characteristics of Mexican culture and digital artefacts, all with the capacity to further study to keep on defining Mexican digital culture permeability through space.

Memes on Trump and The Wall - Political Mockery²⁷:

The archive of memes presented in Appendix A shows a collection of memes manually gathered during and after the Trump presidential candidacy, mostly selecting those that became viral among Mexicans because of the depiction of Mexican sentiment regarding Trump's discourse on 'building the wall'.



Figure 2.1: Avengers Movie Scene Meme²⁸

Source: Unknown (n.d.). Screenshot

²⁷ See Appendix A for a complete visual representation.

²⁸ Translation: (Upper frame) -And when did you become an expert bricklayer for wall constructions? (Lower frame) -Last Night:v

The first meme (Figure 2.1) was shared on the night before the final announcement of the Presidential candidate winner. The meme thus reflects Mexican sentiment about Trump's speech on the wall and mocks the idea of being the ones who will be required to build that wall, thus becoming 'the experts' overnight. The allusion, nevertheless, comes from a Hollywood movie *The Avengers*, in which the character addresses how he had to become an expert on thermonuclear astrophysics overnight. The scene in itself is a well-known meme, being a popular movie consumed among Mexicans. It is also a meme that depicts the need to become an expert overnight, much like a struggling student's only chance lies on them studying for a final exam. Therefore, the meme makes use of users' familiarity with both the Trump 'build the wall' situation and The Avengers scene to re-appropriate both elements and depict a Mexican bricklayer (represented by the elements in the second frame such as the well-known cement sack 'Cemento Cruz Azul' and Iron Man's suit re-appropriated as a bricklayer's). Overall, it mocks Mexican reality of Trump becoming the President and the idea of the building of the wall itself, at the same time the meme is reflecting an imminent moment in time, the moment that Trump will go from being a presidential candidate to becoming the President elect of the United States.

On the other hand, we can find memes that depict a moment in time, a recent event that has taken place in relation to politics (a politician's statement or personal agenda), entertainment (new viral video, sports, famous entertainers, etc.), or life event (could range from a peaceful protest to an unexpected natural disaster). These are added to a general depiction of Mexican sentiment on those events, with the distinction that the way in which that sentiment is expressed also contains Mexican culture elements to express the meaning of the meme together with the sentiment expressed in the meme.



Figure 2.2: Name bracelets²⁹

Source: Unknown (n.d.). Screenshot

This is the case of Figure 2.1, in which we find a really popular way of selling bracelets across touristic locations in Mexico. Usually, people will look for their name on the bracelets or the name of the person they want to get a souvenir for and purchase the bracelet; nevertheless, this meme is depicting someone's idea of making use of the Trump sentiment to generate a profit. The bracelets at the top-centre of the image depict then different messages ranging from 'I love Trump', to insulting him in both English and well-known Mexican swear words. The meme gains value and virality points because the idea and wit for selling overcomes the personal sentiment of the owner selling the bracelets.

Other elements present in the memes shown in Appendix Figures A.1 and A.2 depict the use and re-appropriation of previously consumed content, in this case ranging from Japanese anime, Hollywood movies and American cartoons, all of which were popular in Mexico and consumed by most internet users. They are so well known that the memes exist with infinite different variations and topics to address, but the reappropriation comes from consistently using Trump's appearance on the media to mock

²⁹ Name bracelets depicting Trump sentiment in both English and Spanish.

ourselves (Figure A.1, upper frame) and to mock the other (Figure A1, lower frame) over the futility of the whole situation (Figure A.2).



Figure 2.3: Memory and Tolerance Museum³⁰

Source: Unknown (n.d.). Screenshot

Figure 2.3 reflects the total immersion of memes as part of everyday life through a meme that became popular and shared among others due to two main factors. First, it was presented as a meme, an image with *agudeza* in the text, concise and to the point, with no more than six words but each equally powerful given the context of who was saying the message (a museum on tolerance) and to whom it was addressed (The President of the United States). The second factor was the timing in which it became viral. The controversy arose from the fact that Trump was visiting Mexico, in 2016, after a year of constantly mocking Mexicans and blaming Mexico for 'not sending their best...'. At the time, general opinion in Mexico was that the only individual more hated than Trump was the Mexican President himself, by a close margin. Figure A5 (in Appendix A) also depicts part of this sentiment since the march had the purpose of asking the Mexican President Peña Nieto to step down. However, the moment and

³⁰ Memory and Tolerance Museum Translation: #MrTrumpWithAllDueRespect, we want you to come and remember the suffering caused by speeches like yours. Help this message get through. Share. #TrumpToTheMuseumM&T. (Inside Image) -Mr. Trump: for you it's free.

timing could not be wasted, so both signs in the corner were witty and expressed the message that Mexican society wanted to convey.

Finally, Figures A4-A6 in Appendix A depict more Mexican culture elements, together with the Trump thematic of the wall. Only those closely familiar with the Mexican traditions or everyday life experiences can understand and share the joke in the realm of mocking the situation but also mocking the elements presented in the meme. The first (Figure A4), is a mockery of the standard Mexican custom of using walls to paint banners to promote Banda Music (Mexican music ensemble), using a football scoreboard to depict Mexican witty superiority winning over Trump. Figure A6 makes use of a well-known pre-conquest ritual that has survived over the years, commonly known as 'Voladores de Papantla' (Papantla Flying Men), in which the joke has a layered meaning implying the wall would not prevent access to the other side, commonly used as a joke since it states the obvious.



Figure 2.4: USA Preliminary Results 2016³¹

Source: Unknown (n.d.). Screenshot

Figure 2.4 presents a lot of everyday life elements, simultaneously framing a specific moment in time, when the results for the United States' Presidential elections were about to be released in 2016. Mexicans, at the time (more than used to see tragedy with a hint of humour), kept track of the situation. Rather than worry about it or to stay upto-date to familiarise themselves with the situation, they followed the unfolding of events to be kept in the loop and be able to create more memes, but most importantly to be able to understand all new and old memes.

³¹ Figure 2.4 Text Translation: Preliminary Results 2016 USA (right side) meanwhile at OXXO (popular convenience store in Mexico) -Would you like to round out for the wall?

The general consensus among Mexicans was that there already too many problems in the country as it was to keep on worrying about external factors. The results of the new President in the neighbouring country seemed like an event out of the scope and reach of everyday life Mexicans; they knew about it but could not worry about it. Since they had almost no impact on the decision, they followed the development to make fun of the situation, because the only input possible was the type of memes that could be created and shared about the situation.

They could not choose who would win the Presidential election, but they could choose in which way to mock whoever won. This particular image therefore depicts a fake poll in which the winner is a Mexican political party with a famous reputation of 'making up' survey results; this once became popular because the total percentage was well over 100%. Also, on the right side of the image, a cashier from one of the most popular convenience stores in Mexico is shown. The everyday activity that she is performing is what gives the human quality to the meme, cashier services in Mexico often ask customers at the end of the transaction if they want to round-up the amount to donate money to charity. In this case, humour arises from the hypothetical event of facing this everyday life situation, in which instead of being asked to round-up for charity, the round-up would go directly to financing the wall, turning the most mundane activity into a meme to which almost all Mexicans can relate.

Mexicans of Late Capitalism - Mexican Magic Realism, Archiving Physical Space³²:

According to Aristotle, *On the Art of Poetry*, human beings have a 'natural taste for imitation' since:

The instinct for imitation in man from his earliest days; he differs from other animals in that he is most imitative of creatures, and he learns his earliest lessons by imitation. Also inborn in all of us is the instinct to enjoy works of imitation. (Aristotle, Horace, Longinus, 1979 as cited by Durix, 1998, p.45)

It should come as no surprise that this instinct for imitation has been applied to the digital realm. What better place to express and analyse the art of imitation than in memes? In their name, memes have the capacity and need for imitation to become what

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³² See Appendix B for visual representations.

they are; as Roland Barthes (1982) noted, they find relevance not in the narration but in mimesis.

For Barthes, 'the origin of a sequence is not the observation of reality, but the need to vary and transcend the first "form" given to man, namely repetition' (Barthes cited by Durix, 1998, p.55). Memes must have the characteristic of causing laughter, so users share them across platforms but also, and maybe most importantly, memes become what they are because there is an infinite variable of the same image or event represented. Imitation creates the narration and endows it with viral capability; the more variations and imitations of the same topic in memes, the more they are known by users. Therefore, memes reflect reality in their many varied ways. Nevertheless, I want to address how, in Mexico, this reality gets easily mixed with elements that could easily be branded as surreal.

Everyday life is sometimes so bizarre that the mockery element in the meme, the joke, comes from the fact that we are just presenting everyday life in Mexico in the most explicit expression. To further explain what I mean, I have taken a Facebook archive of Mexican memes under the title *Mexicans of Late Capitalism*. This archive shares and curates a variety of memes from everyday life of Mexico, with the catch that some, if not the majority, of the images and videos are just that, a representation of a moment in time in Mexico. Due to the bizarre elements that appear in it, these make a joke others use and share to create more meme variations and continue the imitation process.

Looking to give a more formal view to this 'bizarre element' present in daily life in Mexico, here I exemplify Magic(al) Realism's characteristics and show where they are present in Mexican memes, specifically in the archive found in Appendix B, a collection of memes from Facebook under *Mexicans of Late Capitalism* and *Instituto Nacional de Bellos Memes*³³.

According to Ann Bowers, in her book on Magic(al) Realism, the term appeared in the 1920s, and specifically in Latin America in the 1950s. Magic(al) Realism is used to define a particular narrative mode that is understood as the 'commingling of the improbable and the mundane' (Bowers, 2004, p.3). In memes, before addressing the

³³ National Institute of Beautiful Memes (a play on words with a famous art institution called INBA, National Institute of Fine Arts) available at @INBMoficial.

correlation between the mundane and the improbable, I would like to address that 'much of the confusion concerning magic realism arises from the fact that it was contemporary with surrealism' (Bowers, 2004, p.13); they were both influenced by each other. It would come as no surprise to also sometimes see elements of surrealism in the mix of the mundane with the improbable and the surreal in everyday life in Mexico.

Magical realism is 'a style of literature which integrates a realist mode of writing with fantastical or marvellous events treated as perfectly ordinary occurrences' (Buchanan, 2018, par. 1). Whoever has experienced Mexico's everyday life would agree that the blend of the improbable and the mundane is regarded as common, to the point that Mexicans cannot sometimes distinguish the situations they are in as improbable. Only when regarded from the outside or by outsiders is it that those characteristics become obvious.

The key of magical realism is 'to describe a reality in which the *magical* is part of everyday life and not an extraordinary dimension' (Buchanan, 2018, par. 1). Born as a literary form, the term magical realism has been discussed in paintings and literature, as well as TV and film. Nevertheless, I would like to further explain the use of magical realism in the digital realm in what we know in today's vernacular as Memes. The use of magical realism is presented, not with the intentionality to present or preserve magical realism or everyday life in Mexico, but rather to cause laughter and share and imitate (create new memes) across digital platforms.

To help us understand the particular element in Mexico that allows for magical realism to be perceived as ordinary, we must not forget to mention Frida Kahlo. Carlos Fuentes, a popular Mexican novelist of the Latin American boom movement, journalist and diplomatic, makes a useful comparison between Mexico as a country and Frida Kahlo's life in which both share the brokenness and pain of mutilation, symbolical and political, that tore the country and the woman apart:

As people are cleft in twain by poverty, revolution, memory, and hope, so she, the individual, the irreplaceable, the unrepeatable woman called Frida Kahlo is broken, torn inside her own body as Mexico is torn outside. (Fuentes, 1995, cited by Bowers, 2004, p.119)

Moreover, Frida Kahlo is not only a symbol of the nation of Mexico, she is also an exemplification of magical realism as an essential aspect of Latin America, by stating

that her art was not surreal but rather an expression of her reality. Frida expresses that which is known by Mexicans and taken for granted, but which is perceived as out of the ordinary by foreigners. That which, for example, the Spanish 'conqueror' of Mexico, Hernan Cortés, in the 16th century reported being unable to describe in familiar European terms what he saw on the American continents:

Frida Kahlo remains...the most powerful reminder that what the French Surrealist codified has always been an everyday reality in Mexico and Latin America, part of the cultural stream, a spontaneous fusing of myth and fact, dream and vigil, reason and fantasy. (Fuentes, 1995 cited by Bowers, 2004, p.120)

Latin America has become the most recognised location of magic realism: it has opened the door to digital representations of magical realism in memes. Mexico is closely associated with the concept of magical realism, and it is part of daily life that the portrayal of ordinariness generates mockery and laughter in the fact that they are merely possible, often evoking the phrase 'that could only happen in Mexico'. Expressions of everyday life are all that need to be portrayed to become a meme, since humour arises from the narrative presenting an event that seems out of the ordinary (for others) in an ordinary part of day-to-day reality in Mexico.



Figure 2.5: Street trade business (translated text on sign: Street Trade Prohibited)
Source: Unknown (n.d). Screenshot



Figure 2.6: Old lady giving a blessing to beer boxes in front of an altar

Source: Unknown (n.d). Screenshot

Memes thus reflect Magical realism elements that align and show humorous value with the depiction of normal everyday life in Mexico. Stories of street vendors (Figure 2.5), vehicle accidents or incidents (Figures B1, B2, B4, B6, B7 and B8 in Appendix B), home to work commute (Figures B9-B11 in Appendix B), eating (Figure B5 in Appendix B), and religious life (Figure 2.6), among others,³⁴ are all represented in extraordinary yet ordinary everyday life events. This is much like the popular story around André Breton, founder of Surrealism, which is well-known among Mexicans. On his travel to the country around 1938, he fell in love with Mexican craftsmanship and decided to ask for a handmade table from a local carpenter. Unable to speak Spanish he decided to draw the table he wanted, the carpenter took the design home and created the table based on a quite literal description and created a table with three legs of different sizes, to which André Breton declared Mexico as 'the most surrealist country in the world'. Another similar famous word of mouth story says that Dalí, who also visited Mexico, fiercely declared that he would not be able to return to the country since he was not able to live in a country more surreal than his paintings.



Figure 2.7: Tacos street food establishment operating during a flood.

Source: Unknown (n.d.). Screenshot

Figure 2.8: Man using phone after bike accident.

Source: Unknown (n.d.). Screenshot

Overall, memes depicted in this chapter show elements of magical realism as 'narrative art that presents extraordinary occurrences as an ordinary part of everyday reality'

³⁴ See Appendix B for visual images.

(Bowers, 2004, p.131). With the introduction of memes in the form of funny images in the digital realm, magical realism (portrayed in paintings, photography, literature, etc.) found a new way to be portrayed in a digital medium in which everyday life occurrences want to be shared among those users that experience them.

In consequence, humour in memes arises from finding two main characteristics of magical realism. First, elements or content that could easily seem to belong to a fantasy world due to the improbability of their existence, but which seem ordinary in the space portrayed. Sometimes these elements are not explained but their appearance is intuitive for those familiar with the situation. Second, most of the actions are real but lack explanation due to their unlikeliness:

Obviously, surrealism is alive...The general public thinks of surrealism as the furthest extreme of modernism and, elsewhere, it has become the object of academic study. It is very much a matter of one of those things whose existence is contemporaneous with our own. (Débord, 1958; McDonough, 2004, p.67)

For Débord, not only is surrealism alive, but to him 'the spectacle designates the alienation of Late Capitalism that manifests itself in various spectacular phenomena' (Débord, 1958, p.67), a term that I have applied to memes since the official page that 'distributes' the main memes has already incorporated a level of mockery that addresses this in its name, 'Mexicans of Late Capitalism'. The manifestation of alienation in Late Capitalism is therefore the sole purpose and source of virality behind the Facebook page's success.

Similarly, for Débord, the importance in the politics of language could be expressed by means of diversion, through the re-appropriation, and sometimes plagiarism, of the dominant discourse. This practice becomes most closely associated to him and the collective project of the Situationist International with the name *Détournement*:

The group would define this practice as the excision of an item of culture (whether image, text, or object) from its normative context and its sub-sequent juxtaposition with another fragment in order to stablish an analogical relationship between the two (McDonough, 2007, p.5).

Détournement Memes³⁵:

This final section presents the type of meme that I perceive applies the technique of *Détournement* used by International Situationists in the 1960s. This type of meme shares qualities from the previous two and is also grounded in humour shared as a social group in Mexico. Additionally, these memes carry with them elements to become a *détournement* tool.

In the User's Guide to *Détournement* on one of the English translation notes, we find that the French word means: 'deflection, diversion, rerouting, distortion, misuse, misappropriation, hijacking, or otherwise turning something aside from its normal course or purpose' (Débord & Wolman, 1956a, par. 38): memes³⁶ under this category echo said meaning. Memes under this category depict misuse of the original version and misappropriation without regard for copyright infringement, borrowing elements from physical space (Figures 2.10 and 2.14) and digital space (Figures 2.9 and C9) without regard for the medium.



Figure 2.9: Bus decoration based on famous Hollywood movie.
Source: Unknown (n.d.). Screenshot

Figure 2.10: 'Sistine Madonna' picture by Rafael Sanzio, 1514 re-contextualised and renamed as 'La Despensa' (The groceries).

Source: Unknown (n.d.). Screenshot

³⁵ Found in Appendix C, Figures C1-C10.

³⁶ Found in Appendix C, Figures C1-C10.

In addition, *détournement* places this 'turning around' of 'pre-existing aesthetic elements' in which '*détournement* is thus first of all a negation of the value of the previous organisation of expression' (Débord & Wolman, 1956b, par. 2). Likewise, the memes found in Appendix C, Figures C1-C10 have in common this sharing of repurposed material to create new meaning by means of disassociation from their original aesthetic elements. Users must possess knowledge of the original and 'official' version of the material being repurposed; however, the value or meaning of the original remains detached from the new version of the material presented.



Figure 2.11: Nopales (edible cactus commonly eaten in Mexico) sold with Batman shape

Source: Unknown (n.d.). Screenshot

For instance, Figure 2.11 re-appropriates the famous Batman logo and turns it into a Mexican basic food basket product by switching the consumption of the logo for entertainment purposes into a perishable product, while also calling others to buy the product because of the portrayal of the commercial logo.



Figure 2.12: Painting 'Las Tortilleras' by Carl Nebel 1834 with added text³⁷

Source: Unknown (n.d.). Screenshot]

Another example is Figures 2.12 and 2.13 that frame Mexican cultural events with elements taken from art and re-appropriate them to fit pre-existing aesthetic elements, both cultural (Mexican or popular culture), such as making *tortillas* in Figure 2.12, while addressing how Mexican cuisine is based mostly on the same prime ingredients.

³⁷ Translated text: If you put food on a *tortilla*, it's a taco, but if you dip it in hot oil it's a *taco dorado* (golden crisp). Ah! But if you submerge it 'enrolladito enrolladito' (really well rolled up) it becomes a *flauta*, while extended it is called *tostada*. Now, if prior to that you bathe the taco in guajillo chilli it is called *enchilada potosina*. On the other hand, if you put cheese inside the taco, it is a *quesadilla*, but if you put salsa on it and put the cheese on the outside, it becomes an *enchilada*. And here comes the magic, that *enchilada*, in fragments, accompanied by roasted meat, invokes the mythical *Chilaquiles*. I call it 'the quantum overlay of the tortilla'.

However, Figure 2.13 shows a pre-conquest scene re-appropriated as a common scene of street-vending in which a man chants using a speaker as he sells products such as bed covers, plates, etc. Both scenes show elements of Mexican culture only accessible or knowable to those who have lived in Mexico and have come across both experiences.

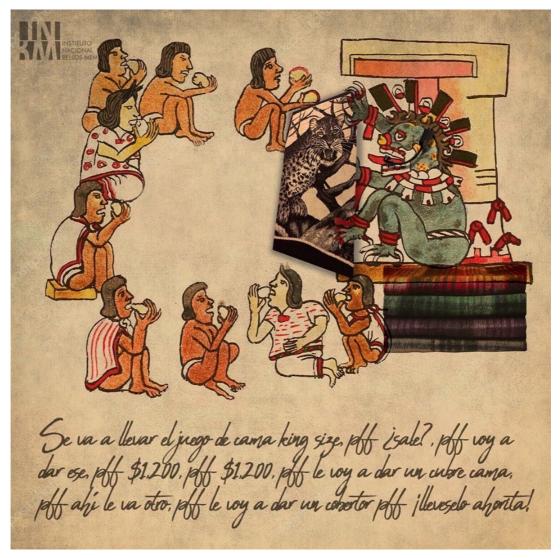


Figure 2.13: Magliabecchiano Codex (fragment) with added text³⁸ and imagery

Source: Unknown (n.d.). Screenshot

Finally, Figure 2.14 is relevant to the discussion not only because it depicts a famous painting by Manet, but mostly because this type of re-appropriation shows a very digitally famous event, the 'Edgar se cae³⁹' video (Edgar's fall), which was one of the

³⁸ Text translated: You are going to take, the king size bed, *pff* ³⁸ alright? *Pff* I am going to give you that one, *pff* \$1,200, *pff* I am going to give you a bedspread, *pff* there goes another one, *pff* I am going to give away a bed cover *pff* take it now!

³⁹ One of the first and most known viral videos in Mexico, uploaded to YouTube in 2006, available from: https://youtu.be/b89CnP0Iq30.

first viral YouTube videos in Mexico, if not the most famous since its appearance in 2006. The mix and match of elements and the juxtaposition they create is what gives the meme a humour factor, and what depicts a time in a moment of Mexican culture reprocessing under the high standard of art.

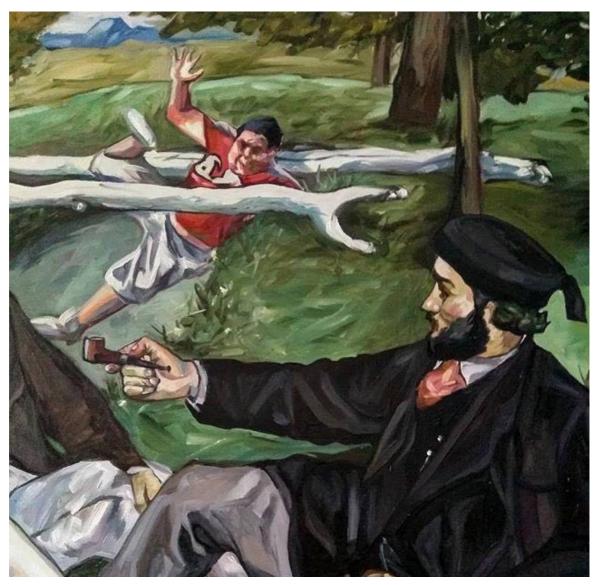


Figure 2.14: Viral video 'La caída de Edgar⁴⁰' (Edgar's fall) and 'The Luncheon on the Grass' by Édouard Manet, 1863

Source: Unknown (n.d.). Screenshot

'Détournement is thus first of all a negation of the value of the previous organisation of expression' (Débord & Wolman, 1956b, par. 2), and how producing memes implicates 'the capturing of various spectacular images and turning them around in a new presentation in order to subvert the authority of the sign and the significations it sets in

⁴⁰ One of the first and most viral and famous videos in YouTube since 2006 available from: https://youtu.be/b89CnP0Iq30

order' (Débord & Wolman, 1956b, par. 3). Memes take famous paintings and re-edit them to fit Mexican culture elements-memes in digital space. They also take famous logos in the physical space and reuse them, turning them around in a new presentation that reflects and uses the previous one to create a new meaning.

For Débord, *Détournement* is used as a 'subversive critique of modern commodity' (Débord & Wolman, 1956b, par. 3). The elements in these memes and the elements that bring humour into the meme become a direct form of subversion and critique of the commodity.

Some products or materialisation of memes have the ability to become a commodity and a critique simultaneously. Such is the case of bootleg products that become famous because of their defective rephrasing of official brands. These products become not only solicited as merchandising, but paradoxically (as in the case of memes like 'ayuwoki') become the 'original', since there is no previous existence of the product given that the idea originated online in users' conversations.



Figure 2.15: Bootleg merchandise on a famous phrase by the newly elected 2018 President of Mexico, Andrés Manuel López Obrador

Source: Unknown (n.d.). Screenshot

Likewise, the Situationist's aim to re-appropriate capitalism is adequately perceived in all bootleg products in Figures C6-C10 (in Appendix C); they characterise similarities with capitalist products ('the original'), but the way they are presented, either as bootleg

or logo copy, represents a deconstruction of capitalism that makes use of that same marketing. People are aware of the product's existence because of the original marketing campaign, but by taking the consumer products out of the advertisement and creating a new bootleg branded product, they are disrupting the process and using it at the same time. Bootleg products are another type of cultural unit since, like memes, they have no respect for copyrighting. Their aim is to propagate amusement in the idea represented, such as the misuse of logos for local businesses (schools, food-shops, local stores, etc.), accessories, clothing products, etc., a practice that is extremely common in Mexico.



Figure 2.16: Bootleg handmade version of Toy Story 4 new toy sold which is also handmade in the movie but was sold as original and branded by the company

Source: Unknown (n.d.). Screenshot

Similarly, memes and *Détournement* involve 'the fabrication, mimesis and mockery of the medium of the message itself' (Débord & Wolman, 1954a). This explains why an analysis such as this, and finding parallelisms between one and the other, is barely straightforward as they share the same characteristics and the same forms of fabrication (which in digital allows for the fabrication and imitation of memes, also called mimesis purpose). The final degree of parallel between *Détournement* and memes would be that 'Débord abused Hollywood representations, filching material and upsetting copyright, distorting the ideological power of mass consumerist images' (Débord, & Wolman,

1956b, par. 5), much like memes 'steal' or copy-paste material found online regardless of the original source or copyright ownership, doing the same in physical space.

A case in particular stands out as it depicts an example of how physical and digital space have correlated to create the bootleg bag present in Figure 2.17; its 'branding' came from a digital viral meme to scare people using Michael Jackson's image, it was re-branded as 'ayuwoki'. Ayuwoki is a deliberate corruption of 'Smooth Criminal' lyrics, a direct reference and mock of the sound in Spanish of 'Annie, are you ok?' turned into ayuwoki. The joke became so popular and viral that the product stepped from the digital space into the physical, becoming a materialisation of digital culture that now has space in the physical in the form of bootleg, non-official yet original in its kind (the product only exists as bootleg) like a school-bag.



Figure 2.17: Bootleg 'ayuwoki' merchandise, an internet-born phenomenon meant for scaring people

Source: Unknown (n.d.). Screenshot

In summary, much like 'Détournement can be traced to the surrealist practice of the juxtaposition of un-associated objects aiming to destabilise the observers' sense of reality' (Débord, & Wolman, 1956b, par. 4), in memes we find elements of surrealism and magical realism that make use of juxtaposition to create a joke, aiming to unconsciously critique and destabilise the marketing spectacle. Destabilisation takes place at various levels by disregarding copyrights, by carelessly sharing the product for laughs, and by honest opinion and agenda of memes that become successful among all of the meme pool online.

'The Spectacle is not a collection of images, but a social relation among people, mediated by images' (Débord, 1987; Sussman, 1989, p.73), much as memes are not a collection of funny images but a social relation among Mexican users mediated by images. Since magical realism practice is present in Mexicans' everyday life, the juxtaposition of those elements being depicted as an image in the form of a meme is what creates a joke worth sharing with other users. This way, memes aim to destabilise the observers' sense of reality, to locate the elements of digital realism that seem to not belong or to be too far-fetched to actually happen in real life. Memes destabilise the appreciation of reality by causing laughter and mockery about elements that could seem like a tragedy at first glance (much like Trump memes), but it is in creating laughter from tragedy that they become a tool of resilience.

Memes are based on the human ability to find humour in a certain thing that does not correspond with the other, in elements that create juxtaposition. Just as a 'subversive effect is achieved by interweaving text in irreverent juxtapositions to appropriated images' (Débord, 1974, film) (which at the time included anything from art, newspapers, and comic strips), the juxtaposition of elements found in Mexican memes comes from the irreverent elements represented as real. Therefore, what causes laughter in users is the creative ability to show things that seem out of place or that do not correspond with one another, elements that computers would not be able to see or understand and would reflect as errors. What computers lack the ability to process, humans do in the form of laughter, providing memes for the human characteristic to become or perform as a cultural unit, as a unit that mixes technology with the human component.

Conclusions:

Memes are an extension of self and are nowadays an integral a part of our everyday life; they are present in how we see and consume content. They have become an extension of how we communicate and express ourselves to others. This extension of self is, nevertheless, personally curated, meaning each user has consciously or unconsciously crafted and selected which memes will be part of their surroundings from a pool of millions of different variations and memes. Users create a personal archive of memes based on their culture, what they know, what they consume, what they learn and what they think, and express to others in both physical and digital space, as content is consumed and then used to express how users feel about it.

Users also create a literacy of technology in memes, a specific language with rules to follow. However, as with any other language, it is then appropriated, new words are created and new ways to express old meanings are also developed. Memes, 'explore the contours of our own extended beings in our technologies' (McLuhan, 2001, p.6), and the content of a meme is always another meme or medium. In other words, the meaning of the meme comes from a previous alteration of the original meme that became viral or from an allusion to previous content, such as a scene in a movie or an event that took place in the past.

Much like the Situationists who 'believed that artists were in the best position to lead the way towards change, converting art from a precious, consumable object to a principle permeating daily life' (Sussman, 1989, p.4), I contend that memes allow us to see a consumable object turned into art since that consumable object is always permeating daily life. That consumable object turned into a meme is now creating a critique, but that critique can only be grasped by those who take time to see the overall picture of successful memes in Mexico and analyse which individual memes are curated per user. The Situationists were able to see art in everyday life, as with the perception of art found in memes depicting everyday life because memes embody the notion of cultural and daily life transformations.

Memes have become a key part of contemporary culture. Through them, an un-filtered, general public opinion is able to break free from all kinds of events and social interactions, cultural interpretations and general understanding. Through memes, that

very moment in time and space becomes curated and materialises as a cultural unit. Memes are an interesting vehicle to create a narration of cultural identity across time, as one meme can have more than one element of Mexican culture and of popular content consumption at the same time. Users' tendency to share what they consider funny can also shed light on the kind of views and opinions a specific person holds or the elements with which the user finds, narrates and reflects their own identity. Some memes, nevertheless, can shed light on the person or group identity and become a critique on that same identity.

However, the generation of criticism through memes is a double-edged sword since users can, on the one hand, share a joke on the basis that they see the comedy coming off it in discrepancy with the joke being portrayed in the meme. At other times, however, sharing a joke could be misinterpreted as actually sharing those views as the truth of what the joke represents. For a meme to work, there also needs to be a shared interpretation among all the people that consume the meme. If the message on the image can reach a specific sub-group that also identifies with the message, then the meme can expand and reach further digital geographical areas at speed. The speed with which the image is shared and replicated is what will then be defined as virality. For example, the way memes are sometimes consumed first and then individuals inquire on the news origin or event that spread that meme in the first place, depicting the virality of memes and importance over the original source of content or event that triggered the meme.

Mexicans and memes hold an intrinsic relationship with 'la burla' (which could be roughly translated as 'mockery') to create a joke. Black humour is present in the daily lives of Mexicans; we are therefore able to transform disgrace into 'burla'. Sarcasm and mockery are used as coping tools to fight tragedy and to quickly overcome the grief that the same tragedy has set upon us. Mexicans tend to use this tool so often that sometimes they mock things that in other countries could be considered unnecessary, rude or too sacred to make jokes about (death and religion for example). Irreverence and 'burla' are therefore key elements in meme creation that perfectly connect with being Mexican.

Ultimately, the permeability of memes, granted by digital technologies, also permeates everything around us, giving us easy tools to handle, access and create content for memes. Nevertheless, as with all media, this does not mean that memes are a new communication of that mockery but rather that the mockery that took place before, and

that was communicated in other ways, has now become digital due to how ubiquitous technology is. Memes celebrate Mexicans' everyday life; nevertheless, it is not the purpose of this work to decide whether they make users' lives better or worse, but rather to analyse the digital permeability they have created and in what ways users have adapted it.

Finally, going back to the three main memes sections, it can be stated that memes on Trump and the wall reflect a general view on the political mockery that Mexico experiences on a daily basis as a country, in which both external and internal viewers mistrust and lack confidence in politics and official institutions, which in turn reflects back in memes that tend to mock the situation of the country as a whole. Going back to Frida Kahlo and Mexicans, we see a fracture in a country that, despite everything, somehow keeps working. We see corruption, political ridicule and authorities' complete disregard for basic human conditions; sometimes the only positive thing is the publication of memes created around the situation, and the harder or the more complex the situation is, the more types of memes arise.

On the other hand, focusing on memes addressing the online archive *Mexicans of Late Capitalism* and *Instituto de Bellos Memes*, memes are found to aim to replicate and propagate Mexican culture. The use of magical realism elements allows these memes to remain relevant regardless for how long they go viral or the political situation of the country. These memes do not need to grow on top of current events or word of mouth popular online at the moment since they have presented the humorous element on top of everyday life of Mexicans. Therefore, they have the most capacity to remain successful for more time or at different intervals in time.

Détournement memes share similarities with magical realism element memes, starting from the place in which they get collected and exposed to other users. The thing that makes them stand out and create their own section though, is their use and misuse of marketing products to create a meme. Détournement memes critique and expose the creation of bootleg products that take the mockery of the original product to another level: these memes show the reality of the debate between copyright infringement use and misuse on what is original and re-appropriated. As with memes, they lack interest in the original: they show that the extension between physical and digital space translates this lack of interest for the original. Memes will always remain interesting since they

contribute to the world's culture, and 'if someone contributes to the world's culture through memes, they may live on intact long after their genes have dissolved in the gene pool' (Dawkins, 2013, min. 3:40). Proving their impact, studying and analysing them should always be kept in mind, now and in future interdisciplinary research, since memes have much to give and much to be analysed.

Chapter III Digital Borders

The Journey of an Online Traveller: A Psychogeography of the internet

The way we think about space matters. It inflects our understandings of the world, our attitudes to others, our politics...the way we approach cities, the way we develop, and practice, a sense of place (Massey, 2005, p.17).

How we conceptualise space tends to affect how we perceive not only politics but our self, culture, society and other aspects of everyday life. How we conceive space matters: we need to put great effort into thinking how we are perceiving space in terms of the internet, considered a 'virtual' space, and how this space inflects our understanding of the world.

Following Massey, if how we conceive of space matters, what are the implications of thinking about the internet in terms of 'virtual' space? How does the space of the internet as we imagine it reflect our understandings of the world?

In this chapter, I explore internet as a City through the eyes of psychogeography. The act of walking will serve as an example to explore these implications; how space has an impact on our understanding of the world, of the self and others. When we think of exploring space, walking comes to our minds as the most basic way in which human beings tend to move from one place to another while exploring an area and their surroundings. 'They walk an elementary form of this experience of the city: they are walkers' (Coverley, 2003, p.105). Walking, as practice, entails moving or shifting from one place to another.

Therefore, this chapter explores psychogeography as a speculative exercise that allows a direct comparison between Mexican neighbourhoods and online worlds. This psychogeography exercise started as a creative trigger to explore online websites as space, from there, and analysing as a researcher, the limitations of the approach led to other creative interventions or methods that allowed the expression and showcasing of the coevolution between individuals and technology in different circumstances.

Psychogeography is, in other words, the starting ground to perceive online space as we would a physical space. Its limitations on how to wander the space and 'get lost', considering the way the internet operates geographically, as well as perception of the

space based on personal emotion and individuals' behaviour, is nevertheless used as an advantage in other chapters, as a trigger for new methods of exploring online space and perceiving the impact of Digital Borders, both in space and the impact on individuals exploring that space.

As a starting point, the act of walking will serve as our practice to explore the internet as space. We move now to define space:

For some it is the sphere of the everyday, of real and valued practices, the geographical source of meaning, vital to hold on to as 'the global' spins its ever more powerful and alienating webs. (Massey, 2005; p.5)

If space determines the sphere of everyday life, this means that space is delimited by those who explore it, the things they discover, and how they give value to their findings. Therefore, if the internet is being approached from the perspective of a Mexican individual, the space delimited as the sphere of their everyday experience would be surrounded by the practices that constitute being Mexican, on top of their geographical source. In other words, the internet, and the things or websites users encounter and explore within it, are part of the space that defines Mexico given that they are accessed from the geographical source, and because Mexicans identify themselves with the content reflecting specific values or practices common to everyday life.

This chapter presents the particularities or difficulties that arise with mapping a virtual space, the internet accessed from a Mexican perception of space. To that effect, a comparison will be made between walking to explore a space, such as the city, and walking to explore the internet, as if it was a city, to mark the behavioural judgements and standards of good conduct that we apply similarly to behaviours in physical space, as a city, and virtual space, as the internet. In other words, to depict similar behaviours that we carry from physical space into virtual space as conducts of society.

Moreover, and as a direct consequence of mapping virtual space, I will argue and define what I have named as digital borders. The term 'barreras digitales' is encouraged to be used in Spanish to avoid the most common use and conceptualisation of 'frontera', commonly used when talking about the USA-Mexico border. It addresses at its core the problematic of translating from Spanish into English and takes the opportunity of addressing how I perceive and identify with remix as part of my mestizo cultural

identity in being Mexican. This is better expressed by a Gloria Anzaldúa interview made by Keating in which she addresses:

I try to give a term, to find a language for my ideas and concepts that comes from the indigenous part of me rather than from the European part, so I come up with Coatlicue, la facultad, la frontera, and nepantla— concepts that mean: "Here's a little nugget of a system of knowledge that's different from the Euro-American." This is my hit on it, but it's also a mestizo/mestiza, cognitive kind of perception, so therefore this ideology or this little nugget of knowledge is both indigenous and western. It's a hybridity, a mixture, because I live in this liminal state in between worlds, in between realities, in between systems of knowledge, in between symbology systems. (Keating, 2008, p.5)

From this hybridity of Euro-American and indigenous is from where digital borders are perceived and materialised into a digital art installation. The mixture and blurring between physical and digital space represents a theory in the making that interacts and expands on other theoretical approaches, remixed and applied into creative practice. Gloria Anzaldúa's theories on Borderlands and *mestizaje* are not necessarily the main focus of my thesis, but on a detailed look some of the concepts themselves seem to illustrate and directly influence and interact with my artistic approach to digital borders in Mexico City.

No chapter of my thesis, and specifically this one, necessarily focuses specifically on the concepts and theories of borders themselves, but instead illustrate and interact with digital borders as a remix perception of my creative and critical practice. For example, the use of indigenous imagery, terminology and beliefs is always present in the creation of online content such as memes, and it permeates both the physical and digital space in Mexico City since it is part of tradition and customs of the city. As such, I borrow from Anzaldúa's 'indigenous Mexican philosophies and epistemological tools for individual/collective self-definition, resistance, intervention, and creation' (Keating, 2008, p.5) to also develop and convey my own innovative theories of digital borders and creative interventions:

Borders are set up to define the places that are safe and unsafe, to distinguish us from them. A border is a dividing line, a narrow strip along a steep edge. A borderland is a vague and undetermined place created by the emotional residue of an unnatural boundary. It is in a constant state of transition. The prohibited and forbidden are its inhabitants. *Los atravesados* live here. (Anzaldúa, 1987, p.3)

As clarification, the border created and materialised from digital space has no doubt legal and political implications and there is countless research regarding the importance and implications of physical borders (Andreas, 2003; Anzaldúa, 1987). Nevertheless, I am mostly interested and concerned with the perception of the border as a dividing line and the consequences this brings into the technological aspect of things. I talk about the operational resources or protocols in place that create a digital border and their impact regarding cultural access, as well as the social implications that digital borders create. These include how we react and interact with online content restrictions in Mexico City, with the particularities and originality that perceiving a border online generate for a Mexican sharing what is described by Anzaldúa as someone that has being brought in the middle of a 'border culture'.

The primary register and analysis of border is therefore focused on the technological and social implications of the digital border; these are further developed in the chapter ranging from accessing content from a more 'informal' source to a whole creation and reaction of a temporal environment, such as a reaction and coordination of human and technology during an earthquake. In the beginning, borders were 'strategic lines to be militarily defended or breached' (Andreas, 2003, p.81) and they therefore have a strong military and political background. Nevertheless, my use of digital borders addresses the need to breach or break through the border. However, it is more concerned with the social impact on individuals, or the reaction of individuals and documentation on how they tend to breach this border rather than analysing the economic and political implications of breaching the border.

Globalists see borders as increasingly blurred and open, becoming bridges for commercial transactions rather than economic barriers and fortified military lines. [...] Yet they too often miss or understate the more complex dynamics of state territorial retreat and reassertion, of border erosion and reinforcement at the same time. A more nuanced perspective recognizes that territorial controls have multiple forms and functions that can vary dramatically across place and time (Andreas, 2003, p.84)

Some researchers tend to argue that a 'borderless world' is on the horizon, and much of the literature around what was previously called cyberspace tended to associate the digital sphere with a territory that 'claimed' to be open and equally accessible to everyone, regardless of their geographical location. In reality or underneath, however, it tended to be regarded similarly to any physical territory with a 'need to be defended and guarded'. Globalisation tends to create the illusion of tearing down borders and having free and open-access, but in reality it has rather created invisible yet existing borders, such as the digital ones that permeate and modify our interaction with online content, as well as our reaction and use of that same technology.

The aim to give materiality to a virtual space (digital border) is the foundation of the originality of my research and creates the reflection that starts this research with understanding how digital borders originate in the internet. I specifically researched what the internet is causing to individuals, adding the reflection that we need to think on how we explore the internet as space, but most specifically on how our cultural and geographical perception of self when exploring is going to affect the perception of this space. Thinking about how individuals affect the internet, but also how the internet perceived as space is able to change and limit or slow down our 'granted' access to specific areas, and how this modifies and affects our cultural perception of self in the process.

Individuals interacting with the internet as space tend to consciously or unconsciously bypass these limitations. Therefore, the trespassing of Digital Borders, sometimes without the awareness of their existence, will also have implications for the perception of space and cultural access to content online.

Mexicans crossing the Digital Borders imposed on websites or digital content accessible online, will impact their relationship with the internet as space and how they behave or reflect their values onto those same websites, regardless of their geographical location. This chapter therefore deals with the implications and cultural consequences that are originated and perceived through the existence and transgression of Digital Borders.

For the purpose of my analysis, it is necessary to first do an imaginative exercise in which we assume the possibility of entering and exploring the internet as a physical space, exploring the internet in the same way in which an individual explores and walks across a city.

I would like to start this visualisation exercise by defining what I have termed internet-City of Mexico (Ciudad-Internet de México). The term internet-city is used to mark a difference from the term smart-city, in which cities are interconnected with technology. On the other hand, internet-city relates to the elements found online that carry some meaning and allow us to explore the internet as one would do with a city, specifically those elements that carry cultural elements related to Mexico or being Mexican and/or acting in the space as such.

When exploring a city, for instance, Mexico City, the more we walk into it and explore, the more we are able to become familiar with the buildings that comprise it, the streets and road signs that allow a city to operate, with the differences between neighbourhoods, and the changes in scenery that relate to social, cultural and economic aspects of living in the city. We start to become familiar with the cultural values and moral conceptions needed to survive and live in the city.

Similarly, in Mexico internet-City there are digital counterparts (mostly webpages), which are equivalent to those elements previously mentioned and available in Mexico City. Experiencing these elements and the response of others around us is the way in which they become part of the Mexican-Space.

What constitutes Mexican-Space?:

The operating principles that lay the basis for what is here termed as 'Mexican-Space' are three propositions of space given by Doreen Massey, Professor of Geography:

First, space as the product of interrelations; as constituted through interactions. Second, space as the sphere of the possibility of the existence of multiplicity, as the space in which different trajectories coexist. Third, space as always under construction. A product of relations-between, relations which are necessarily embedded material practices which have to be carried out, it is always in the process of being made. (Massey, 2005, p.9)

This means that what constitutes Mexican-space is first, that space is the product of interrelations among Mexican individuals, constituted through the interactions they have in everyday life by means of personal or virtual communication. This includes not only Mexicans living outside Mexico City but also outside Mexico, communicating either verbally by phone or video-calling and/or using text and social media to keep in touch.

Second, Mexican-space is also found in the sphere or city that allows different trajectories to develop and become intertwined with each other. This means Mexican-space is found in those stories either from the present or past that shift and create the

idea of being Mexican, of belonging to Mexican culture, from costume traditions, historical events, news and/or personal developments of life in the city.

Third, Mexican-space is always under construction, meaning that it is shaped by individuals and their stories and trajectories; as these stories and people change and live their everyday life, the space is able to evolve and change according to the situation or event taking place⁴¹. Mexican-space is always in process; it is experienced by how individuals behave and conceptualise space (including their behaviour and online practices).

Walking in the internet-city of Mexico:

As previously mentioned, my argument lies in the similarities found between walking through a street in Mexico City for the first time and walking through internet pages online. The experience implies looking around to see the type of buildings and constructions, their number and arrangement, and above all, the implicit communication that the arrangement of houses and buildings say about the users inhabiting the place and the behaviour one should have around those places. Therefore, my aim is to focus on the cultural perceptions shared by individuals while getting in contact with elements of the city and the way in which individuals examine, observe and learn the emotional and ethical processes taking place while they wander Mexican-space. These perceptions, since they share the same space, exist not only in the interaction of individuals with the city but also within webpages. Overall, the internet shares and mirrors behavioural conducts and introspections of living in the city.

Likewise, the internet-City of Mexico has its own version of streets, buildings and neighbourhoods, whose users or inhabitants share reactions, bias and preconceptions, as well as similar moral and psychological attitudes when it comes to exploring and inhabiting the spaces of the city in which they live. These reactions and attitudes vary depending on what we may find or stumble upon walking through the city⁴². The internet-City of Mexico is interesting to explore due to the fact that there are users or habitants of the city that, due to the nature of Mexico's rich history, cultural mixture and migratory past and present, come from different geographical zones and at times even

⁴¹ An example of this is found in Chapter 4, in which the city and individuals react to the unexpected appearance of an earthquake.

⁴² As we have previously reflected, when talking about how space is defined by individuals' trajectories.

are outside of the Mexican geographical territory. Such is the case of Mexicans living abroad, those born outside of Mexico but who still identify themselves as Mexican,⁴³ and so on. These inhabitants in particular will tend to have a different experience of Mexican internet-space; this is due to limitations to website access they will encounter because of geographical segmentation of content when a device is used to access the internet from a different location.

Digital Borders:

Online media content seems infinite: the process of consuming it makes it part of my culture. Nevertheless, it was not until I moved geographically away from Mexico and into a foreign country that I experienced, on a personal level, the segmentation of online media content.

This personal experimentation on segmentation of content, or rather, restraint in access to media content based on location, made me realise that we are supposed to consume media content based on our location due to copyright restrictions and online content segmentation. This idea is not new, and although the topic is closely linked to Digital Borders, it is not the main topic of discussion in this research.⁴⁴ After experiencing constant online messages reminding me of the shift in location when accessing content online, the awareness of lacking access to part of my culture shifted to make it a reality.

I became aware of the reality of media content available for individuals to consume and make it part of their culture as Mexicans, and my limitation in that consumption. Nevertheless, as part of being Mexican and exploring and consuming content online, my own experience of frequenting online websites (mostly to do with watching online movies or TV streaming online) that tend to move location or change name to avoid being blocked, and my experience of being denied access to content, shifted to looking for 'alternatives' to watch the content that I knew others in Mexico were consuming and that I could also consume if I was able to avoid or deceive the restriction.

⁴³ For example: Mexican-Americans born in the USA whose relatives live in Mexico, but also those who live in USA (legally or illegally) who still have links/family within Mexico, students abroad, and so on.

⁴⁴ For more information on copyright infringement, see Lawrence Lessig, founder of Creative Commons. He also has some research that focuses on Remix Culture (Lessig, 2008) with more of an emphasis on legality and law.

In other words, although we know there is content that we want to consume and access, it depends on our ability and expertise to override those borders. The override can happen through different means: the use of a VPN to simulate a different location online, the use of alternative websites (such as Dailymotion or Vimeo) when looking for a blocked YouTube video, or asking others to stream-send the content to keep accessing and consuming that content I want to make part of my culture.

When I first moved to the UK, one of the main problems I encountered when wanting to access content that I knew was being widely consumed in Mexico City, because friends and family shared it on social media or discussed it online, was a message stating: 'This content is not available in your country', or 'The user who uploaded this video has blocked it in your country' (Figure 3.1).

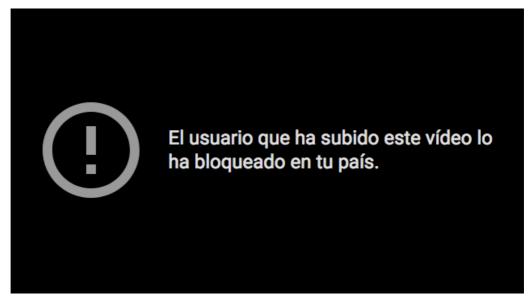


Figure 3.1: Blocked YouTube video⁴⁵

Source: Unknown (n.d.). Screenshot

The message (Figure 3.1 and footnote), although clearly explaining the limitation due to copyright, made a deep impression on me due to the wording 'not available in your country'. Would it be illogical that, because my country of residence was not *my* country since I was on a student-visa, I should be allowed to still watch and retain access to my culture and its online content that reflects my culture?

⁴⁵ 'The user who uploaded this video has blocked it in your country' (YouTube video screenshot, my translation).

The first type of Digital Border is portrayed in this message. A digital border created by content segmentation based solely on my geographical location, meaning I have been denied access to part of my culture. This border or withholding of content is materialised by the message shown in the image, meaning I am aware of existing content I would like to access, and that is then denied to me. This is also the digital border that tends to be overcome by users most often, sometimes unknowingly. For example, when trying to watch a movie, users tend to look for the best available source on different websites, or they have specific 'tricks⁴⁶' to apply to the video being banned or censored. This means individuals are used to finding and searching alternative websites that portrayed the desired content.

The second type of Digital Border appears in the opposite way. This is when one is already located in another geographical location outside of Mexico but identified as Mexican. This means that, technically, there is content online that could be relevant to you and your culture, but due to the location of the device you use to connect online, this content will never be able to appear in front of you, for you to make the choice to consume it or not. This type of border is intertwined with the creation of content specifically tailored to location, such as Spotify or Netflix, which will show recommended playlists or movies according to the location of the device.

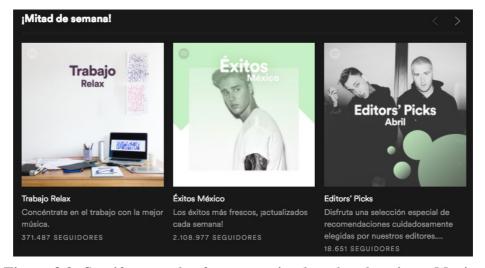


Figure 3.2: Spotify example of segmentation based on location – Mexico

Source: Unknown (n.d.). Screenshot

⁴⁶ One of the most famous is uploading movies on YouTube with accelerated speed and then using YouTube's own slow-down option to watch it normally, this stops the algorithm detecting the actual video-copyright (audio); it also sometimes covers images are added to the video, or videos are framed

under something else to also avoid copyright infringement detection.



Figure 3.3: Spotify example of segmentation based on location – UK

Source: Unknown (n.d.). Screenshot

This border is also only visualised and perceived when the actual location has shifted from one place to another but there also remains a level of content and access that the user will remain unaware of due to the same location-based segmentation. That is, a user would get playlist suggestions for rain mood when in the UK (Figure 3.3), and playlist suggestions to get over the week when in Mexico (Figure 3.2).

My Creative Practice (The Origins):

My creative practice is closely linked to my personal experience across space and experiencing of Digital Borders. Moving geographically from Mexico did not mean I completely left the Mexican-space. Access to online content and constant communication using mobile phones and computers allowed me to remain part of Mexican culture, values and topics to discuss among other users online. By exploring spaces both common and uncommon to me online, I was able to conceptualise Digital Borders to then create an argument on the effect and impact that Digital Borders have on users' access to culture. My exploration is therefore based in the border between limitation and access to media content based on a UK geographical location aiming to access Mexican-space.

The exploration was performed using Tor and Chrome to experience their content segmentation, in addition to free and paid VPN apps, randomised access to content

(aiming to 'get lost' online), as well as ethnographic research based on video and image techniques applied by users to bypass online copyright-protected content through time. Algorithms and platforms get better over time at detecting content, but then users' techniques to overcome the algorithms also become more creative. For example, Facebook Live videos in the beginning tended to showcase live 24 hour TV shows that people could go into and watch, such as The Simpsons, Malcolm in The Middle, and so on. However, as technology evolved so did access to the live streams, which then incorporated full movies and/or other types of content.

Part of my creative analysis also includes observational analysis based on perceived experiences when relocating geographically from Mexico City to Brighton, UK, from 2016 to 2020. Constant monitoring and questioning of Mexican user activities and consumption of content, compared with similar experiences of Digital Borders at different moments in time form the basis of the research. Documentation and site monitoring were recorded on a personal blog,⁴⁷ which worked as field diary. In the same way an anthropologist would gather observations in the field of study, this research has made observations and gathered information in the form of online fieldwork.

A creative experimentation took place after conceptualising Digital Borders and other topics discussed in future chapters, such as Mexican Digital Culture, memes, resilience, sound and noise, creativity, and so on, to generate a final piece or digital installation that aims to materialise those elements as well as to show the disruption apparent within them. Chapter 4 is dedicated to explaining this process.

Overall, a great part of this analysis is also fed by organic and sporadic encounters with Digital Borders that took place during the research. This allowed me to analyse my own predisposition to encountering Digital Borders when looking for online content after becoming aware of their existence, and the ways in which I became conscious and created protocols or standardised ways to look for content and/or trespassing the dividing lines created by Digital Borders.

Questioning pillars under which this research is founded include in what way is the internet experience filtered through the rejection or lack of access to specific websites based solely on our geographical location? And what is the cultural impact shown by

⁴⁷ Personal blog available from: https://violetaf07digitalmedia.tumblr.com/

individuals who deal (by trespassing or not) with filtered content shown online based on geographical location?

Finally, there is a critique on the lack of visibility of the border itself, the problem with transparency; in the case of Digital Borders, this also operates as a type of camouflage or omission to avoid unveiling, present throughout all media content. The argument is to say and compare how borders and barriers in the physical world tend to be represented by walls or material structures that prevent looking to the other side or crossing, while in the digital world barriers present a transparency that allows them to interact and permeate or affect only to a certain extent everything they touch or interact with.

Digital Borders operate much like a fishing net, over the heads of their users, following them on their journey and being activated or descending on them based and depending on the way in which they operate or interact online. They descend upon users depending on which sites specific users navigate on the internet, or which content they want to access. Also, the perception of the Digital Border, or our ability to make the border visible, tends to be in some instances not the final objective but the beginning of an interaction in which the quality and consequences of the interaction become part of Mexican values and culture.

Walking Online as Creative Practice:

As already mentioned, a parallel may be established between walking in the city and walking online. To demonstrate this, I need to start by defining the term 'walking' when applied to my creative practice of walking online.

It has long been discussed in which terms walking can be used as an aesthetic practice, a method and a critical tool using psychogeography (Débord, 1958; Pinder, 1996; Bassett, 2004). Therefore, the aim of this chapter is not to further discuss the critical relevance of walking used as a method, but to use psychogeography experimentation as a key creative tool to experience, critique and analyse the web in terms of space, more specifically, the internet portrayed as Mexico City.

If 'place is understood as a specific location and as a process or an event' (Springgay, 2018), my aim is for us to see how the internet could both be a place with a specific location assigned to it and a process or event that takes place when we dwell or

experience it. Moreover, since 'walking is a way of becoming responsive to place; [and] it activates modes of participation that are situated and relational' (Springgay, 2018), this means that through walking the internet we (users experiencing it) will become responsive to the modes of participation that take place. What we have previously defined as an event is now a process that takes place in a specific location. By walking, we will be able to become observant of the characteristics with which the internet wants us or leads us to participate. Most importantly, however, we will be able to address in which way we remain situated and relational towards our culture through the internet.

Walking allows the embodiment of digital borders since they give 'way of knowing where movement connects mind, body and environment' (Springgay, 2018). Embodiment of digital borders regards virtual space as a relational social and convivial place, in which body and environment might seem not present; instead it is through examination of moving to a particular place 'on an individual account of a walker' (Springgay, 2018) that we are able to perceive how the walker, when displaced from the original location and relational background, experiences a shift in convivial and social elements operating in this virtual environment. Also, how the foreign walker is then in need to overcome those borders or create new ones to maintain this connection between mind, body, and environment. The foreign walker is now related to the past location and cultural background, but also related to the present (modified) location experienced as a social being.

One of the critiques that is often applied to this methodological research is the idea that 'figures like the *flâneur*⁴⁸ and the practices of the *dérive*⁴⁹ become common tropes, often assuming that all bodies move through space equally' (Springgay, 2018). This critique is used in favour of this research since it aligns with how the internet creates a similar illusion of all bodies being equal by 'ignoring' or pretending to ignore race, gender, location, and so on, while users move through the internet as space. Nevertheless, this illusion is equally broken down when assessed on what actually happens behind the illusion of universal space online. For example, the concept of online marketing

⁴⁸ 'Flâneur: the casual wanderer, observer and reporter of street-life in the modern city, was first explored, at length, in the writings of Baudelaire. Flâneur in English is via French from the Old Norse verb flana *to wander with no purpose*'. (Tester, 2015, p.13)

⁴⁹ 'Derive: a Mode of experimental behaviour linked to the conditions of urban society: a technique of transient passage through varied ambiances. Also used to designate a specific period of continuous deriving' (Sussman, 1989, p.198).

research and understanding how it operates online sheds some light on the fact that the universal space we seemed to have created online is actually able to be specifically segmented based on who is accessing and from where; and the more we are able to specifically divide and segment, the better.

From the creation of the internet to our understanding or conception of it, the idea or way in which we thought of the internet was as a separate space; a space that you could go into and out of, popularised under the term of 'cyberspace' (Strate, 1999, p. 382) in science fiction. Nevertheless, it is evident that our relationship to the internet as space has inevitably changed through time; we are now always present in the space even when not engaging with it, which is why we need to 'come up with better ways to visualise and understand internet and the web as space' (Graham, 2013, p. 178). The aim of this research is to create a new way of visualising and understanding the internet as space. Not only do we need to understand those spaces but also the implications of relating differently to the internet as space.

Creating a resemblance between walking the city and walking the internet, using walking as a 'form of movement with aesthetic and critical potential' (Bassett, 2004, p. 397), the aim is to use walking as a critical and aesthetic practice method applied to online walking.

The ideas, practices and experiments of the *avant-garde* artistic and political group known as the Situationists, active in Paris in the 1950s and 60s (Bassett, 2004, p. 397), make up the core of my own creative experimentation to explore in a similar way as one would do with Paris as a city, internet as a city. The particular city to which I apply my analysis is Mexico City, having lived there most of my life and having experienced it, I am then comparing the internet version of the city (some of the most visited web pages in Mexico City) to their counterpart in Mexico City's neighbourhoods.

Psychogeography, defined by Débord as 'the study of the precise laws and specific effects of the geographical environment, consciously organised or not, on the emotions and behaviour of individual' (Débord, 1955, par. 2), is closely linked to my perception of how web pages generate a specific effect based on the emotions and behaviour of the individual that experiences them.

Cuevana3 vs Netflix or the 'Good' and the 'Bad' Neighbourhood:

The first experimental comparison of note that I would like to narrate, needs to first situate us in the 'precise laws' and 'specific effects of the geographical environment' that were applied to the websites visited and their physical counterparts. The first one is the emotion and expected behaviour of a 'good' or wealthy neighbourhood, where everything is well-maintained, and there is a higher expectation of how to act or what to avoid doing. The physical comparison I would like to introduce here is Polanco (Figure 3.4 & 3.5), a neighbourhood in Mexico City known for its exclusivity qualities.

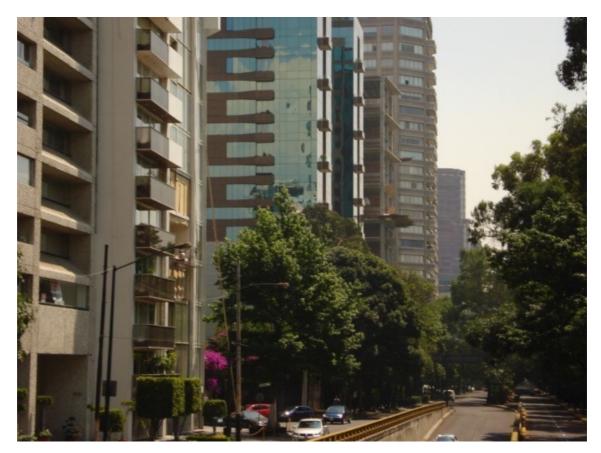


Figure 3.4: Polanco Skyline Mexico City DF

Source: Rutlo (2012)

Polanco is a place known not as a 'barrio' (Spanish for neighbourhood) but as a 'colonia' (a synonym for a neighbourhood with a more refined ring to it) of the wealthy classes, with green areas and well-kept gardens tended to by people hired exclusively for that purpose, in which maintenance is expected. Everything must remain as it looks, untouched, unaffected and, as much as possible, crystal clear and clean. This colonia also includes areas of such exclusive status that access is restricted and allowed only to

those who can prove they belong inside because they reside or work there, or by paying an access fee.



Figure 3.5: Edificios de Polanco, Ciudad de México -Polanco-Wikipedia

Source: Castillo (2007)

Under this definition, the non-physical version of Polanco, for the purpose of this creative experiment, is recreated based on Netflix as a platform. Netflix was selected, first, because of its characteristic of having different versions of its own content depending on geographical location; the movie and series content users get access to from Mexico differs from what is available from the UK; also subtitles and dubbing may vary according to location. Interestingly, this is not the rule in terms of payment of the account; for example, a user could be paying for Netflix in Mexico (at a cheaper price) but could get access to the UK content because of location.

Thinking of Netflix and the different ways in which it segments content, exemplifies my research point. I regarded with much interest the owning of a Mexican-paid Netflix account that could not access Mexican content, only British, reflecting the online culture I was experiencing outside or currently geographically, but at some point, realising that

this change in content also meant the account was denying me access to my own culture.

Coming back to our Netflix-Polanco comparison, Netflix (the version shown while in Mexico) is selected to represent Polanco, since it requires payment to grant access to its platform. Additionally, Netflix has a high-quality design interface, always in vogue and, at times, with translucent backgrounds, just like the glass buildings it represents. The most important part is that a certain expectation comes from having Netflix, the idea that users have paid and, therefore, are legally consuming content. That legality comes with higher standards: users would not tolerate a low quality or 'bad' product, much as residents would not tolerate the same in the *colonia*.

On the other hand, it is necessary to make a comparison between another neighbourhood in Mexico City and its online counterpart: Cuevana, an online website to watch movies. Cuevana has a long story in Latin America, born in Argentina and quickly becoming the place to get informal media content across Latin American countries. At some point in 2011, it was the most visited webpage across Latin America. However, as copyright and legal issues usually go, Cuevana struggled and then 'officially' disappeared at the beginning of 2015.

Nevertheless, this is only regarding the original owners and the 'official website' since after their official 'disappearance' the Cuevana version or website that will be referred to in this research remains in use. Cuevana became the 'unofficial' or 'informal' place to watch movies and series, and its un-officialness came with the expectations users had of the place. People would only hear about it from others who had already tried it, and spam inside the website (as with all websites with a similar background) became the norm. Users became aware and started using as a safety protocol that they needed to close as quickly as possible any new pop-ups when they clicked on a video for the first time, since they could not be sure of the type of spam they could get. Sometimes, the clicking itself became tricky because too many objects popped up, making users click on them by mistake. Therefore, some would avoid the website altogether because they were too afraid to dwell in that type of space.

Cuevana has changed through time in terms of an interface and media content presentation. Throughout its lifespan, the website was blocked at intervals or moved elsewhere with a new URL or address. This meant that, at times, new versions of Cuevana appeared while the old versions remained functioning but without updating the look of the interface. Cuevana2 and Cuevana3 were born (Figure 3.6), and it was only through word-of-mouth or constant searching for the website that people became aware of which one was the current address that should be used to access the website.

At the time of writing, Cuevana3 still exists; to portray the type of space or neighbourhood it represents we can talk about the interface link to their *Aviso Legal* (Legal Notice) that, funny enough, opens a spam page that then redirects to the home page again, thus operating or simulating normality protocols of 'safety' until proven the contrary. This is much like a neighbourhood business that looks decent enough until a crime takes place and their façade is discovered.

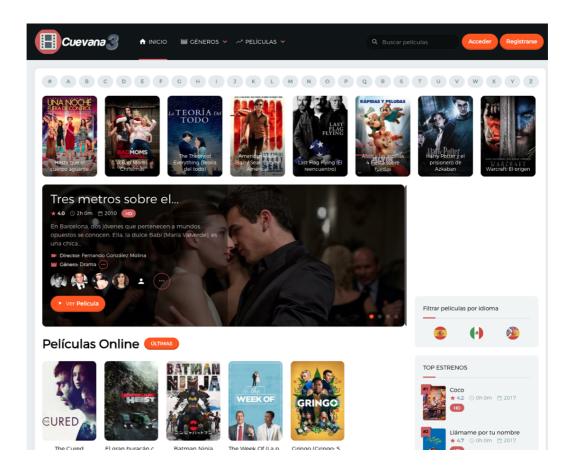


Figure 3.6: Cuevana3 interface prior to update

Source: Cuevana3 (2018). Screenshot

Looking for more information on Cuevana, I used one of the pages online that says who is hosting a website. I received a message along the lines of 'Unfortunately it is

impossible to know who is hosting this website because they are hiding behind a Cloudflare proxy. No online tool will be able to tell you which company or who is hosting this website' (my translation, 2019). This shows that, overall, Mexico City has a lot of similarities with Cuevana as a mixed middle-low class neighbourhood.

This type of neighbourhood (Figure 3.7) perfectly mixes elements of both economic backgrounds with visual representation present in the type of cars parked in the street and the way streets look, as well as in the general feeling of the streets that people get as time passes.



Figure 3.7: Street in Mexico City

Source: Unknown (2018). Image

Selecting a neighbourhood for Cuevana is complicated due to its mix and changes through time. For instance, a change and improvement in interface can be perceived, but spam tactics and social and moral implications around its use and access remain unchanged.

Having a general view and understanding of Cuevana and Netflix as Mexican neighbourhoods, we can then analyse how online websites also present qualities and expectations, such as:

The sudden change of ambiance in a street within the space of a few meters; the evident division of a city into zones of distinct psychic atmospheres; the path of least resistance which is automatically followed in aimless strolls (and which has no relation to the physical contour of the ground); the appealing or repelling character of certain places--all this seems to be neglected. (Débord, 1955, par. 12)

Cuevana and Netflix form part of the same geographical space online; they reflect and produce media content and Mexicans use them to access and consume that content. However, if we were to travel from Netflix to Cuevana looking for a movie, the sudden change in ambiance would be noticeable in the online versions. The atmosphere would change but the probability of finding the movie to watch on Cuevana3 would increase given the legality associated with it. The appeal of one website becomes the drawback of others, because of the constant spamming and imminent danger of getting a virus, the same way there is an imminent danger of being mugged in the street, depending on the neighbourhood being visited in Mexico City.

If the decision is made to engage with either space, precautions must be undertaken, such as not carrying valuable items, or in the online case only having one tab open to easily track the appearance of new 'unexpected' windows. Likewise, on the streets, one must always be in the lookout for suspicious people or make sure one is not being followed, checking frequently without making it too obvious.

All these qualities and similarities seem to be neglected at mere sight, yet in a way:

People are quite aware that some neighbourhoods are sad and others pleasant. But they generally simply assume elegant streets cause a feeling of satisfaction and that poor street are depressing, and let it go at that. In fact, the variety of possible combinations of ambiances, analogous to the blending of pure chemicals in an infinite number of mixtures... (Débord, 1955, par. 12)

The variety of possible combinations of ambiances come up all at once, at the time of dealing with different internet tabs. If a user is looking for a movie online, they can easily navigate between diverse ambiances, different 'neighbourhoods' and become aware of divergences in dealing with those ambiances. If a user has access to a Netflix account, the user will start the online journey there, looking at the movies offered, with the possibility of getting distracted by another movie because of the way Netflix presents and pre-loads their movie recommendations, eager to make users stay on their website. On the other hand, if a user moves out of that site and into Cuevana3, looking

for the movie the user aims to watch, he or she will become aware and careful of the places where accidental clicks could be made and of the pop-ups. The user will become more mindful and understanding about the lack of quality in the movie or the appearance of external text in the middle of the movie.

Likewise, the combination of ambiances is possible when navigating different tabs, since individuals used to constant searching of online movies from irregular places involves learning to read which websites look more trustworthy than others. Learning to distinguish based on experience which links aim to make you click but contain no real content, which interfaces have backup since others also used them to consume content, as well as which websites seemed to be too problematic to consider engaging with.

A feeling of satisfaction coming from a nice place on Netflix on finding the movie at first somewhat compared with the feeling of finding a movie on an 'alternative' website after minutes or hours of looking constantly online. Therefore, the possibility of blending sensations and feelings online compare to those of blending sensations when exploring a physical space, as mentioned by Débord on people's awareness of neighbourhoods.

What we learn with the analogy between Netflix and Cuevana portraying the preconceptions associated with formal and informal space that are similarly inherited from physical into digital space, allows us to generate a more immediate reaction and audience understanding towards the effect carried by individuals into technology. Psychogeography and wandering when applied to online space allows us to expand and further produce urban theories since digital-physical space is now intertwined and tends to have an effect on each other⁵⁰.

On a second reading there is also a critique on the pleasure of browsing and the idea of what this activity might look like depending on the individual doing the wandering. The activity also depends on their knowledge or openness/expertise of exploring or wandering on the more 'informal' sites or digital spaces that tend to match a critique with the difference between social and economic status:

⁵⁰ For example, in the case of memes born in the digital space and translated into the physical or viceversa.

Rather than consider web navigation as a form of travel, I am interested in exploring how it is that we have come to imagine or know ourselves to be moving – whether navigating or surfing – while sitting (or with the advent of wireless, while walking, driving, riding, flying) at an interface. (Parks, 2004, p.37)

By comparing both formal and informal websites (Netflix and Cuevana) and the presentation and evolution of their interface whilst comparing them with their physical counterpart in Mexico City, I am borrowing from Lisa Park's research on epistemologies of movement at the interface to address what she calls 'the need for different epistemologies of movement at the interface' (Parks, 2004, p.54), with an interest in exploring how it is that we have come to imagine and associate formal and informal qualities and preconceptions of physical into digital space. Moreover, psychogeography allows us to apply the terms of movement and exploring a city as one would walking and translating that movement into navigating or surfing online.

This chapter therefore aims to demonstrate how 'movement is derived through a combination of geographic, artistic, linguistic and photographic systems of signification' (Parks, 2004, p.38), and how each of these sites, Cuevana and Netflix, together with their associated analysis between physical-digital space, is offered to make discussion of web navigation as something more material. How it aims to feed the discourses of digital nomadism, encouraging technological literacy but also critiquing the access associated to those who possess technological literacy. This is because, in this case, having technological literacy regarding how to deal with the 'informal' websites comes with a critique of belonging to a specific segment of cultural and political status. In Chapter 1, when addressing Creative Intervention 2, the aesthetic experimentation, as well as the process of differentiation between formal and informal, physical and digital and the exposure of global inequalities, is perceived and extrapolated to the remix juxtaposition of Cuevana and Netflix as an interface into their physical neighbourhoods in Mexico City.

Conclusions:

Users' response to online worlds mimics users' response to physical places or neighbourhoods. These responses are also fed from each individual's upbringing background and experiences, culture and general understanding of the world based on those experiences.

In other words, addressing how Mexican-space is perceived as 'the space and places though which, in the negotiation of relations within multiplicities, the social is constructed' (Massey, 2005, p.13). The space in which stories are formed between individuals blends from physical into digital, since perception regarding how to behave comes from the individual applied to those places and spaces. Perceptions on how to behave and react in a city are learned and reinforced through everyday life.

The internet-city of Mexico exists as online space but its access concerns those not physically present in the geographical space that constitutes Mexico. This is the case of students abroad, immigrants, Mexicans born in the US but who hold Mexican culture as part of their identity, Mexicans on holiday, and so on. All these individuals have their own perceptions and ways of experiencing the city, perceptions that they transfer into how to operate or navigate online when looking for specific content. This chapter used movie access to explain the similarities and differences between spaces and preconceptions associated with those places.

Digital Borders appear the moment individuals who relate with Mexican culture, in any way, try to access content that they know reflects their own culture. When presented with a message of limitation or denial to access that content, the way they react and interact with that message forms part of how to deal with and materialise digital borders. The border is therefore sometimes materialised in a message like 'this video is not allowed in your country', but at other times becomes invisible due to our lack of awareness of content being censored based on our geographical location.

The comparison between good and bad neighbourhoods narrated here will also become the foundation in the development idea of my creative project (further discussed in the final chapter of this thesis). As such, the importance of noticing how we react and interact in space, as well as the behaviours we inherit form physical space, need to be acknowledged and remain as an enriched source of research to keep on developing in the future.

Finally, the origins of my creative practice therefore make use of psychogeography exercises to start exploring online space on the basis of physical space. This chapter will therefore become the foundation on which Chapter IV allows me to talk about my creative practice and methods to produce a digital art installation that addresses the

discoveries found during this research, and my personal approach and process to understanding how Digital Borders operate and how I can materialise them through a creative and artistic outcome.

Chapter IV Media Ecology during and after the Mexico City Earthquake of 19 September 2017

An Analysis on Experiencing an Event and the Relationship Between Individuals, City and Technology

I will begin the paper by noting that cities often bounce back from catastrophe remarkably quickly. (Thrift, 2005, p.134)

It is 19 September 2017, and the day starts like any other normal day in Mexico City. A busy city on a busy day. The only difference of this day is that planning has taken place for the city to perform an earthquake drill. The purpose of the drill is not simply to practice and know what to do in case of an earthquake, but, significantly, the drill is also an act of remembrance to commemorate what has been passed on, mostly via oral narratives, of a massive 8.1 Richter Scale earthquake that destroyed the city on another 19 September, in 1985.

More than 10,000 lives were lost in that 1985 earthquake. However, the stories of those who survived now carry the experience and narrative of what happened during the earthquake; they are able to pass the experience on to people who have never experienced an earthquake of that magnitude. According to the narrative passed on, the city was only able to rise again due to the complete solidarity of society, which came together at a time of crisis, when the only thing that was certain was the lack of support from the government. From all those narrations of previous experiences, the need for organisation among citizens and organisation to rebuild the city from its remains is a strong constant, always present in the stories and narratives from those times.

Nowadays, since most digital-born generations were too young to experience the 1985 earthquake, stories of how buildings collapsed at the time, as well as people's response to those in need, became part of a narrative shared by older generations and became one of the many urban myths that surround Mexico City:

It was the population above acronyms, political parties, secretariats of state, social strata, *los puros cuates* (the close friends), the *compadres*, who organized in the neighbourhoods. This is how rescue teams and shelters emerged. A long time passed before the government came to take the reins... (Poniatowska, 1988, pp.192-193; my translation)

Different stories and different experiences all come together, collectively shaping a narrative about how, on that day, individuals were able to put their differences aside, regardless of social stature, to help each other for the common good.

Most generations born after that event have heard and fed from those stories; an oral tradition that spread like many others, with its myths and real facts. Inhabitants heard about it whenever a small earthquake was felt in the City, when drills were performed at school and then at work, or simply when someone who felt the floor trembling (sometimes caused by a truck passing by) looks around, nervous, to check, and asks if it is actually trembling.

'Coincidence of events form the structures of time-space' (Massey, 2005, p.3). It is then no surprise that an earthquake that repeats itself on the same date, regardless of how many years happened in between, will from now on become part of the structure of remembrance of Mexico City every 19 September. As a society or group of individuals, most Mexicans have heard, either from parents or relatives, about the big 1985 earthquake. And, like many other events, it occupies a space in our collective memory. This collective memory shares and feeds from our cultural traditions and therefore carries and merges the stories of those who experienced the earthquake but did not survive and whose stories are now shared by others who saw what happened to them. Those who were not in danger but remember vividly where they were at the time and share their story in accordance to what they lived collectively with others, and those who will only learn and remember all stories by hearing about it from others.

Whenever the city had a small earthquake (a regular event in a city built not only where tectonic plates meet, but also over what used to be a lake), the spirit of all those collective memories arise and people reminisce and recall all they have lived or stories heard from others, keeping the collective imaginary alive and up-to-date.

19S Earthquake as Media Ecology:

In this chapter, I first argue that the earthquake of 19 September 2017 (hereon referred to as 19S or Quake of 19S as it is referred to in Mexico) presents a new form of media ecology that interacts and spreads due to technological access at the time in relation to other human and non-human elements present during the earthquake in Mexico City. Second, I will argue the role or consequences of the availability and access to digital

video and audio as well as social media, which present a shift in the way we experience an event and our involvement in the event. But also, the way in which narratives are transmitted and shared across individuals via these technologies:

... the only way to find things out about what happens when complex objects such as media systems interact is to carry out such interactions - it has done to be live, with no control sample. Objects here should also be understood to mean processes embodied as objects, as elements in a composition. Every element is an explosion, a passion or capacity settled temporarily into what passes for a stable state. (Fuller, 2005, p.1)

To start this analysis, a description of 'media ecology' sets the basis of the chapter. In the past decade, media ecology has become an innovative and theoretical framework for media studies. Born in the 1960s and consolidated by three main events, the creation of the Media Ecology Association in 1998, the diffusion of the World Wide Web, and the development of media convergence processes with the resurrection of thinkers such as Marshall McLuhan, there was an institutional consolidation of media ecology in the context of communication studies and the social sciences (Scolari, 2012, p.204). Moreover, and to form a consistent discourse, media ecology is dealt with in this thesis as a term able to encompass environments (structures that we can see, say and do), media, human beings and interactions.

Media ecology therefore makes explicit the technological environment and what can we do and what we cannot:

Media ecology tries to find out what roles media force us to play, how media structure what we are seeing or thinking, and why media make us feel and act as we do. It is in this context that Postman (1970) affirmed that media ecology is 'the study of media as environments' (Scolari, 2012, p.205).

My definition of media ecology for the terms of this chapter is based on Matthew Fuller's approach to media systems, where we need to interact with complex objects to understand those interactions. We need to completely immerse ourselves in the interaction, without a control sample or a pre-meditated outcome. Thus, the immersion in 19S, much like its expectation, is live and alive. Likewise, objects and processes are all part of the composition of the media ecology.

The analysis of 19S as a media system is complex since the interaction deals with both human and non-human actions present during and after the earthquake. Actors involved

include buildings, streets, cars, people, technology (specifically smartphones, social media, drill alarms, so on), but also more complex interactions between those elements such as people's emotions and reactions expressed through the use of technology. The earthquake in itself is also a complex element since it forms part of the media system but also generates new particularities within the media system. All these objects create a composition and a formed interaction of spontaneity. The 19S earthquake happened unexpectedly and gives place to a live interaction. Narration of the experience is therefore recorded and processed differently across individuals and technology with no control sample.

Objects and processes (embodied as objects) interact with one another, and every element is unique. The Quake of 19S therefore creates a media system in which interaction is unique but also needed to understand one another.

Having established a media system, 'ecology' is added to the mix:

The term "ecology" is used here because it is one of the most expressive terms language currently has to indicate the 'massive and dynamic interrelation of processes and objects, beings and things, patterns and matter' (Fuller, 2005, p.2).

Therefore, the term ecology allows for the process pertaining to the earthquake to be understood at the same time as understanding it as an entity that interacts with other objects and processes, such as the collapsing of buildings, but also people's emotions and reactions.

'Media ecology' is sometimes used in a similar way to 'information ecology', and the term 'ecology' is sometimes replaced with the term 'environmentalism', in which a notion or study of media is interrelated with a notion of human culture. Much as with Fuller's perspective, however, the aim in using media ecology:

is used largely either as an aside, or more precisely as something already accessible as a known object or reference. ...to take this named thing, make use of it, but also to test it and, one hopes, to extend its precision (Fuller, 2005, p.5).

By coining the term 'media ecology', it is possible to focus on discussing the processing of interactions between objects, inside the ecology, instead of remaining at a level of theorisation of interaction with cultural analysis and production.

In other words, we are able to deeply analyse the consequences that our relationship to technology has during an earthquake by not only analysing the event and elements present in the event, but also using the event (the earthquake) as part of the elements present in the analysis. Rather than staying on a theoretical level that would only explain the elements that took place in the interaction (technology, individuals, the city) and how the interaction took place (which elements interacted with which), the aim is to move further and argue how this interaction varies and have the opportunity to change our perception of an event, and how this will also affect our relationship to an event in the future (in case of a new quake) due to the elements now available and the way we have internalised them to keep on narrating them to others.

Earthquakes in Mexico:

First, we need to understand that earthquake drills and mild earthquakes are common in Mexico City. Together with general advice on what to do during an earthquake, how to avoid dangerous objects, locate safe-zones in the structure of a building and most importantly, how to evacuate buildings, the constant repetition of events (drills and small, at times imperceptible, earthquakes) allows us to normalise eminent danger. Mexico is to earthquake drills what the United Kingdom is to fire drills. So much so, that from pre-school, children become familiar with the phrase *No corro*, *no grito*, *no empujo* (I won't run, I won't shout and I won't push), a statement that encapsulates the three main rules that aim to help the general public to remain calm and remember what do to in case of an earthquake.

Therefore, one of the main reasons the Quake of 19S took people by surprise had something to do with familiarity and repetition. For Mexicans, earthquakes are perceived as part of average everyday life, because most earthquakes are mild and almost unnoticeable. Familiarity with mild earthquakes, together with the constant repetition of what to do and what not to do from a very young age, pushes the process into normality and boredom since drills cannot be performed differently nor do the rules change over time. This leads to individuals becoming bored with it and at some point, most have stopped taking it too seriously.

This analysis uses media ecology as an holistic approach to the interactions between media technologies, individual's activities and agency given to both objects and patterns. The first observations towards discussing the Quake of 19S deal with the main differentiation between individuals and media technologies. Conceptualising that repetition in machines is what allows machines to perfect or improve quality in any task. Machines use repetition as their means towards perfection and quality improvement since they are able to keep on learning from repeating the same activity over and over, whereas for individuals, repetition of the same activity tends to lead to dullness and boredom. Repetition of the same activity for individuals eventually leads to them ignoring the activity altogether as it is being performed.

Mexicans repeat the drill activity from pre-school through to adult life at work. At some point, for some sooner than others, earthquake drills become good excuses to kill time at work or school, to rest. In some cases, the opposite happens; those who want to avoid 'losing precious time' prefer to ignore the drill or the mild earthquake and keep on working.

On 19 September 2017, a macro drill was scheduled to occur in the city, in remembrance of those who lost their lives in the earthquake of 1985. The drill was also to test new alarm activation equipment, speakers installed throughout the city with the idea to alert people (when possible) to the presence of an impending earthquake. Technology from 1993 operates by means of sensors located on the Pacific coast, where risk is higher due to the lack of equipment and investment as well as the somewhat guess-around selection of where to locate alarms to react to earthquakes (Najar, 2017, par. 8). As a consequence, the level of chance and spontaneity present in the location, of sensors and earthquake detection, is associated with the technology installed to detect an earthquake but also with the earthquake as an entity since its appearance at a specific time and moment are also based on chance.

Earthquakes cannot be prevented but rather acted upon. The selection of where to locate an alarm trigger in case of an earthquake resorts to a degree of randomness; it entails selecting a specific area and hoping that the sensor will be able to detect the earthquake at that specific location. Therefore, the spontaneity of earthquakes, together with normalisation of repetition of earthquake drills, became part of the ecology in which technology and individuals were operating in the city.

Since my media ecology is Mexico City, it is important to define in what terms and conditions I am addressing Mexico City as a place and space, especially since 'cities have become extraordinarily intricate, and for this, difficult to generalise...We think on particular sites or moments when imagining a city' (Amin & Thrift, 2002, p.1). Mexico City could easily be defined by its territorial setting; nevertheless, when thinking of what really constitutes Mexico as a city, a consideration must be made of all the people who live, work and populate the city. For example, the influence of those who live outside the city (State of Mexico) but travel everyday back and forth from it:

There is a strong emphasis on understanding cities as spatially open and crosscut by many different mobilities, from flows of people to commodities and information. [...] urban life is the irreducible product of mixture. (Amin & Thrift, 2002, p.3)

Therefore, I am addressing Mexico City as spatially open, as a place in which many different mobilities take place. Mobility of people travelling from outside the city into it for work, information mobility generated in the city by both individuals and machines (specifically for this chapter, news information and message communication between individuals using social media), mobility of products travelling from and for other states, and so on, and to highlight that urban life takes place at a distance due to many factors, the internet being one of them and the one with which this chapter is mostly concerned.

The internet enables the creation of mixed spatialities and allows us to create 'an appreciation of cities as "sites of transnational connections" (Amin & Thrift, 2002, p.3); for example, in the way cities and the internet englobe qualities of human communication and connections that are not bound to a place or space. Adding the internet to the 'appreciation of cities' means that all these connections and lack of connections (digital borders) help vary the creation of identity and community.

Likewise, Mexico City extends beyond its geographical territory and into streams of people from Mexico City living abroad, but also into information accessible online regarding Mexico City, outsiders' communication with those living in the city through social media, media content accessible in Mexico but not elsewhere, and so on. As such, Mexico City expands towards wherever Mexican individuals, otherwise called *capitalinos*, which are those who identify as locals because of their contact and

experience with the capital, explore and experience their everyday life since 'Space is not incidental, therefore, but rather a vital part of what is to be human: an enframing that allows the incubation of different ways of life by extending extension' (Thrift, 2014, p.4).

Mexican *capitalinos* experience Mexico City as a space that allows them to frame and perform their everyday life activities around urban life; in turn, this allows for 'different ways of life' to be performed every day. The space explored, virtual and physical, forms part of what it means to identify as a local anywhere. The framing of that everyday life experience allows the extension of Mexico City as space to stretch into different areas.

Having a dynamic space, which shifts and moves to experience everyday life, means that 'Human sociality therefore *always* coevolves with objects and space that provide more or less room to become something else' (Thrift, 2014, p.5). In other words, if Mexico City as space evolves and shifts according to individuals' experience of everyday life (when in contact with objects of urban life or information that involves elements of Mexican culture). This means that individuals are always coevolving or being affected by the objects and spaces in which they experience being *capitalinos*.

Moreover, 'cities are based in large part on activities of repair and maintenance, the systematic re-placement of place, and this ability is still there in times of trouble to be adapted to the new circumstances' (Thrift, 2005, p.135). Likewise, Mexico City is known by many as the city that somehow manages to move on, even when things stop working altogether. For example, if a red light suddenly stopped working and cars needed to keep circulating in both directions, a traffic jam would immediately ensue, but the street's mechanism would continue by creating a non-written flow of crossing cars, as if the red-light was never needed (sometimes, depending on the street, even if working normally, the light could easily be ignored).

Due to the magnitude of Mexico City, it is no surprise that the city is undergoing constant adaptations to solve the systematic issues that arise from living in the most populous city of North America in which law and order vary on perception. Having to constantly adapt, repair and replace becomes part of normal everyday life in a city with 21 million people and rising (CIA World Factbook, 2018, par. 9). This ability of constant adaptability is still present in times of trouble, like that caused by an

earthquake, to which people then adapt to face the new challenges the city presents to them. 'These activities often involve a high degree of improvisation' (Thrift, 2005, p.136). Improvisation is how Mexico's citizens cope and demonstrate resilience⁵¹. Repair in Mexico involves working with what is available at the moment the problem arises, and (most of the time) working with a partial repair if needed, which is where improvisation is performed, and results tested and perfected over time.

To quote the beginning of this chapter: 'cities often bounce back from catastrophe remarkably quickly'. Thrift argues that the main reason is:

the fact that Western cities are continuously modulated by repair and maintenance in ways that are so familiar that we tend to overlook them but which give these cities a good deal more resilience... (Thrift, 2005, p.134).

The earthquake experienced during 19 September 2017 exposed Mexico City's resilience, modulated by constant repair and maintenance experimented as one navigates everyday life in the city.

Taking up the narration of media ecology experienced during the earthquake, spontaneity and resilience are part of the experience as much as normalisation of repetition due to the dullness of repetition in the case of earthquake-drills. The macro drill took place as planned under the aforementioned conditions, in addition to individuals' interiorisation of the day of remembrance on the earthquake of 1985 (in each case depending on their level of involvement or knowledge of the situation).

A couple of hours later, after the act of remembrance had ended, allowing the city to return to 'normality' following a simulation of procedures in response to a movement of the earth, an earthquake with a force of 7.1 on the Richter Scale hit the centre of Mexico. Seismic alarms had approximately one minute to alert those in Mexico City by means of radio waves and smartphone alarms before the earthquake was felt, before the city and its inhabitants created a media ecology based on resilience and improvisation to overcome times of crisis.

⁵¹ The capacity to recover quickly from difficulties; toughness (Oxford Dictionary, 2010).

Back to the 19S Earthquake:

A case study denotes research on a system bounded in space and time and embedded in a particular physical and sociocultural context. Research is conducted using diverse methodologies, methods and data sources, like participant observation, interviews, audio-visual materials, documents, and so on. (Silverman, 2011, p.16)

In the Mexican scenario, I explore the system bound in space and time as Mexico City during and after the earthquake of 19 September 2017 embedded in its particular sociocultural content.

For the purpose of this research, I carried out a multimodal ethnography comprised of 12 individual semi-structured interviews with individuals physically present and scattered across Mexico City during the Quake of 19S; these interviews mostly discussed their interaction with technology during the earthquake. There were also informal group conversations and discussions of the earthquake among friends and family. Ethnography also comprises participants' observation from abroad (online access to official news outlets) as well as a yearly visit to the site that sustained the most damage (La Condesa) four months after 19 September 19 2017, and from then on until the submission of this thesis.

Table 4.1: List of Study Participants⁵²

Pseudonyms Used for Study Participants		
NUMBER	PSEUDONYM	CODE
1	Lorena	DE-S
2	Ximena	AI-B
3	Irene	IR-G
4	Laura	KA-F
5	Jorge	CH-F
6	Ana	AN-V
7	Jimena	AN-G
8	Alejandra	ER-O
9	Estela	AL-S
10	María	AM-C
11	Mariana	XI-M
12	Leticia	LO-M

⁵² To see a resumed list of questions asked to interviewees or full transcript please see Appendix C. During my description of events and interviews, names of interviewees are either changed or used on a more general base to avoid specificity and respect their desire to remain anonymous.

Source: Table made by author

Also, a qualitative content analysis was performed on digital media and online platforms, including GitHub repositories created to coordinate efforts after the earthquake, Facebook pages, chats and groups on WhatsApp, Twitter hashtags #FuerzaMexico & #terremotoMX, Google Maps missing people database, Google Maps, and audio-visual material in the form of memes, videos, pictures and audios shared across all previously mentioned platforms. The core of the research explores the idea of experiencing an event through physical and digital spaces.

Working from personal experience, the chapter relies mostly on the use of ethnographical instances and narration as a methodological approach to express the data collected and observed through the years. Narrative is therefore built on personal and direct observation, but also on a compilation of people's experience of the earthquake and their use of technology, obtained through interviews. The events as narrated are seen as 'instances of social action', in order 'to treat narrative as socially situated interactions embedded in interpersonal, cultural, institutional, and historical contexts' (Chase, 2005, p.653); these narrate and mostly allow the description of the emotional effect level present in the media ecology of 19S that embeds personal, cultural and historical events.

Looking at the consequences or impact of experiencing a disaster like the Quake of 19S in Mexico City while being detached from the physical place means creating a dialogue with my own conception of sociocultural engagement and its attachment to a physical place. While doing so, we must not forget that 'any study of internet interactions is challenging because of the simultaneous dense interconnectedness of the internet and the normal boundaries between networks and communities' (Gatson, 2013, p.245). This means further describing and discussing the idea of borders existing between the digital and the physical.

On another level, narration will lead me to discuss and conceptualise what happens when physical reality disintegrates (similar to how buildings collapsed during 19S), and the role of virtuality when this takes place. 'Conceptualizing cities as having all kinds of periods of temporal return...also points to the fact, often forgotten, that *demolition* is as much a part of the history of cities as construction' (Thrift, 2005, p.135). Maps created

to help locate collapsed buildings and coordinate human help become time maps symbolising what no longer is:

What was at stake in all these ventures was the use of available technical means of expression in order to produce transformative effects, whether these were located on the levels of affect and perception, or on the social or political plane, or, as was frequently the case, on both these levels at once. (Goddard, 2018, p. 11)

What is at stake here is the analysis of available technical means of expression during the Quake of 19S to produce transformative effects in the form of an organised collective, a media ecology that addresses and locates levels of effect and perception inside the city, as well as on the social and political.

Starting with Actor-Network-Theory:

Having read and consumed so much content related to the Quake of 19S, and after researching and finding so much rich data and material to analyse, I first made use of Actor-Network-Theory (ANT) to map and draft all 'connections that are being made and remade between human and non-human entities' (Dankert, 2011, par. 1) during 19S in Mexico City. Under the conception of ANT, we find *actants*:

An actant is that which accomplishes or undergoes an act. They differ from actors because an actant can not only be human, but also an animal, object or concept that accomplishes or undergoes an act. (Dankert, 2011, par. 11)

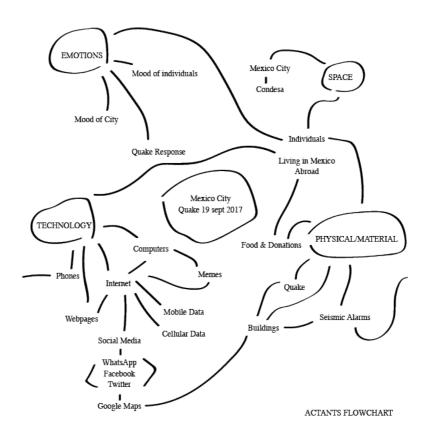


Figure 4.1: Actants Flowchart

Source: Devised by author

The Quake of 19S is, in itself, an actant in Mexico City (yet another actant) intertwined with individuals and technology. The earthquake, though, is also a process or an act that triggers change into other actants, the same way phones turn from entertainment devices into communication and coordination tools. Other actants include individuals forming a collective, buildings collapsing, people's mood and reaction towards the events taking place (emotion), the collective sentiment of solidarity felt in the city and the idea of resilience and improvisation to cope with the eventualities at hand.

Under an ANT approach, all actants share agency; this means that all the aforementioned elements shared responsibility and took part in the network formed after the Quake of 19S triggered the media ecology. Therefore, all actants (human and non-human) depend on each other⁵³ when thinking about cause and effect within the earthquake. 'Technologies and human agency are seen as inseparable parts of a sociotechnical system. Networks arise from the dynamic interaction of 'actors'; people, things and ideas' (Chandler & Munday, 2016b, par. 1). The Quake of 19S allows us to

⁵³ Or are connected with each other, intertwined.

analyse the human and non-human response towards an unexpected event in a time of ubiquitous computing in everyday life.

In this actant equation, though, I also become an actant. My role as an actant bridges between human and non-human actants since I am also using some of the 'technological actants' to access my experience of the Quake of 19S, although differently from those who used them during 19S in Mexico City.

My Digital Experience of the Quake: An Emotional Narration:

'When you are there for an emergency, involved in the incident, you become a part of it, too.' (Doctor's quote on working and being a patient during the Quake of 19S)

When you are there for an emergency, you become part of it. I stumbled upon this quote by chance while reading and collecting all kinds of news information on the earthquake. The quote impacted me because it got me thinking about the definition of involvement in an incident. Here I was, searching constantly for information about an earthquake that had shocked my hometown, and which I thought I had lived if not first hand, quite closely due to access to information. Nevertheless, the word 'involvement' seemed to carry the idea or need of being present in the city while the earthquake was taking place.

Did my experience of the incident somehow diminish my involvement since online content was my only access to experience and communication with 19S actants? After much thinking and even more data collection, I came to an obvious realisation. I am also an actant. Although I experienced the earthquake from abroad and on a different access level from those present in Mexico City, I also made use of the same 'technological actants' (mostly social media: WhatsApp, Facebook, Twitter, online news, and Google Maps) that I will now use to bridge both sections; ANT and my personal narration of the Quake of 19S experience from abroad.

Therefore, I start by addressing the general feeling of experiencing the earthquake from abroad. Since I was born and had lived most of my life in Mexico City (almost 20 years), the emotional reaction I had towards 19S (after the initial trauma and concern for my loved ones' safety) was the realisation that after living over a year outside Mexico City, I suddenly felt like an outsider.

My culture, the places I knew, and people I related to on an everyday basis suddenly seemed to become part of a detached event taking place without me, moving forward without me, neither for good nor bad. I felt as a participant only able to look and experience the earthquake through the consumption of information via technological means. While others had no choice but to experience the physical event of the ground shaking, to then create and coordinate help with the use of social media and Google Maps, I seemed to remain on a level of access solely based on what others decided to share and communicate regarding the experience taking place in Mexico City.

'Human' groupings are always and everywhere made up of objects and spaces, as well as bodies, and each can substitute for, and extend, the other. [...] objects and spaces also have their own presence, out with human being. (Thrift, 2014, p.5)

I eventually realised that it was not necessary for me to be physically present in the place to be part of the experience, but rather that the 'human grouping' formed to coordinate and help during the earthquake included both people in the city and those abroad helping through the internet. Therefore, the actants of people scattered across different places meant that 19S as an ecology was formed by both objects and spaces able to extend and substitute for each other, since all actants have their own presence and relationship with each other.



Figure 4.2: Emotions Flowchart

Source: Devised by author

Researchers have demonstrated that metaphors are more than a poetic ornament of the language or just a series of rhetorical forms. Rather, they are basic cognitive devices of human communication and culture (Lakoff & Johnson, 1980; Ortony, 1979). Metaphors are fundamental for understanding the world that surrounds us, and they occupy a central role in our conception of technologies (Scolari, 2012, p.206)

This second flowchart aims to address and depict the main emotions, and elements or objects that triggered such emotions during the 12 mini-structured interviews with individuals who experienced the Quake of 19S. The empirical basis for this emotional flowchart comes from using elements mentioned by participants in the interviews as figures of speech that reflect and express the emotional impact lived at the time of the event since metaphors are not only important for everyday conversations and understandings, being used by some of the interviewees themselves. They also play a fundamental role in scientific discourse since many new paradigms or complex theoretical models were born or are represented through metaphors. These rhetorical

devices are very useful for giving meaning to new phenomena that are otherwise almost impossible to interpret (Scolari, 2012, p.206).

In this case, it is a negative emotional response (mostly of fear) to sudden movement or shaking after the Quake of 19S. I remain on the virtual side of experience of the earthquake and did not experience an earthquake during my yearly visits to Mexico City throughout the duration of this research. This means that, so far, I lack that instinct that triggers fear of experiencing the same event over again. The first perception of emotion during an earthquake is triggered by the situation individuals are in or the people they are with. For people in Mexico City, this was triggered by the actual feeling of movement caused by the earthquake and the realisation of what was happening around them. In contrast, my perception of this event came solely from personal communication with others. A friend decided to send a message using WhatsApp that said: 'Está temblando en México' (It's trembling in Mexico). This quote implies the earthquake was taking place at the moment it is being read; nevertheless, my emotional reaction was delayed until I could rationalise the magnitude of the event.

One of the first emotional reactions that individuals have after experiencing a natural disaster is the need to communicate with their loved ones. Emotional reactions are sometimes expressed through technology; such is the case of contacting loved ones after the earthquake. In Mexico City, telephone technology dealt with an unexpected saturation of calls, which in turn disrupted the system itself. This is much like how during a music concert, the phone signal is disrupted due to the concentration of a great number of telephones in the same location attempting to connect to cellular network antennae.

After receiving a notification of a natural disaster taking place, concern and distress appears until communication with loved ones is achieved and people are assured everyone is fine. Full concern is put into communicating with loved ones, but distress appears at a certain level after the need to trust that technology will fulfil the communication. The greater the silence after a first contact, the more stress is put on technology at either end as the cause of lack of response. Such was my experience after being able to immediately contact my sister in Mexico City, but failed to contact my brother, who was supposed to travel back home from University at that time. My family

was making every effort to make phone calls but failed (my sister being in Mexico City, and my parents in Querétaro, a state two hours away from the city).

As time went by and concern increased on my part, I decided to try contacting my brother via a WhatsApp call. It seemed an idea too far-fetched to be feasible but the necessity to corroborate that technology was maybe the cause or absence of response increased as time passed, and more and more news about the actual impact of the earthquake was shared on news sites and social media. To my surprise, my brother answered at the first ring, the anxiety felt at the moment of starting the call suddenly dropped when technology managed to connect us.

Looking back, at the same time we tried to locate my brother, and as emotion slowly scaled in proportion with the lack of response, I started following an online news show to understand the complexity of what had happened. The realness and magnitude of the event seemed to sink in as emotion escalated after I saw the news of my country on an international news TV channel; if the event had made it into international news, then the magnitude of what happened had to be significant. Again, the velocity at which communication and transmission happened is also to be noted. For others, the event became real at the moment of physical and sensory feeling (in the form of a seismic alarm for those who were in areas where they were activated). For me, the experience was based on seeing and watching it via television and online news, and as time passed, it felt as if it was possible for me to not be part of the experience at all if I stopped feeding on the information; this was because a simple look out the window from my physical location would have indicated life continued with normality on the other side of the world.

Most of my interviewees seem to match responses by stating that they did not feel the magnitude of what had taken place. Mariana's testimony, an illustration freelancer working near the main chaotic zone, echoes most responses as an example in which she says: 'I didn't *feel* the magnitude of the earthquake until hearing about it on the radio' (Appendix D-10, my translation). Some others, who had the opportunity to study or work abroad in the past and had friends in other countries, quite interestingly seemed to get calls from friends living abroad via WhatsApp asking about their safety. Such is the case of María, working on a public relations (PR) event in an upscale hotel in downtown Mexico City at the time of the earthquake. When the earthquake took place, she

remembers foreigners' reaction after the earthquake since they had never experienced it before, while her Mexican colleagues were mostly worried thinking if the event was serious enough to 'warrant' the cancellation of the whole conference and sending everyone home.

Being that her office was somewhere else in the city rather than the hotel but that most cars parked inside buildings had to remain there due to the fear of collapse, she decided to walk across the heart of the city centre until a taxi or any kind of transport became available. 'It did feel strong, but it was just another quake and people were aiming to go back to their normal activities since we didn't know how else to react' (Appendix D-10, my translation). In her testimony it should be noticed that, while she felt the earthquake, the building did not show any signs of structural damage, compared to the building next door, which had cracked stairs. This missing out from actually seeing damage close-hand seemed to affect her perception of the earthquake; this was just another thing that had happened in the city. As time passed, however, she realised the cars had stopped circulating and only fire-fighters and ambulances were going through: 'I think we have normalised so much the sound of ambulances and fire-fighters that even that detail took longer for me to register and give the attention and importance it required' (Appendix D-10, my translation).

Transport in the city centre and affected areas came to a halt and only emergency ambulances were granted access. This meant that people working in this area, but living outside of Mexico City, suddenly realised they needed to somehow move from one great distance to the other. 'The amount of people walking was what amazed me the most, you cannot imagine. We were so many...because there was no Cabify, Uber, Underground or any kind of public transport available' (Appendix D-10, my translation). In the case of María, she decided to walk back to the outskirts of the city until a cab eventually became available, during this walk, she narrates how she realised the only phones working were the old ones under a 3G band compared to the new ones on 4G. People with old or disposable phones were suddenly lending them to others with probably better ones so that they could contact their loved ones. Luckily, WhatsApp did not fail, she communicated with her mother through the app and suddenly, probably 40 minutes after the earthquake, received a call from a friend located in Madrid.

'It was not until I received that phone call that I registered the actual impact of the events taking place before my eyes; my friend asked me if I was alright since he had seen the news, and although I told him I had experienced the quake and was walking home, that was so far all the information I had, whereas he managed to update me on the fact that half the city seemed to have fallen down' (Appendix D-10, my translation).

This testimony therefore sheds light on our capacity to respond to an earthquake based on experience, but also on how technology has a great effect on how we access that experience. That phone call from the other side of the world represents not only how technology is part of everyday life but also how technology is similarly susceptible to the effects of an unexpected event. An ecology focused on working in a specific way will find ways to correct itself when in trouble, but it is also through the usage of individuals that this technology will either wither or adapt to meet the situation at hand, much like the 3G bandwidth example.

Coming back to our narration on people after the earthquake trying to make their way home and processing the experience, we find that many others, especially those with family living or working in downtown Mexico City, on the contrary, decided to avoid listening to the radio or watching TV as a defence mechanism until they got to a safe place or heard from their families. Of my interviewees, 75% had perceived the magnitude of the earthquake with their senses, but those who belonged to a younger generation that feed from the stories (only) of the earthquake of 1985 were unable to relate to previous experiences. On the other hand, those who had experienced the earthquake of 1985, quite clearly decided to avoid taking the experience in until the safety and assurance of safety for their loved ones could be secured. Such is the case of interviewee 12 who stated that her mother (also working in Mexico City) purposely decided to avoid getting information because she had experienced the earthquake of 1985. Not only was she anxious but she also wanted to keep further shock at bay until she could get in contact with her daughter who had to walk home, like many others, or ask for a lift from any passing by cars.

Some others, such as Estela, a student interested and involved with social movements and civil disobedience in one of the highest ranked public Universities in Mexico City. In the heat of the moment and after the earthquake actually ceased, dove right into helping others in the time of crisis, without giving time to think about what she had just experienced: the chaos and need to help overcame other senses until she had time to rest

and look back at her own situation. Her case is interesting and worth mentioning because she was taking an exam inside a building in Mexico City (that in the past had been a bank), but as a result of the earthquake of 1985 had remained abandoned and was later adapted by the government to become a school. She mentions through her experience that one of her classmates is visually impaired and, in the midst of chaos, she seemed to hold the idea that she needed to evacuate the building only if the computer with specific software she was using to take the exam could travel with her.

After she left the building, a group of women in a near-by building started shouting that they needed help because it had collapsed. Most students decided to go and help them, in the process seeing people escaping from the scrapes of the building and trying to be of help or to find help. She managed to report the building by posting about it and tagging the corresponding government departments that would be responsible for responding, but people knew they would have a hard time getting there, if at all. It was not until a group of builders from a near-by building came with spikes and shovels that they managed to coordinate the help, and with their guidance, create a human-chain to start removing debris.

For me, there was a constant need to feed and contrast information across platforms to keep the events feeling as if they were *happening as part of my everyday life* so that I felt I was still part of the events unfolding.

Cities are streaming. Interfaces are becoming representations of time as well as space (Galloway, 2012; Gelertner, 2013) as heterogeneous, real-time streams of content become the norm. Each person will be able to keep tabs on many streams of content at once...The city and its inhabitants will tell their own stories made up of time-based content endlessly being updated. (Thrift, 2014, p.8)

However, the problems that arise with this engagement was the need to verify the information across platforms as well as the constant self-regulation when thinking on what content had priority at specific moments in time; there is a six-hour time difference between Brighton and Mexico City.

As noted, during events immediately after the earthquake, one of the main needs was addressing how much damage the city had sustained and where the most help was needed. More than ever, a tool was required to know which areas were safe or in danger.

Mexico City's citizens knew it was up to them to overcome and come up with a solution. The complete mistrust in the government and their constant corruption fuelled these ideas. This is how a Google Map was created that combined individuals in the scene uploading information (using their phones) about where they saw collapsed buildings, together with details of where there were gas leaks or fires, or where shelter, equipment or volunteers were needed. What started as a word-of-mouth technique of people writing and hanging papers on walls for others to see, soon became information added to the online map.

Irene, who at the time was working in the Office for the Treasury and Public Credit, the Finance Ministry of Mexico, mentions she was part of a team in charge of information transparency of public credit by promoting the use of technologies and open data. She clearly remembers how:

on social media, information was published from civil society organisations or from *chavos dateros*⁵⁴ who use geo-reference tools to locate collection centres, which buildings had fallen specifically and what exactly was needed and where (Appendix D-3, my translation).

When talking about audiences and their use of technology, it is important to realise we already live in a world saturated with information that flows 24/7, faster than we can digest. This means that the selection and consumption of news becomes important in the process of assessing the self but also in distinguishing 'online truth' from 'fake news', and most importantly on the emotional effect that we get from this news and how we process what we see, read and feel in the event of an earthquake.

Over saturation of information means there is a need to change our capacity to tackle and process a lot of information in the blink of an eye; this is another characteristic that we need to consider when analysing Mexican individuals and their reaction in a mediated city immediately after an earthquake. Regardless of having so much access to information and help with media communication thanks to technology, complications in the narrative do not cease. An example of this is the fake news of Frida Sofia after the Quake of 19S in Mexico City.

⁵⁴ Literally translated as young users who work or deal generally with data and/or code.

Who is Frida?:

After the earthquake, and as time went by, the news of a school that collapsed became novelty:

Television cameras fixed their attention on the frantic rescue operations after a devastating earthquake toppled the school on Sept. 19. Tidbits of information about the child, whom some began to identify as "Frida Sofia," trickled out. Some reported that she was with five other children, some that she had spoken to rescuers and was wiggling her fingers, still others that she had been sent water. (Specia, 2017, par. 2)

News started as a rumour of a 12-year-old girl still trapped in the rubble under a collapsed elementary school. Due to the shock and impact of the 'news', this rumour spread like wildfire through social media; it was repeated so much through all platforms that it was even covered by the country's largest television network, Televisa. The coverage validated the news as legitimate despite the network's poor reputation in the country.

Collective trauma and spread fear, combined with a need for distracting oneself with more news, as the minutes passed, media outlets disseminated more 'novel' information on the development of this specific case. When access to information is so instant and people at the scene are able to share the content, news click-bait tend to focus more on the emotional effect they can cause on people to click on an article rather than on the sharing of information, given that such information is already available to everyone online.

Therefore, treating the environment as an artefact in which news is created to distract some but also feed others (depending on the sites or websites they chose to consume), and information being created by both individuals and official outlets started a process of manual and digital verification. People on the street will corroborate materials needed in shelters and post online only after checking in-site. Similarly, online posts will only become 'official' or verifiable if more than three posts by different people had posted the same information and the materials needed matched the location and the time it was requested.

Nevertheless, nobody expected an official outlet to take advantage of such an environment to deliver unverifiable content to the public. The case involved a sensible

topic when discussing the probability of trapped minors and a collapsed building, in addition to the possibility of survivors still inside. The building, as a physical object, had already been verified and declared as damaged with a collapsed structure. Media outlets were kept outside the perimeter of the building with no access inside to avoid disruption of rescuers' work.

Like the people unable to access, media outlets were also left to guess, together with audiences, about ongoing developments. For its part, Televisa (one of the biggest media outlets in Mexico) decided to simulate and pretend that they were the only ones with access to information on the place that no other media outlet had. They soon started full coverage of the Frida Sofia case, a kid that had 'survived' that it was then discovered to not even be real.

Another emotional effect or collective emotion shared not only during the earthquake but also on a regular basis in Mexico, is distrust for the government. The emotion spreads and comes with any media that involves the government, distrust if it is an official outlet and waiting for the discovery of the reality by an unofficial outlet, most times in the form of leaked videos. This emotional effect remained within the ecology when the government was concerned, such is the case of Graco.

Why, Graco?:

Thanks to immediacy in information, it became widely known that the State of Morelos' Government (a state impacted by the earthquake) was smuggling donations made by the public by re-labelling the products to imply they were donated by the government itself.

The president of the Comprehensive Family Development Institute (DIF) in Morelos, Elena Cepeda -wife of the current governor of the state, Graco Ramírez- ordered the Morelos Police to seize donation trucks and reroute them to the collection centres of the institution under her charge, humanitarian aid has been smuggled into the state and directly given to the victims in the towns and communities affected by last Tuesday's earthquake. (Miranda, 2017, par. 1)

This meant the government would take donations made by the public in the city or other states, and after accepting them to 'process' the aid and deliver to places that needed them the most, they would re-brand the donations using their name and logo, repackaging humanitarian help turning it into campaign promotion for their political party in times of crisis.

After the initial shock, imminent action was expected from those who saw their donations going into the government and doing what the government seemed to do best, seize the opportunity for their benefit, regardless of the situation. People decided to distrust official channels and let people receive aid directly; those same people would then also discover what they had suspected since the beginning, corruption in the hands of those who were responsible of providing official help to the city. They decided to take matters into their own hands and coordinated themselves, much as had been done in the city. Immediately individuals organised to take back their donations from the official donation centres; however, after officials denied access back into the centres, steps were taken to prevent this from happening again. A protocol to ensure help arrived without getting government-branded was initiated amongst those donating and those coordinating to send help to other states impacted by the earthquake, showing Mexicans' resilience and improvisation in times of need. Messages of encouragement were written with markers on food products, as well as messages to protest and stop the government from branding and re-packaging the items as their personal donation for propaganda purposes.

Smuggling humanitarian help while the government is preventing you from doing so may sound like fiction, but it is a snippet of reality when it relates to Mexico. Interviewees also mentioned the need to keep a low profile when passing through toll points and making sure the distributed goods were handed to actual beneficiaries. Distrust for the government and the need to work as a community in times of need marks Mexicans across time. This is how individuals managed to rebuild the City after the 1985 earthquake, and to overcome the challenges posed by a lack of government response during the first 24 hours. What became the outstanding factor to consider this time was the ability to instantly respond to the effects of the earthquake and coordinate help that could reach across physical space and/or word-of-mouth. Mexicans became aware of the events through social media only a couple of minutes after the repackaging was taking place. Pictures circulated and individuals coordinating through the use of smartphones decided to intervene to ensure donations would reach earthquake victims without government intermediaries. As records in newspapers said, some managed to intercept and smuggle-back the donations; at some point, two large trailers with donated goods that were first directed to a non-government regulated donation point, and later re-directed by government officials were also intercepted.

Civil society coordination was key in managing to stop the seizing of donation trucks together with the coordination of individuals' cars to 'smuggle in' donations (since they would attract less attention), to directly reach the places in need of food and medical donations. This coordination was also based on users' and smartphone access to Twitter and WhatsApp. Several videos on other locations appeared with similar happenings: in Oaxaca trucks full of humanitarian aid, mainly food, were being 'kept' in government warehouses. When people realised this, they were then able to stop it by blocking the road and sharing the videos so others would come and coordination could keep going. Mundane, everyday entertainment tools suddenly had to rise up to meet the events taking place, helping to circumvent government and military obstruction of roads to get to remote places.

Human inventiveness, together with the use of everyday technology, ranging from cars to access to mobile phones and social media, meant people could coordinate donations by themselves or could report where the seizing of goods had taken place, giving materiality to the immaterial blocking of goods by government: the government's creation of barriers between those in need and those trying to help.

As such, during the earthquake, much effort and emotion was put to overcome the problems at hand. Interviews with individuals who experienced the earthquake range from distancing from the main events until being able to deal with them, to completely engaging with the situation. Although the interviews' main focus was based on people's relationship with technology during the earthquake, it was after reading people's interaction and narration that it became evident that their relationship with technology is always intertwined with emotional effect. Contacting family, coordinating help to others, feeding from news, and so on, all have emotional sentiments in common when performed during the earthquake.

Technology helped us see the magnitude of things, to be able to quantify damage, even if as humans we cannot completely scale the magnitude at first view. Having a visual image to accompany the information, such as the fallen buildings, helped to scale the event using senses. Technology allows us, in a way, to 'feel' what we have not been able to experience first-hand.

After the earthquake, there was an overwhelming number of homage videos emotionally expressing the situation Mexico was overcoming. One of the participants mentioned that the emotional effect was such that three days passed when she could not cry, regardless of the experiences she had gone through; it was while watching one of these homage videos that she was able to cry at last.

Another cultural element is present online when Mexican culture customs in the form of memes were shared to calm recipients down and have a laugh to help overcome the crisis. Interviewees even mentioned taking active action sharing mostly one meme that represents a Mexican tradition of eating a type of savoury roll called 'bolillo' when a scary situation has just happened. The popular belief is that a piece of bread could help prevent gastritis or even diabetes, diseases believed to be triggered by an extreme fright. An example of this is being given bread after seeing or experiencing a car accident. In the case of the earthquake, the meme simply shows a picture of a bolillo (Figure 4.3) and says: 'Comparte este bolillo pa'l susto' (share this roll to offset the effects of fear).



Figure 4.3: Meme shared during the quake as cultural practice to curb the effects of fright

Source: Unknown (n.d.). Screenshot

Overcoming the earthquake was only possible by listening and sharing in whatever form the experience was felt during the earthquake. Some chose to return to their normal everyday life, some decided to act and keep the coordination, some listened, and everyone told their story to others. Now, more than ever, these stories are accompanied by visual aids in the form of videos, audio and still images compiled by those who personally recorded material, or those who uploaded it online to share with others. Interestingly enough, this means the impact of the earthquake now has a more visual and global conception in the social imaginary than previous earthquakes.

'Technology makes things personal despite them not being yours'; 'It's funny how although the quake was felt in Mexico City as a whole, our instinct targets danger in a specific space, and the first thing in your head is to get away from that place' (Appendix D-6, my translation). Sometimes this conceptualisation helps overcome the experience of the earthquake. Nevertheless, the fact that stories surfaced narrating how technology allowed people to be saved during the earthquake, thanks to the messaging system (WhatsApp), means technology is always present in the media ecology and allows the creation and narration of stories that form part of the Quake of 19S experience.

Those users who were abroad or outside Mexico City were moved by the digital images of the earthquake; videos of buildings collapsing and stories of people's experience during the earthquake. They also made use of their technological access to share and donate using online websites.

At the platform, waiting for the underground to arrive, everyone was worried but nobody said anything, they would not speak, as if the act of talking would generate more movement...outside I took a bus and though it was full of people, nobody said anything. No one spoke, nothing. We also didn't know anything; we only knew what our senses had perceived (Appendix D-7, my translation).

Ana's testimony, a wedding photographer at work while the earthquake hit, captures the role of silence and noise in a busy city. For citizens in Mexico City the idea of noise means things are normal, a noisy street seems safer than a quiet one; this means that the idea of silence carries with it the idea that something impactful has taken place. And, as will be mentioned later in this chapter, this silence will become a materialisation of what had happened in the place.

My Digital Experience of the Quake (Emotional Narration):

More to the point, in situations of breakdown, whether epic or mundane, the humble mobile phone has extended the city's interactivity and adaptability in all kinds of ways and may well have been the most significant device to add to a city's overall resilience by adding an extra thread to the urban knot. (Thrift, 2005, p.136)

Seeing and being in the earthquake (emotional knot of the city), emotional feelings of seeing content about chains of people helping, videos of the impact of the earthquake, videos of silence and hands in the air, the Mexican flag and spontaneous singing amidst the disaster.

Visual content that illustrates the earthquake, providing a visual remembrance for future generations. 'True, the speed, interconnectedness and complexity of information and communications technology has produced new vulnerabilities' (Thrift, 2005, p.136), the same as Graco and Frida did. Nevertheless, visual content that expresses and supports a collective memory of the earthquake is now shared and remembered by using technological devices to access the content. 'But, generally speaking, information and communications technology has probably made cities more robust by adding more degrees of redundancy and new forms of knowledge' (Thrift, 2005, p.136).

When asked when or how, if at all, they started to perceive 'normality' in the City, most interviewees described that even if it was too sudden or they struggled to make changes in the midst of it, normality seemed to catch-up with people two weeks after the earthquake. In my various digital timelines, I could clear perceive the emotional effect that content had between my friends in Mexico and those abroad.

It remains to be seen if the ghost-like presence of the earthquake is still able to be felt while visiting the city, or if this emotional feeling of the city will be confronted while being in the physical presence of the Quake.

Dérive in the Age of Mobile Technologies:

Dérive: a mode of experimental behaviour linked to the conditions of urban society: a technique of transient passage through varied ambiances. Also used to designate a specific period of continuous deriving. (Sussman, 1989; p.198)

In my actual encounter with the remains of the earthquake on 16 January 2018, four months had passed since the 2017 earthquake. Some areas in Mexico City had slowly but steadily gone back to their normal everyday lives, and the city seemed to have reached a point where it kept moving and operating as if nothing had happened in the first place. Nevertheless, deep inside the La Condesa neighbourhood, one of the most affected areas by the earthquake, remained a place where the experience of the earthquake seemed to have lingered a little longer.

To immerse myself once again into the experience, I decided to navigate across the neighbourhood using the Google Map created on the day of the earthquake (Figure 4.4) for the purpose of live mapping and tracking buildings that presented damage in their structure or buildings that were no longer there. The aim was to apply a psychogeographical *dérive* across the neighbourhood, on physical buildings that no longer existed, using a digital map.

Since the Google Map used during the earthquake⁵⁵ remained available even after the earthquake, the idea of remembering and having a digital visualisation of physical buildings that were no longer there caught my attention.



Figure 4.4: Buildings that show structural damage but remains standing in the neighbourhood La Condesa

Source: Photo by author

55 19 September Sismo Google Maps available at: https://www.google.com/maps/d/embed?mid=1_-V97lbdgLFHpx-CtqhLWlJAnYY

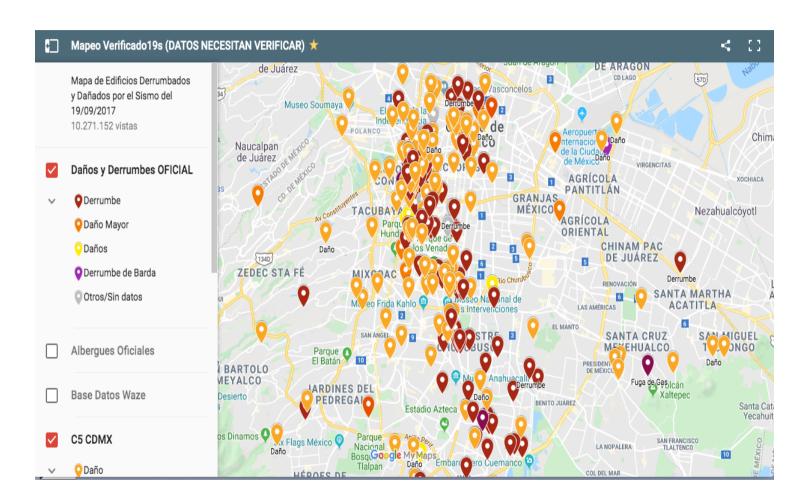


Figure 4.5: Google Map from the 19S 2017 Quake in Mexico City

Source: GoogleMaps

From the many places mapped, I chose Condesa due to the high impact and amount of damage that was concentrated in the area (Figure 4.6), also due to the news coverage and my experience and knowledge of the *previous feeling* the place had.

Condesa, described as a neighbourhood, has a colonial vibe due to the type of architecture dominant in the area. It is an area abounding in gardens, coffee shops, restaurants, and such arrangements that the general feeling associated with it is 'trendy and in fashion', regardless of the type of shop being visited. Expensive in terms of rent due to the vibe and trajectory of the place, it is preferred by both trendy and foreign people since word-of-mouth tends to describe it as the Mexican Europe.



Figure 4.6: Location of a demolished building

Source: Photo by author

Being familiar with the area, I decided to walk across the streets using my phone to document places that used to be there (Figure 4.6), and their absence was mapped in Google. The journey to get to Condesa started from reaching the neighbourhood from outside the city. The usual morning traffic and individuals going to work made the city feel as if nothing had happened, as if nothing was different; everyone moved and did as usual in their lives. However, the moment I stepped out of the car and started walking into Condesa, the change in mood was palpable.

While surrounding areas swarmed with people, this neighbourhood specifically felt different. Gone was the vibe of the trendy and fashionable place, and in its place, there was silence. What before used to be a busy area, full of restaurants, with people walking their dogs, and cars struggling to find a parking space, was now almost empty. Only one or two cars pass by every couple of minutes, and the people, although minding their business, seemed unusually quiet. I first stopped next to a building that showed cracks across its surface. It is right next to a famous park and the Map shows a sign indicating damage occurred there. Seeing the virtual representation of the map then shifts to physically encountering the actual building.

Although Maps (Figures 4.5 and 4.7) created a suggested representation of the space, the actual aftermath of the space, as well as the map itself, seemed to serve a purpose depending on the moment in time in which it was accessed. At the time of the earthquake, the map suggested a representation of what was immediately happening, a live representation of destruction. However, when I accessed the map months later to do a *dérive* of the places, this map was more of a remembrance of what used to be there in the past. This experience would then influence the way I interacted and moved through the space since the feeling of the place had also changed.

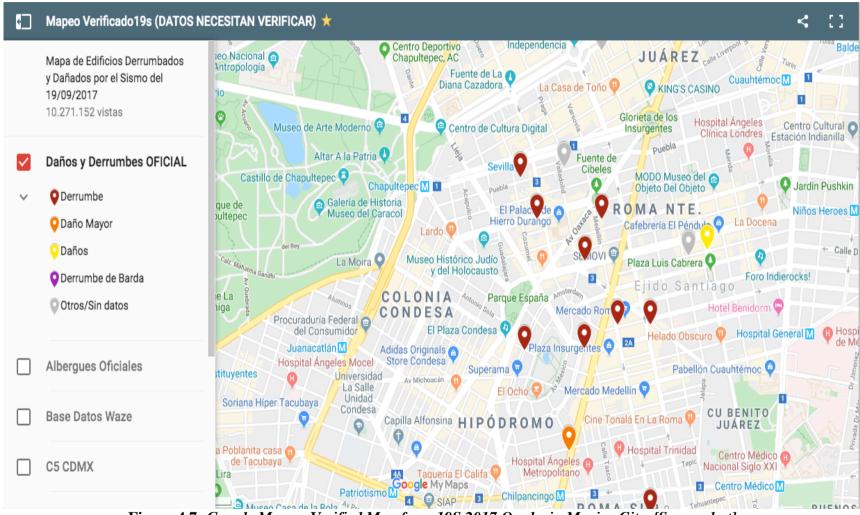


Figure 4.7: Google Maps - Verified Map form 19S 2017 Quake in Mexico City. [Screenshot]

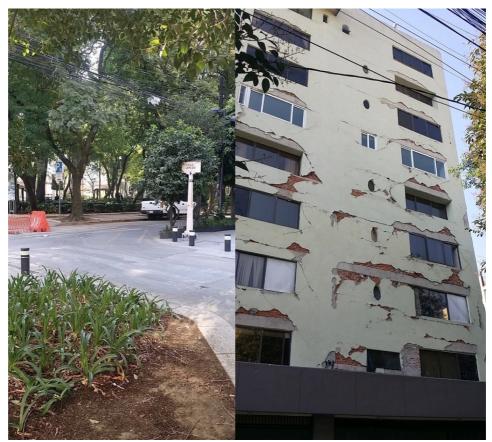


Figure 4.8: Start of my dérive journey across Condesa

Source: Photo by author

My journey to get to Condesa also aligns with entering into the remains of an emotional knot of the city. On 16 January 2018, after four months had lapsed and most of the city felt 'back to normal', I decided to walk to Condesa starting from the outskirts. Nevertheless, as soon as I entered the neighbourhood space, the sentiment of the quake and experience of it in the form of silence was palpable. What in the past showed dogs on a leash and children playing in the park was now empty streets (Figure 4.8), interrupted only by mounds of rubble from collapsed building here and there, and streets were lined with caution ribbons delimiting the unsafe areas due to the risk of collapse.

What in other parts had taken less time to forget or overcome, in Condesa the physical remains and need for economic investment to get 'back to normal' seemed to retain the collective emotion of what had been experienced during the earthquake. The immediate response by people helping each other in any way possible, as well as individuals abroad overturning all their support by making online donations, showed an immediate emotional response that, sadly in the long term, could not be retained. Adding to that (or feeding from it) we find the constant idea of developing countries where necessary

investment to completely overcome a tragedy might be delayed or interrupted due to other economic concerns or issues taking priority.

From a map that in the beginning began as a trustworthy representation of collapsed buildings and places that showed damage, during the midst of my *dérive* walk, the idea of 'low danger' collapsed buildings came to the fore. This is because during both my *dérive* but also during interviews and research, the concept of mistrust due to corruption in the process of safety verification also affected how people reacted to collapsed buildings. Ranging from newly built to neo-colonial buildings, structures alike in many cases presented damage or collapse. The 'fortunate' buildings in-between were marked as safe to re-enter, but who was to say the safety certification had not also arisen from a corrupt transaction?

The local government has transferred its responsibility for design verification and construction supervision to professionals. However, a large percentage of these professionals turned out to be very low skilled construction workers without the legal and economic capacity to face their responsibilities. They will not be able to compensate future losses in any way. In such a scheme, the only winners seem to be the developers with most of the profit and none of the responsibilities. It would appear that the regulator is not performing its duty. Building owners and tenants may be living in buildings that are not as safe as they assume. If they were aware of this situation, they might require a full risk assessment, which could be very expensive. (Reinoso, Jaimes & Torres, 2016, pg. 211-212)

Google Maps is aided by people and organisations who certify the collapsing and damage of buildings; in both cases, individuals and organisations cannot fully reassure people or sustain the safety of buildings if a new earthquake occurs. Feeling in danger therefore becomes part of living in the Mexican-Space, due to the lack of trust in government and organisations. In some cases, this fear was either overcome by moving somewhere else 'where quakes are felt less', according to interviewees, or not thinking too much about it and hoping for the best. Corruption creates mistrust and, much like buildings (which cost exorbitant monthly rents and others which do not), the earthquake showcased that both rich and poor will be treated equally in the face of a disaster. My dérive walking in Condesa, next to remains of both new and old buildings that collapsed, was a constant reminder of the equality treatment in the face of adversity experienced in Mexico.

Encountering the cracks of buildings shifted the emotional response of the earthquake from what had happened to what will probably not happen, the recovery or full reconstruction of the neighbourhood.

The representation of the map I used, with all of the previous limitations mentioned before, took me to empty places, places that were missing something or had changed the feeling of that part of the city around them. The place was mostly empty, but the mere thought of taking pictures and being watched by someone felt inappropriate (Figure 4.10). Like a place that ought to be left alone after what happened, alone until enough time has lapsed to pretend that what happened is now overcome and life can go back to normal, as it had already happened in the surrounding places.



Figure 4.9: 'No Photos. Respect for the victims. Thanks, Mexico!'

Source: Medina (2017). SinEmbargo. Image

While continuing walking this route, I was able to encounter the famous places that sustained the most damage and that were shared by individuals and media outlets through social media. These places interested me the most for this analysis because they had represented the most obvious shift of attention in the city, the places in which visual effect went from physical into digital for those in the place during the earthquake, but that, for me, went from digital representation into physical.

People pass through the street like the damage is no longer there; it has become part of a scenery that no longer interests people for sharing the story of what happened because a new novelty has taken attention away from it. It could also be because there is nothing else that can be done, but the navigation through the city made me aware that although a lot had happened in terms of social aid, coordination of individuals and use of technology, now the main focus was on the structure of a place, and the place this structure had collapsed. The geographical location is now the only means by which the space addresses the events that took place and reflects the representation I witnessed only through social media and virtual means. At the same time, this geographical point becomes a knowledge assent of an event taking place into a 'real assent' in which experience now forms part of that knowledge of the event that took place.

La Condesa, as a neighbourhood, was able to hold the emotional feeling of the city right after the shock of experiencing the earthquake for longer, before going back into 'normal' everyday life. The reasons are associated with the amount of more visible and physical damage that the neighbourhood endured. At the place, cultural elements and forms in which Mexicans cope with death make a presence through the depiction of the Mexican 'ritual' associated to coping with death. As an emotional release, many collapsed buildings now hold an offering (of food and religious symbols) to the deceased. This tradition, commonly represented by Mexicans during November to remember all those who have parted, depicts Mexicans' perception of and relationship with death as an event that cannot be controlled or predicted, but also that should not cause fear since it is inevitable, and it also comes unannounced and unexpectedly. *Ofrendas* (offerings) not only show this emotional release but also show the resilience and sensibility of individuals who are unable to do more, to create an offering to 'overcome' the experience for better or for worse.



Figure 4.10: Offering for the deceased in area of collapsed building in Mexico City

Source: Photo by author

Therefore, much like the picture above (Figure 4.10), and although it could be very shocking for other cultures, it should not come as a surprise to find *calaveras* (skulls) and *ofrendas* (offerings) of different sizes and shapes across La Condesa, during and after the time of the Quake, given that they became another physical representation of what took place in the City.

Conclusions:

The Quake of 19S was an unexpected contingency that allowed the liveliness of the city to be expressed and perceived more clearly as a media ecology with different elements mixed in the network of operation. From all elements encountered in the ecology, the one that stands out is the relationship between emotional effect and technology during the use of it, and the use of that technology, but also of individuals' ways, of appearing or overcoming the experience felt at the time of the crisis.

Second, cities tend to be regarded as places in which toughness and unkindness are needed to succeed and strive as individuals. The earthquake allowed a momentary change to be expressed; nevertheless, 'for better or for worse, life came back to normal in the span of two weeks' (Appendix D-2, my translation). As such, the Quake of 19S perceived in the Condesa neighbourhood allowed us to change the idea of toughness and unkindness that is associated with living in the City. The Quake, although devastating, allowed people to come together and realise their similarities in the midst of chaos. The Quake became an emotional knot created in Mexico City that managed to remain a little longer in Condesa due to the number of buildings that experienced damage in the area, physical reminders of what happened.

Furthermore, using an unexpected event to analyse the use of technology allows us to clearly compare the use and change in technology from everyday life into a moment of crisis. We are able to perceive in which ways technology is shaping us due to our use of it on an everyday basis, but also how we are shaping such technology by applying to it our inventiveness and cultural approach to life. Culture, emotional effect and being part of the City are some of many key elements that need to be considered and further analysed if we want to discuss the effect of technology on individuals and further understand how these changes vary.

Interaction with technology is analysed under the magnifier of culture and emotion perceived during the Quake of 19S. Emotion in the city tends to be perceived as dormant or not discussed at all. However, even the smallest interaction, like the use of social media or how we interact on our mobile devices, creates emotion and develops relationships, not only among us but also with technology. This, in exchange, results in a whole range of emotions caused by technology, which we need to keep analysing and discussing. In other words, we need to keep on researching our interactions with others and with technology in everyday life. These interactions hide cultural elements, sometimes in plain sight, happening on a small and personalised scale every day in everyone's lives. The change is slow, but as we learn to use new technology (but most importantly to improvise in the use of technology when this fails or is not accessible on the same terms as others), when we get a new phone or learn to use new software, we also learn and adapt to use new ways to communicate through this technology in times of need, without forgetting previous uses of other technology in order to be able to adapt. Improvisation in a city in times of crisis becomes a reality.

Remembrance now has a stronger visual aid for future generations sharing knowledge and stories of the 2017 earthquake in Mexico City; the capability or access that new

generations will have in terms of audio-visual narrative. Previous generations transmitted their experience of the earthquake of 19 September 1985 by word-of-mouth, whereas modern generations will now be able to match those word-of-mouth stories to audio-visual elements found online, which depict the earthquake that took place on 19 September 2017. This access to audio-visual materials, in sum, generates new areas of research on how and in which ways the impact and consumption of these contents will have an effect on the possible case of a new disaster.

It is shown that an ecological vision can overcome the five fallacies of communicative reductionism, because it looks at social movements as complex configurations of multiple practices, actors, and infrastructures that are interconnected. (Treré, 2019, p.18)

Overall, this chapter aimed to expand our understanding of media ecologies in times of crisis. 'An ecological perspective also forces us to pay attention to the contextual conditions that shape collective action' (Treré, 2019, p.18). As such, the use of media ecology as a term was used to allow for this contextual condition to take shape and be analysed under the scope of collective action performed by an unexpected earthquake. The analysis focuses on the changes the city underwent during times of crisis, focusing on the emotional perception of the event, the city, the media ecology, individuals and technology all intertwined.

I have discussed 'how senses of place can be personal and how they can be collective, how they can be instigated by everyday actions but also by invented rituals. Due to this combination of culture and geography in our identity' (Anderson, 2015 p.107) present during and after the unexpected earthquake of 19 September 2017, in Mexico City, a couple of hours after the remembrance of a similar earthquake experienced on 19 September 1985. Sense of place in Mexico City during and after the Quake of 19S holds a personal and collective perception of the event, not only to overcome the experiences but also to coordinate help during the most important moments after, the collective made use of rituals and techniques related to Mexican culture and use of technology in everyday life.

Media ecology can be simplified to a basic statement: Technologies—in our case, communication technologies, from writing to digital media—create environments that affect the people who use them (Scolari, 2012, p.207)

As such, we are able to perceive the combination of culture and geography in our identity during the Quake of 19S.

Conclusion

This thesis examined a set of visual and technological practices for materialising digital borders. The materialisation of these digital borders is based on creative interventions in the form of a digital art installation, described in detail in Chapter I. The thesis combines a conventional analysis of data and non-conventional analysis and the creation of a creative project to address the coevolution of technologies and individuals in digital-physical space in Mexico City.

Together all four chapters address and create a critical media analysis that explores the ways in which culture, technology and individuals coevolve. Given the nature of addressing creative practice (by the creation of a digital art installation) with written critique (in the form of this thesis), the use of an interdisciplinary approach allows us to bridge media, communications and cultural geography to depict and examine modes of online communication, as explored through observational analysis and iterative creative practice.

Practice-led research operates as both action and theoretical reflection on the work of Nigel Thrift (space and the city), Mark Graham (internet geography), Guy Débord (psychogeography), Eduardo Navas and Mathew Fuller (art and technology) in order to bridge the gap and expand knowledge across disciplines.

The originality of the work, both creative and theoretical, arises from addressing the perspective of media studies from the complexity of Mexico City by shifting the usual geopolitical bias of media studies. Mexico is analysed as an alternative to perceive, analyse and see both Western and Mexican cultural elements present in the use of

technology, highlighting the complexities of a situated socio-cultural analysis in an era of global media. As a result, technologies and individuals are seen to coevolve based on the limitations of the geographical spaces in which they are intertwined; yet in a time of networked media cultures, the cultural expression expands beyond the boundaries of its space of origin.

Chapter I addressed the application of media practice to the study of digital borders by discussing the iterative process of creating a digital art installation. Creative interventions, defined in the chapter, demonstrate the evolution of cultural expressions online. The limitations of creative expressions are materialised as digital borders.

This chapter manages to achieve its main purpose of documenting and theorising my own creative work. 'Creative Interventions in Digital Borders: a digital art installation' allows those who interact with it to become aware of borders and from there on to perceive the close relationship between exploring the web and exploring the city.

In this chapter, I managed to achieve what I set out to do by depicting a digital play in which visual and sonic voices represent the voice of the physical and digital cultural elements coming together. The merging of physical with digital space is shown in a remix appropriation of how I personally and creatively perceive and experience borders, and what this said about daily life in Mexico City. Digital happenings are as important as physical happenings to the city's identity, the Mexican identity and the context in which it is portrayed.

Sound allows us to give ephemerality to space location by allowing a certain proximity without giving a specific location. A sonorous landscape created for the installation depicts Mexican cultural imagery superimposed onto digital realms. By allowing software to remix sounds recognised by individuals I created a new digital score, which is based on its physical counterpart in Mexico City, giving a cue to a similar recognition of space in the digital realm.

The showcased digital art installation in ACCA (January 2020) is an exploration of Mexico City and its cultural aspects as a case study to research the perception of digital borders. The outcome is an exploration of creative interventions made through the constant learning of new techniques in which the correlation of technology and remix represents the use of technology as an everyday extension of our bodies. Sound and visual elements recreate space, and resilience is expressed by both individuals and technology.

Chapter II used Mexican memes as specific media technology to analyse and illustrate how memes are an extension of self. The chapter made use of magic(al) realism to distinguish the characteristics that make Mexican memes stand from others, understanding how a particular quality of the creation and re-appropriation of memes in Mexico involves humour as the default communication mode to become viral.

Moreover, in this chapter I addressed how memes have become a specific cultural means by which Mexicans communicate, discuss and express their feelings about everyday life. Memes in Mexico are unique to analyse since they reveal a blend of pre-Columbian, Spanish and American culture. By showing that memes are used to share a

cultural background, we come to the conclusion that a key aspect or characteristic of memes in Mexico City is humour and tragedy.

Agudeza, as described in the chapter, is the element that allows humour to become a cultural unit in the form of a meme and propagate through time. Mexican humour agudeza has managed to adapt and stay through time to express power or injustice, perceived by those who share the meme as a cultural unit. Memes have become an extension of self by the way in which they express humour, and how they have become a tool for communication among users.

The hypothesis that memes have become an extension of humour is thus sustained and further analysed through the scrutiny of magical realism. Magical realism and *detournement* are thus perceived in the digital realm in memes, and those memes show the same characteristics. Juxtaposition to establish an analogical relationship between elements and memes depicted through the misuse of the original version and misappropriation show particularities of Mexico City and their users and borrow elements from both physical and digital space without regard for the medium.

The re-purposing of material to create new meaning by means of disassociation from their original aesthetic elements is also present in memes from Mexico City, showing that memes can become a subversive critique of a modern commodity.

Memes in Mexico City reflect everyday life, but by analysing those elements depicted in the meme we can also find a deconstruction of capitalism that uses that same marketing technique. Destabilisation took place at various levels by disregarding copyright, sharing for laughs, and honest opinions on those memes that become more successful than others in the meme pool. Memes are shown to be based on the human ability to find humour in certain things that do not correspond with others, in elements that create juxtaposition.

Chapter III presented a spatial analysis of digital borders, using psychogeography as a creative intervention. By using psychogeography as a speculative exercise I was able to create a comparison between Mexican neighbourhoods and online worlds. The creative trigger was to explore online websites as space, the outcome of which was to prove that the user's response to online worlds mimics the user's response to physical places or neighbourhoods. Responses are fed by each individual's upbringing, background and experiences, culture and general understanding of the world based on those experiences.

This chapter addresses how Mexican space is perceived and how this space is socially constructed. The argument is that spaces allow stories to be formed between individuals and how these blend from the physical into the digital, indicating that the perception regarding how to behave comes from the individual who experienced those places and spaces. Perceptions on how to behave and react in a city are learned and reinforced through everyday life.

The concept of the internet city of Mexico is also defined. It allows us to say how the existence of online space is separable from users being or not being physically present in the geographical space that constitutes Mexico. This chapter argues through examples and users who in some ways conform to or identify with Mexican culture as part of their identity, and illustrates how individuals have their own perceptions and ways of

experiencing the city, perceptions that they transfer into other online activities such as navigation through online content. The discussion of online access is thus framed to explain the similarities and differences between spaces and preconceptions associated with those places.

From then on, the chapter shows how digital borders appear the moment individuals who relate with Mexican culture try to access content which they identify with but are denied access to. How they react or refuse to accept that denial forms part of the analysis and materialisation of digital borders. The border is therefore sometimes visible by way of a materialised message stating denial to access that content and other times is invisible due to our lack of awareness of content being censored based on our geographical location.

By iterating the concept of good and bad neighbourhoods, these ideas and concepts form part of the digital art installation narrated in Chapter I. The importance of noticing how we react and interact in space and the behaviours we inherit from physical space are acknowledged.

Chapter IV described Mexico City's liveliness as a media ecology by looking at the city in a moment of crisis through the 19 September 2017 earthquake in Mexico City. A creative intervention addresses and contrasts the experience of the quake in the physical place against an online experience in order to analyse the relationship between emotional affect and technology.

The earthquake of 19S was an unexpected contingency that allowed the city's liveliness to be expressed and perceived more clearly as media ecology. Similarly, I argued in favour of the value of the relationship between emotional affect and technology during the 19S quake, in the use of that technology and in the individuals' ways of appearing or overcoming the experience felt at the time of crisis.

The earthquake of 19S as perceived in the Condesa neighbourhood allowed us to change the idea of toughness and unkindness associated with living in Mexico City. The quake as an unexpected event allowed people to come together and realise their similarities amidst the chaos, becoming an emotional knowledge created and expanded through Mexico City. Damaged buildings as physical material in the area thus became reminders of what had happened.

The 19S earthquake was selected as an unexpected event to analyse the use of technology and compare the use and change in technology from everyday life into a moment of crisis. The outcome: that we are able to perceive in which ways technology is shaping us due to our use on an everyday basis, but also to perceive how we shape technology, in this particular 19S case, by applying inventiveness and a cultural approach to life.

Culture, emotions and being part of Mexico City in physical or digital space are key elements that affect how technology and individuals further understand and coevolve with each other. Interaction with technology is analysed under the magnifier of culture and emotion perceived during the quake. Interactions hide cultural elements, especially in times of need, so individuals experiencing the 19S quake had to adapt and find new

ways of communicating through technology. The chapter as a whole depicts how improvisation in a city in times of crisis becomes a reality.

Media evolves in times of crisis, for example, the collective action performed during an unexpected earthquake. Chapter IV set out an analysis of the changes the city underwent during times of crisis by focusing on the emotional perception of the event, the city, the media ecology as a whole, individuals and technology intertwined. Concluding that a sense of place in Mexico City during and after the quake of 19S holds a personal and collective perception of the event, not only to overcome the experiences lived during the quake but also to coordinate help during the most important moments after, this collective thus made use of rituals and techniques related to Mexican culture mixed with the use of technology in everyday life to overcome it. As such, we were able to perceive the combination of culture and geography in identity during the quake of 19S.

Overall, this creative project and thesis used theory as a creative tool to produce analysis through practice. The role of the practice that informs my work is deeply rooted in the use of visual analysis, interviews, online data and ethnography to create meaning through the act of making. The thesis argues how practice becomes both action and reflection: creating videos, consuming online context, experiencing an earthquake, and learning new software techniques all formed part of an iterative process that gave birth to creative interventions given by individuals with technological interactions.

This thesis encompasses the perception of the coevolution of technology and individuals in everyday life, as perceived through the eyes of Mexican culture and individuals. It looks at the dynamics of cities from a media ecological perspective during a crisis like

an earthquake. The materialising of the immaterial of the internet is perceived as digital borders and the ability of memes to share and encapsulate cultural elements with magic(al) realism.

By detecting cultural perception in our use and coevolution of technology I have done what I set out to do. The implications of these statements imply that future work should always aim to analyse the side-effects of technology according to culture and media environment. Further research is needed to address how various media react differently to different cultures and predict the implications of those reactions.

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Appendix A - Memes on Trump and the wall - Politics Mockery [Archive]



Figure A1: Upper frame movie: Attack on Titans - Lower frame movie: Mean Girls



Figure A2: Cartoon: Sponge-Bob Square Pants



Figure A3: Trump coat tag gone viral with the scripture 'Made in Mexico' Lo bueno del #Muro es que ya tendremos más espacio para anunciar bailongos.

México 1-0 Trump



Figure A4: Text Translation: The good thing about the #Wall is that we will now have more space to announce *bailongos* (dancing parties). Mexico 1 - 0

Trump



theintercept The view of La Reforma from the Angel of Independence monument includes a sign calling to



Figure A5: Depicting a march with the signs in the down-right corner 'Out Trump & Out Peña' (Mexican President at the time)



Figure A6: Text Translation: 'How to cross to USA through the wall' (*Voladores de Papantla* is a famous religious ritual originating from Mesoamerica Mexico)



Figure A7: Text Translation: Preliminary results 2016 U.S.A (right side) 'Meanwhile at OXXO' (popular convenience store in Mexico) 'Would you like to round out for the wall?'

Appendix B - Mexicans of Late Capitalism Mexican Magic Realism, archiving physical space [Archive]



Figure B1: Man loading gas in a water tank after a shortage in gas was announced.



Figure B2: Family on a hand-made car/bike in the streets.

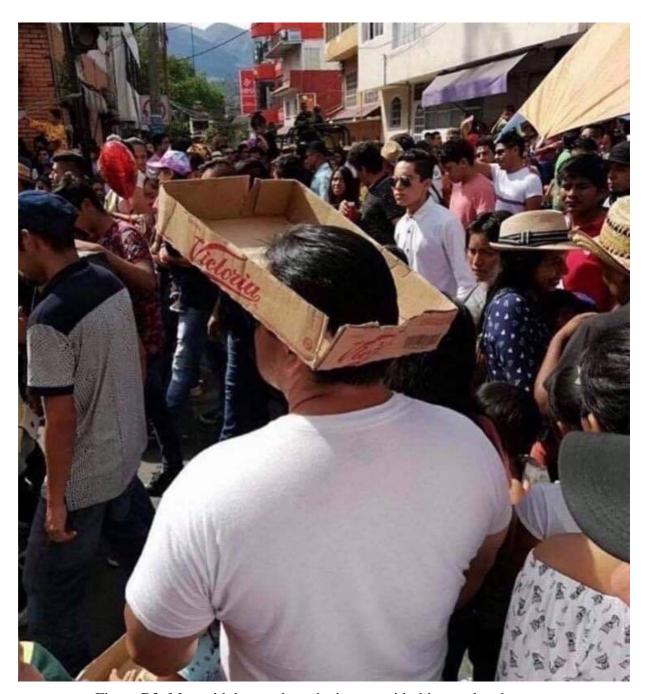


Figure B3: Man with hat made at the instant with things at hand.



Figure B4: Young man travelling by bus and listening to music.



Figure B5: Family cooking outside the window.



Figure B6: Changing a tire.



Figure B7: Crime scene delimited by electrical scooters.



Figure B8: Furniture move by motorbike.



Mejora tu salud iUsa las im escaleras fijas!

Figure B10: Wrestler blocking electrical stairs. Translated text: Improve your health, use the fixed stairs.



Figure B11: Girl holding fridge in the rear of truck for security purposes



Figure B12: Taxicab missing both right doors driving in the street.



Figure B13: Car falling into sinkhole in the street.



Figure B14: Ice-cream man walking in the rain.



Figure B15: Snow-flooding inside a convenience store (snow is not common in Mexico)

Appendix C Détournement Memes



Figure C1: *Nopales* (edible cactus commonly eaten in Mexico) sold with Batman shape.



-Sí a una tortilla le pones comida, es un taco, pero si lo metes en aceite caliente es un taco dorado, ah! pero si lo metes "enrolladito-enrolladito" se convierte en flauta y extendida se le llama tostada, ahora bien, si ese taco, antes lo bañas en chile guajillo se llama enchilada potosina.

Por otra parte, si al taco le pones queso por dentro es una quesadilla, pero si le pones salsa y el queso por fuera se convierte en enchilada. Y aquí viene la magia; esa enchilada, fragmentada, con una carne asada, invoca a los míticos Chilaquiles.

Lo llamo, la superposición cuántica de la tortilla.

Figure C2: Painting 'Las Tortilleras' by Carl Nebel 1834 with added text.

Translated text: If you put food on a tortilla, it's a taco, but if you dip it in hot oil it's a taco dorado (golden crisp), ah! But if you submerge it 'enrolladito' (really well rolled up) it becomes a flauta, while extended it is called tostada, now, if prior to that you bathe the taco in guajillo chilli it is called enchilada potosina. On the other hand, if you put cheese inside the taco, it is a quesadilla, but if you put salsa on it and put the cheese on the outside, it becomes an enchilada. And here comes the magic, that enchilada, in fragments, accompanied by roasted meat, invokes the mythical Chilaquiles. I call it, the quantum overlay of the tortilla.

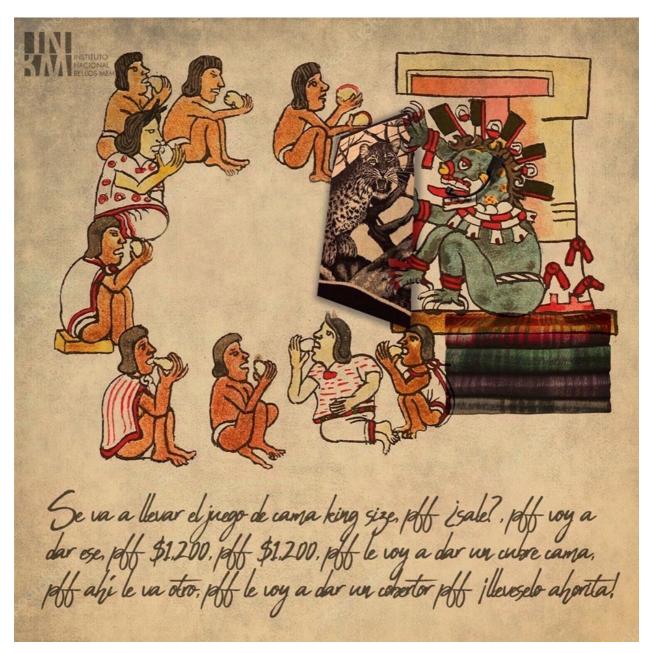


Figure C3: Magliabecchiano Codex (fragment) with added text and imagery.

Text translated: You are going to take, the king size bed, *pff*, ⁵⁶ alright? *Pff* I am going to give you that one, *pff* \$1,200, *pff* I am going to give a you bedspread, *pff* there goes another one, *pff* I am going to give you a bed cover *pff* take it now!

⁵⁶ Reference to the sound of a microphone speaking noise used by street vendors.



Figure C4: 'Sistine Madonna' picture by Rafael Sanzio, 1514 re-contextualized and renamed as
'La Despensa' (The groceries)

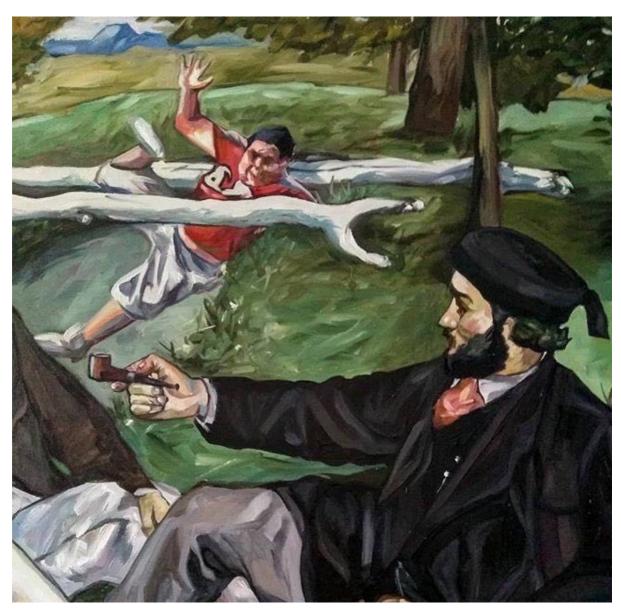


Figure C5: Viral video 'La caída de Edgar⁵⁷' (Edgar's fall) & 'The Luncheon on the Grass' by Édouard Manet, 1863

 57 One of the first and most viral and famous videos in YouTube since 2006 available in: https://youtu.be/b89CnP0Iq30



Figure C6: Bootleg merchandise of a famous phrase by the newly elected President of Mexico in 2018, Andrés Manuel López Obrador.



Figure C7: Bootleg merchandise of 'ayuwoki'⁵⁸ an internet-born phenomenon meant to scare people.

 $^{^{58}}$ 'Ayuwoki' is a direct reference and mock of how 'Annie, are you ok?' sounds to non-English speakers (song 'Smooth Criminal' by Michael Jackson).



Figure C8: Bus decoration based on famous Hollywood movie.



Figure C9: Re-appropriation of McDonald's logo to sell Mexican food.



Figure C10: Bootleg handmade version of Toy-Story 4 new toy, which is also handmade in the movie but was sold as original and branded by the company.

Appendix D – Quake Anonymised List & Questions

Pseudonyms Used for Study Participants		
NUMBER	PSEUDONYM	CODE
1	Lorena	DE-S
2	Ximena	AI-B
3	Irene	IR-G
4	Laura	KA-F
5	Jorge	CH-F
6	Ana	AN-V
7	Jimena	AN-G
8	Alejandra	ER-O
9	Estela	AL-S
10	María	AM-C
11	Mariana	XI-M
12	Leticia	LO-M

Interview format varies from personal one-on-one to narration of experiences in written and oral form. All interviews were conducted in Spanish with consent approved forms. To protect the anonymity of participants, they were given a pseudonym, and a number was assigned to their original interview. The three main areas or questions included in the interview are:

Please narrate in your own words what you remember from before, during, and after the 19S quake of 2017.

Where were you?

What were you doing?

How did events unfold after the event?

What was your relationship with technology during the quake or what use of technology did you perceive during the quake and after?

What do you think or consider to be the element which helped 'overcome' the effects of the quake or when was it that you felt 'normality' had been restored in the city?

Full transcript available from:

https://drive.google.com/file/d/1i08a3JWY8aoOdxWftqO6Fd2q1kQC6O67/view?usp=s haring

Consent Forms available from:

https://drive.google.com/open?id=1bMqCAB2uo1uRefhTKPtoF4-ftxJLCF5U