SENSE OF PLACE AND MEANING

How Can New Media Resignify Urban Landscapes

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Abstract

When we think about the manifestation of New Media in city space, the first things that usually comes to mind is bright screens advertising chain stores and services accessible from any part of the world. It is self-evident that our imagination of new media in the landscape is linked to consumption, and that propaganda modality is creating more “places” than any other new media in use. Could it be that such screens (and their low engagement threshold) are more effective than any attention-grabbing installation in sedimenting an idea of place to the citizen?

Attention grabbing is different from attention keeping.

There’s a gap in literature when analyzing new media enhancements in regard of city landscapes. Urban design doesn’t necessarily follow the urban advancements of new media and the opposite, new technologies not necessarily are applied with success into designing the cities of now.

This thesis asks if it is possible to use new media to facilitate an opposite process, in which New Media contributes to resignify and enhance the sense of place, by tapping into the potential of new media to create meaning, expanding contexts, the pursuit of identity and facilitating new modes of social behavior such as play.

The First chapter is for defining for architecture and sociological theories, what defines public space, and its influence. The Second investigates how New Media iterates, its technologies and design in with Smart Cities discourse. The Third chapter is foreseeing how identity and other theories play roles in the construction of contemporary cities. The Fourth analyzes my artistic practice through a period of 5 years (2013–2018), combining with perspectives of meaning in resignifying urban landscapes, by creating places. The Fifth is an analysis looking towards the future possibilities in which technology enhancements are in pace together with opportunities for development of urban areas, the importance of new media and urban design perspectives and reflecting about the difficulties in implementing those.

The thesis outlines a phenomena of resignification — change of meaning assigned to a landscape. The work focuses on common patterns used in the discourse of smart cities as a reflection of new media influence and the lack of thoughts often put when building new urban areas - thus the need of better strategies for public space planning, being them more agile and inclusive of diverse design fields and its citizens – a combination of media technologies and an agile and experimental mindset to make a difference.

Technology per se won’t generate meaning, but the major paradigm shift that could bring to our urban landscapes and our lives, is immense.
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TABLE OF CONTENTS

1 INTRODUCTION 9

2 PUBLIC SPACE 12

2.1 Cities 13
2.2 Landscape 13
2.3 Meaning of Public Space 14
2.4 Changes in Public Space 15
2.5 Towards a Categorization of Types of Space 17
2.6 Space, Nonplace, and Place 17
2.7 Place and Identity 21
2.8 Sense of Place and Resignification 22

3 NEW MEDIA 24

3.1 Importance and Definition 25
3.2 Impact of New Media on Space 27
3.3 New Media Changes in Space (Or New Media and Creation of Possibility Spaces) 29
3.4 New Media and Society 30
3.5 Placemaking and Play 32
3.6 Play in New Media 34
1 INTRODUCTION

Media has been undergone a radical change regarding cities, we have now, more than ever the feeling of the presence in our surroundings by it is digital realm. These have transformed dramatically not only ways in which we move, commute and live but more important how we perceive space, place and how we define meanings for those. These new perceptions and creations of “new” are challenging but also enhanced by interaction possibilities, and those will take continuously a larger tool in our everyday lives. Our task is now not to only understand and accept these changes but to comprehend the new demands those will take.

New Media, the central figure in this research and object of my studies, can be represented in many ways, and with many tools. It was never a clear definition nor a field in which you have defined paths to land on. I always had to put myself a definition of what it is and it often changed according to the work I was doing at that particular moment, either by new technologies, updates or trends. This was what attracted me to these studies, the possibilities of a future yet to come.

My New Media scope in this work is upfront defined as a compound of urban screens, digital facades, mapping works, mobile devices, tracking devices, sensors, and cameras. I believe that with this spectrum I shape the now, and my analysis pervades different aspects of both New Media and theories of place, touching then architecture field – which is a fascinating one for me, and society. My pursuit also includes speculative thinking on how society will dwell in the future with urban landscapes of the new and old cities. It is more important than ever to analyze how these new spaces can be built, created and resignified, and how can media leverage and aid meaning to those, as said by Darroch, and Marchessault (2014) “new vocabularies and methodologies for engaging with the distinctive situations and experiences created by media technologies that are reshaping, augmenting, and expanding urban spaces.” (p.3)
We live within days where the promise of highly intelligent urban areas – tracking each and every movement of the citizen leads to a homogenized landscape. When looking at cities without a character, the ubiquitous and programmable nature of new media contributes by making it a perfect tool for creating “non-places”, a term introduced by Marc Augé (1995) in relation to the spaces of modernity devoid of character and individuality.

My research starts with the need to define what urban spaces are – that led me to the studies of meaning of space and the importance of it when addressing the term place, defined by Cresswell (2009) as “any given place we encounter a combination of materiality, meaning, and practice” (p.169). When thinking about space, the addition of new technologies brought a challenging scenario for designers – that for the present work I define including artists, technologists, and architects, because they now have a larger toll when deciding strategies and thus taking planning a step further into what Julier (2005) calls “designscapes” (p.869). Those are very important to organize in this “design-led regeneration” (p.869) beyond lack of meaning facades and into building towards a “network of signifiers” (p.869), a clear sign for me on the larger communication role designers have on “the identity formation of urban centres and the use of aesthetic markers” (p.869) that enable smart cities.

The present work intends to clarify an approach to the necessity of changes regarding the use of new media in the context of urban cities, being them focused at:

**First** – The confusing arrangements between new media tools and common urban design trends, I believe there’s certainly a gap in the talk between technologists, artists, architects, and designers when systematic implementation of artworks, technologies and such happen in the context of cities. Understanding the concept of place then becomes central, or in other words, how can technology and new media design contribute beyond architecture in the construction, ways and story roles for the creation of a place – resignifying urban landscapes.
Second – Investigate new and enhanced perceptions brought by the creation of meaning and the role of identity within cities. Smart cities were conceived as optimized spaces, but as hybrid cities – mixing old and new, they are often per passed by technology and lack in foreseeing potential futures, intertwining practical challenges on designing experiences and context. The reflection about Smart Cities criticizes their actual scenario of failures when experiences touch solely in imbuing new trending technologies.

Cities are places of contrasts at all levels, mixing and divergent; they bear both opportunities and failures, comprising different inner worlds. Understanding the city is to understand the visible and invisible layers that compose and represent its environment. (Lima, 2016, p.51)

Third – Bringing the theory into practice! Aiming to establish a dialogue with my own work practice in the projects “Invisible Helsinki”, “Conducting Senses”, “Voices of Aalto” and “Reger a Paulista”. After discussing strategies like placemaking, agile methods, gamification and the language of play – designing following Julier (2005), “beyond architecture, contribute to providing official or nonofficial ‘stories’ and ‘ways of doing things’ that, in turn, fashion specific aesthetic outlooks for a place” (p.871), emphasizing resignification of urban landscapes as an approach to city planning.
2 PUBLIC SPACE

In this chapter, I reflect on the meaning of city space from different perspectives, that of public space, landscape and place in regarding. Resignification becomes a self-evident answer to the importance of contextualizing place and meaning in urban landscapes.
2.1 Cities

Cities are in the core of this research as both landscape and public spaces live within their boundaries. They are also in the core of this project as they’re not defined by physical constructs but instead involve social structures as Stephenson (2008) says. The mutual relationship between citizens and the city’s physical characteristics trespass their “physical dimension of landscape” (p.130) as their physical structures are highly influenced by the inhabitants; Their culture and lifestyle help creating a dynamic between the social and spatial. Those interactions happen on daily basis in the public space so they’re crucial to us, for Jacobs (1961) “cities are an immense laboratory of trial and error, failure and success, in city building and city design” hence the importance of their studies.

2.2 Landscape

According to Cosgrove (1984) landscape is a way of seeing determined by composition and structuring, and as subjective as cities can be, in landscape the world is detached and the individual spectator “to whom an illusion of order and control is offered through” (p.55), meaning this composition of the space within landscape follows some certainties, like a geometric structure, for example. For Girot & Truniger (2012) the term establishes firstly as a cultural form (like sculpture, cinema or theater), then as a way of seeing subjectively – meaning the idea of landscape comes before it becomes physical construction in both natural or built environments.

It is natural that with the progress of digital media this context had to be expanded. One can imply that landscape is always a mediated and rooted representational process where imagery, both in vision and construction of dialogues happens through perception and discourse. Cosgrove (1984) adds that this interpretation opens the possibilities of understanding of the world. Inspiring and new, the relationships emerged from this reconception when intertwined by media are what Gabrielian (2016) exemplifies in the process of landscape architec-
ture, exemplifying what a map is, and in relation to landscape defining a “mapping landscape” (p.40)

Through practices of drawing territorial systems and their relationships – becomes part of the design process as both a reading of place (reflective) and an opening up of new ways of understanding it (projective). In landscape architecture, the map negotiates between a given reality and an idea, and between an idea and its physical embodiment. In other words, it both follows (through interpretation of a given circumstance) and precedes the world it represents. (Gabrielian, 2016, p.40)

This interplay between representation and conceptualization identifies the relationship of architecture and design itself when envisions and constitutes the materialization of these embed possibilities and enable new roles for designing. Mediated by technology landscape enters its digital realm, making it possible to enable controlled changes in the digital landscape and redefining meanings of public space.

2.3 Meaning of Public Space

The definition of public space is a starting point as it defines the realm of the studies in which this theory can then be utilized. It refers to any accessible but non-private nor prohibited physical spaces including parks, plazas, the streets, restaurants, bars, cafes, museums (Lofland, 1998; McCarthy, 2001) – the option of broadening up the definition is due to the function of these sites being it spaces of sociability and recreation.

Jacobs (1961) and Gehl (2006) emphasize the fascination about it as it’s in the center of people’s daily lives, and different to a subjective landscape, because it contextualizes our interactions and relationship with space. It is no presumption to say its understanding acts as a mirror of society by reflecting and contextualizing people’s habits and experiences. For this reason, the best public spaces in the best cities are the ones that provide a balanced number of necessary activities
and options for its citizens: meaning obligatory and trivial activities for the day and optional, leisurement activities that would take place during the night (see Fig. 1).

**Figure 1. Human Activities on Public Spaces after Gehl’s definition (Gehl, 2011)**

**PLACE**

*Human Activities on public spaces,*

*Jan Gehl*

- **necessary activities**
  - Food stores
  - Supermarkets
  - Schools
  - Health centers
  - Banks
  - Doctors offices

- **social activities**
  - Movie theatres
  - Bars
  - Restaurants
  - Cultural or Community Organizations

- **optional activities**
  - Museums
  - Art galleries
  - Bookstores
  - Antique stores
  - Clothing boutiques

**Simultaneous presence of many people**

- **Satisfy entertainment socializing needs**

**Activities that satisfy the needs of specific sectors of society**

**Gehl (2006)** concludes by defining it as a better strategy to prioritize first life, second the spaces and only then the buildings. He later emphasizes that “Nothing Happens Because Nothing happens” (Gehl, 2011, p.75) meaning that action is demanded for cities to flourish as the definition is at the center of public spaces, before the of buildings that therefore are affected by the existence of technology in the landscape.

### 2.4 Changes in Public Space

Public spaces are the heart of a city, it is where activities take place; being them cultural, economic or trivial we move within these spaces. It’s their function to provide us context for living, relaxing, entertain-
ment, gathering, observing, performing, making sports or contemplating art and other cultural activities. Kaymaz (2013) points they make life in a city and are responsible for creating a sense of community.

With the advent of ubiquitous computing Wieser (1991) we entered a new ground where social relationship, cultural identity and such have been redefined by technologies, so it is expected that it changes also our public space comprehension. This is not a new phenomenon as Arefi (1999) points out that modernism already disrupted the emotional attachment to place, making hard for citizens to generate meaning in the so-called modern cities.

Another important aspect of these changes in public spaces is regarding sustainability, that should not anymore be limited only to natural resources but also includes identity in the urban context and cultural heritage, as Kaymaz (2013) notes. The author expands its discourse by taking into account also psychological dimensions of urban environment, that should be taken into consideration and methodologies of analysis of assessment, that have to be addressed to create new urban identities.

Design schemes would help to build the relationship between people and their new environment and should be prioritized in maintaining a liveable place. Kaymaz (2013) continues arguing that by now we’ve taken responsibility of those mechanisms too late and that is leading to a “loss of coherence, diversity and change” (p.757), by now inadequate and only blamed as results from globalization.

It’s important to know that In the near future we will not only reshape our identity but our urban environments in the digital landscapes. So the public space is also affected by social networks as they will redefine how our relationships are based and the flow of information is established in relation to movement: Being it a result movement of people, data or even migration. The consequences in urbanization processes alerts us that we should “develop plans and policies that would adapt the change” (p.757) and that has to happen soon.
2.5 Towards a Categorization of Types of Space

For the understanding of Public Space and Landscape within cities, the definition of space and place is necessary and those are defined next.

2.6 Space, Nonplace, and Place

Space

Space is considered an abstract concept and often premeditates or is in opposition of place. Henri Lefebvre (1991) points out that space is at the macro level concept and within a macro socio-economic can be a mechanism that supports the interests of the dominant power within society. Zygmunt Bauman (2000) emphasizes the importance of studying space in relation to technology, access to information and capitalism.

In the Book “Place: an experiential perspective”, Tuan (1975) writes about the relationship between the terms by defining that space as freedom, within a set of ideas – in opposition to place being security. People generally experience space through their physically related experience in its contexts, whether it be by the direct and visible layers and bonds like social communication and information, or the atmosphere experience of a city – what generally defines the space is their physical quality. In a world where these network of visible layers have been enhanced by invisible layers, people’s experience have been “increasingly mediated by these networks, but never entirely replaced by the virtual experience” (p.63) as Lima (2016) comments and continues by saying that nowadays “there are new spaces in the informational city where new experience conditions are established (such as the virtualization process, virtual presence and augmented reality)” (p.63).
Redefining the term and adapting to our now augmented social realities is bound in leading to new processes that “affects not only the subject’s experience but also the very definition of matter.” (p.72) as Almeida (2016) points. This ultimately should result in a process that has to take in consideration the total dissolution of digital into the physical world when screens blending of digital matter, “a new layer that intimately merges with nature” (p.73).

Another interesting perspective on space is Zunthor’s in the book “Thinking Architecture” (2006) where he defines spatial composition in two basic ways: the closed architectural body, isolated by the space within itself; And the open body, an endless continuum that embraces an area of space, an undeniable holistic approach in a field where it is impossible to deny filled with rational definitions and functionality. Maybe Zunthor highlights that the narrative should be on material experience and that would ultimately help to provide identity in what the author concludes as a way architecture could contribute to purpose and meaning.

A more comprehensive view of contemporary space in cities demands its own new set of definitions and functionalism. It is clear architecture field should not be alone responsible to define it perhaps this lack of humanism is partially responsible for the creation of non-places.

**Nonplaces**

Nonplace is a term introduced by Webber (1964) describing places with loss of meaning. These places were first seen as modern approaches of the urban space by introducing a myriad of new elements and services. A world supplied by extenuating consumption habits driven by shopping malls, highways, airports, train stations where services grew exponentially within a city and those, in fact, were greatly responsible in affecting deeply the connection between people and space.

These demands in new forms of classification and new kinds of anthropology now face a bigger challenge – by the tweaking, virtual
realm.

Author Tim Cresswell in the book “What is Place?” (2003) summarized the process of current dissolution of places in respect to people, summarizing it in three characteristics:

1. Speed up communications and information flow – an overwhelming bombardment of images of spaces and time.
2. Diminish of the physical planet by the time-space cognition changes, meaning less spatial awareness.
3. Increasing of individualistic habits, social relationships in decrease

Those are important in understanding this shift of place contextualized previously as a mere location, to a place filled with meaning and attachment feelings.

For other authors like Auge (1995) nonplace in pure form doesn’t exist, but instead, these provided constructions are a result of modern society – Supermodernity. For him this transformation of perception is an important aspect because it leads to what Arefi (1999) called a proliferation of secondary (instead of face-to-face) contacts, due to the emergence of cyberspace that afterward affected “communal ties and bonds” (p.181) that were once considered the main characteristics of “place-bound communities” (p.181).

Arefi (1999) continues referring to other characteristics by Auge (1995) when writing about changes that emerged in this scenario like increased loss of connectivity and change in social obligation (p.181) and the important aspect in here is that even though designers are aware of these losses there’s a need to analyze these new meanings brought by new media context because its often the case new demands and reframing elements are put.

In the pursuit of connection, we must take a look again on concepts of place and non-place because optimally they should not exist together. Important elements as a sense of belonging, contextualization, and harmony enhance the capabilities of a successful livable
context but they should intertwine with technology organically. Arefi (1999) then concludes “Loss of meaning not only indicates a major paradigm shift in urban form but also reflects how people’s perception of attachment to place has transformed over time” (p.183).

**Place – Social Cognition and Experience**

Place refers to a specific location according to Hubbard (2007), where space is the environment in which we do things, where we “survive”, this poetic framing is addressed when giving meaning to these spaces and their becoming of a “place”. Tuan (1977) points out that within space, place is where objects define the space, giving them personality and geometry. Relph (2016) see place as the interaction result from 3 main components: The physical, the activity, and the meaning.

Since place and non-place don’t co-exist, these different concepts were important to define distinct worlds – in which social cognition and experience have a crucial role. The understanding of this leads to the clarification of societal changes around us; How we live within times of mass information, loss of social culture understanding – leading to a deficit in our attention span. The way we seek information is by matching it with our relevant interests which directs us to gaps of miss out on information of what is unexpected, less predictable or from outside our controlled realm. Chan (2016) summarizes the phenomena by explaining we may miss now tastes and interests in which we could discover new ways of being.

Lynch (1960) raised these concerns already much before the contemporary dilemmas in the book “The Image of the City” by examining the human-environment interaction through the perception of people regarding the elements of the urban form, Balula (2011) iterated on these transformations by presenting a timeline of events and causes that led to the actual scenario (Fig. 2). The sociological loss terrain is important to be analyzed as it refers to the experience of citizens and societal changes, in the next paragraph I introduce an analysis in regarding of place and identity.
2.7 Place and Identity

When talking about place, we have to integrate the concept of built heritage in it, cities identities are formed by the urban environment and they are in constant change, transforming and developing through time. The built heritage is important for cities because it reflects these changes as they construct a sense of identity. Gospodini (2004) gives an example based on the city of Bilbao, in Spain. The efforts in modernizing the architecture of Bilbao were in combining the historical sites with modern architecture. The author found out that this combination is shown as a sign of identity – as both characteristics – the old and the new – were identically perceived by both its inhabitants and tourists. One example of identity of a place association is made clear with the case of Guggenheim Museum – ranked the best regarding “the meaning of space in the context of Bilbao city and/other European urban network.” (p.242) exemplifying the similarity and importance between both concepts – place and identity. When we take identity as a proven fact of place we start to think towards resignification, both of cultural sites and the enhanced ones – amalgamated by technology.
2.8 Sense of Place and Resignification

The major transformations brought by the diverse components of place have pointed out how placelessness and non-place should not coexist. In the (Fig. 3) these characteristics highlight their differences and the importance of meaning. Arefi (1999) claims a classification is important as it could lead to characteristics essential to “design places not just as locations, but based on how to connect them” (p.191).

Further discussion often leans on identification, the individual with Space, sense of belonging and meaning of a place. Arefi (1999) refers to the importance of it when states that “the debate surrounding rootedness, sense of place and manufactured meaning captures the argument regarding the transformation of the meaning of place” (p.183) and calls for an enforcing of “standardizing global forces that have significant implications for what constitutes the meaning of place” (p.184). Those globalized forces that are now standardized landscapes would culminate in defined inauthenticity described by Relph (1976) and in Jacobs & Appleyard (1987).
When talking about inauthenticity as a flaw when designing places, the context of technology advancements comes to picture. Even though Arefi (1999) highlights the efforts of “neighborhood activists and those concerned with the fate of historical and cultural assets of old neighborhoods” (p.185) in the construction of the sense of place. Technology nevertheless is still present as a challenge when creating meaning in urban landscapes. So maybe focusing in rootedness, in regarding the advent of new technologies, a gap that exists leads us to the question: “how to enjoy the fruits of progress while maintaining cultural and spatial identity?” (p.189). The concept of resignification – giving a new meaning to something – could then be explored as an answer to this question. Maybe by resignifying urban landscapes, both old and new, and within the context of architecture or new media, the answer to contextualize the sense of place within cities is delivered. It’s nevertheless important to explore new media technologies and in the next chapter a more structured definition of New Media in which I try to identify it with the sense of place and play strategies in the context of resignification.
3 NEW MEDIA

In this chapter, I review different definitions of New Media and how its connection with Play could lead to a strategy and answer for resignification when implementing technology in urban landscapes.
3.1 Importance and Definition

Manovich’s defining work “Language of New Media” (2001) is the basis on how I will frame new media for the subject of urban design, in his book these principles of new media constitute the core characteristics in which will serves this research as directives chosen to classify their appearance in urban space. They should not be seen as absolute but a tentative of generalizing trends regarding culture digitalization sphere. The time frame of those also should be understood after the post-industrial change in economies and for that reason, they also look like industrial processes at certain times.

1. **Numerical Representation**, that refers and states that new media is composed of digital code hence can be described as a mathematical function undergoing some algorithmic manipulation. It’s a conversion from analog to digital form quantified by specific units, space and time.

2. **Modularity** Refers to a sort of rhythm, it is composed of a similar structure of a fractal and its structure resembles it because of its infinite recursion pattern. Very similar systems nest inside each other adding up the level of detail and shaping its complexity. For Manovich this is an important aspect as the creation of objects is less important than arrangement and differentiation of them. New media comes bundled with “developer toolkits” and their own databases which trace the paths and are often seen in the result of new media works, leading often to predictable results and boundaries.

3. **Automation** The defining method for “creation, manipulation, and access” is determined in the automation, with indirect human manipulation and access thus filters, effects, tools are predetermined and transform the object of the work into a piece of art. AI plays a larger toll establishing new divisions between human and computer interactions (and a more automatized result), filters, search engines are also a big part of the processing of the data.
4. **Variability** Refers to the “potentially infinite version” that can exist in an object. Regarding computer program variables replace constants, data is separated from algorithms but also the variability could be limited to the selection of these pre-conceived forms, pre-packaged systems.

5. **Transcoding** During computerization processes that transforms media into computer data the term translates as a form of “reconceptualization” mixing the “blend of human and computer meanings”, a movement of data between two distinct formats.

Manovich foundation refers to the influence computer plays in culture (and vice versa) therefore having in mind this embed relationship when creating new frameworks for technology-enhanced dispositives turns a crucial element and sets a tone for further understanding, assimilating and further development that new media brought to urban landscapes.

In the graphic (Fig. 4) as a means to explore the concepts created by Manovich in regarding of **MEANING** and its importance in defining **IDENTITY** and **PLACE** and its capacity to generate context when **RE-SIGNIFIED**. I position 1) Numerical Representation as a component more of place and meaning – it states the nature of the work being either analog or digital and for that reason classified as a basic principle. 2) Modularity and 3) Automation have a similar position as they add complexity to resignification (its recursive character) and rhythm to identity but also 3) deals with the state of AI and its data processes, taking an important role in defining the significance but less authorship in terms of its own identity. Followed by 4) Variability, that for the perpetual change of places could add new meaning and consequently identity to urban spaces and concluded by 5) Transcoding being phenomena blending human and computer, hence the optimal resource to both identity and resignification outcomes in the context of new media work in places. With this categorization, I aim to openly classify this framework in the context of contemporary cities.
3.2 Impact of New Media on Space

The growth of media brought new challenges to the notion of it. The implementation, due to its rapid expansion, created barriers in designing strategies and methodologies. The variety of media brought enhancements and new ways in shaping a city by its form but on the other hand, this novelty made it difficult when designing thinking about which set of tools to utilize for cities. Existing tools of new media used in urban spaces can be categorized into four kinds – but I clarify that this classification requires close attention and a further
contribution from both architects, designers, and technologists:

1. **Tools for resignification of urban landscapes**
2. **Tools for enhancing public existent systems**
3. **Tools for interactive and experience city landscapes**
4. **Tools for the creation of meaning in the context of cities**

Technology and the design of new media tools, when allied with urban designers, are not sufficient guarantees of success in projects. Digital literacy, a term claimed by Eshet (2004), is an extensive and multidimensional concept, comprised of technical, cognitive, motoric, sociological, and emotional aspects, being it so diverse requires specific planning, but it is presented as an important tool to be developed. Placemaking is another theory, in which human-centered design is applied to city planning, it focuses on holistic values of happiness and health of its citizen, working with locally based assets in contextualizing public spaces. It could be seen as a valid approach regarding of technology advancements as it is also focused in promoting people’s well being – as urban design strategies when implementing new media tool have to be diversified in order to acknowledge systems change.

The problems with actual digital platforms are their constraining regarding affordance because of its rigid frameworks, often neglecting people’s ability towards creativity and appropriation of those. Waldheim (2012) goes further and argues that “the impact of digital media and culture may be significant, an epistemological shift similar to the importance of the development of linear perspective in paintings of the Renaissance period” (p.22) stating the need of further investigation on the results of digital technologies in societies.

Nonetheless and regarding design centered, like placemaking, strategies are needed in order to mix top down and bottom up agents in these new models for urban development and governance, diminishing then this impact in redesigning new paradigms for city making in the constitution of changes in spaces caused by new media technologies.
3.3 New Media Changes in Spaces (Or New Media and Creation of Possibility Spaces)

Already in the 1960s, with studies by Lynch (1960), the human-environment interaction was studied through the perception of the elements of the urban form, for that reason the further impact of these studies contemporized for the actual days are so important and crucial to indicate how these interactions occur or might occur in the near future.

According to new media theorists like Houghton (2010), the installation of physical infrastructures shall enable both the digital functionality and the visualization through the use of digital screens. The author refers to “Urban informatics” as the new layer of information about our environment, as means of “study, design, and practice of urban experiences across different urban contexts” (p.2). These surely create new opportunities of “real-time, ubiquitous technology and augmentation that mediates the physical and digital layers of people, networks and urban infrastructures” (p.2) but must be carefully analyzed both in means and meanings.

One important raised question upon those means made by the authors Hampton, Lee & Her (2011) is if we can use these developments to effectively produce change through urban design by its physical structures developing “socially cohesive, liveable, sustainable environments” (p.1032). The answer seems to be certainly yes, but at what costs? And how could we prevent these exponential possibilities not to fail and interfere with the work of modern societies?

Moreover, new media should afford network diversity. For Hampton, Lee & Her (2011), the problem from New Media perspective is with affordances, and the lack of it, because networked individualism fails to recognize the continued importance of place (and therefore its meanings), for the organization of personal networks. In the opinion of authors, this inadequacy happens as a result of the pervasive
nature of these technologies. Hence the necessary shift from new media spaces into new media places pursuing meaning, an important shift focus on affordance from its initial stages of implementation.

One fear that rise from the aspect of network societies is the shift change between communication physical to virtual, assuming this as a duality, that is already present in our daily lives and impossible to avoid in its context. Is also a counterpoint that in order to advance our mechanisms we have to address the point of affordance in the use of public spaces. A place of use, in an affordable way, can establish a powerful mechanism of integration between society and its inhabitants, shaping the future.

3.4 New Media & Society

Poole (2010) claims we are now experiencing an era of persistent identity because we don’t have a separation between our online persona et/or avatars and reality. Meaning our identity is constantly on. Wilson & Flores (2016) says “almost all our movements are routinely and smoothly monitored while we interact with CCTV cameras, withdraw money from ATM machines, swipe identity cards for entering buildings, and buy goods and services using credit/debit cards” (p.89). The author continues stating that within a “highly digitalized society, our identity is key to giving us access to a growing range of services and benefits, thereby increasing the need to manage our identity” (p.89) which bring us to this uncanny duality, which one of us is the real self? And further, which one of our selves shall remain in this pervasive change within spaces?

New technologies in the era of digital networks, interfaces and mobile communications are not only intensifying our physical experience but creating new ways of participation. New media per se has been taking its toll, generating new bodily knowing and tactile communications as said by LaBelle (2015). The new emphasis has been enabling us to be present in many different places at once and being part of a greater contextual “environment that collates more
and more information and input, one is situated as if in face-to-face relation though within multiple and simultaneous instances.” (p.276). This proves that the significant rise of location-based applications can transform the urban environment substantially, and the gamified environment is an effect of location-based applications that are often promoted as enjoyable ludic experiences but instead often exposes us – as they’re also mechanisms of surveillance and data mining in the opinion of Chan (2016), opening also a branch in disclosure of personal data and privacy leaks.

One can say that the advent of new media, in addition, also expanded the views on citizenship. Saskia Sassen on the book “The Global City” (2013) comments on the theme asserting it has been made more complicated; Diminished by ties to a single nation state the influx of migrations, reorganization of capital, transference of power and fluidity of economy. There is now a need for reorganizing what we call place, territory or even home. LaBelle (2015) follows on the same idea: “Such repositioning us symptomatic of transurban disruption, for it suggests a network of interaction and agency existing on top of the map of traditional borders, of both territory and identity” (p.267). This called now informal space is diluted as it is undefined by its informality and in definition, provoking “fissures and openings against the global economic structure” (p.267) and colliding single individuals and multinational companies.

The outcomes in such a complicated scenario are regarding transformations that could happen to identity perceptiveness when we mix between the now transformed urban environment and this new and integrated – globalized and gamified one? The cross between location-based applications and new ways of experiencing the real – dealing with disclosure of personal data and the enhanced environment when communicating with pervasive digital networks Chan (2016) bring us the need of reprocessing paradigms of new identities as well.
3.5 Placemaking and Play

Placemaking is not a new concept: it dates back to the 1960s when writers Jane Jacobs and William H. Whyte introduced ideas about designing cities for people. Their work focused on outlining important elements for the creation of vibrant social life in the context of public spaces presenting itself as an alternative for the loss of appropriation and affordance when thinking those. It is known for the characteristic affordance that enables citizens in constructing space. It is an important framework when thinking about the experience of citizen with the advent of smart citizens, an experience like described here:

We, citizens, create and recreate our cities with every step we take, every conversation we have, every nod to a neighbor, every space we inhabit, every structure we erect, every transaction we make. A smart city should help us increase these serendipitous connections. It should actively and consciously enable us to contribute to data-making (rather than being mere consumers of it), and encourage us to make far better use of data that’s already around us. (Haque, 2012, para. 9)

In Placemaking, one of the important pillars that could be used are the “language of play”. Defined by game designers it shows a crucial aspect because invites the interplay by definition. Words and images entice a set of mechanisms used by people to express attitudes, share ideas and to persuade others according to Daniel-Wariya (2016).

Another author Albert Rouzie (2005) urged that the field should “begin to consider play as a significant rhetorical element of composition and communication” (p.189) as the concept often takes place through a range of methodologies that sustain possible narratives and often include several forms of interaction:
Creative narratives can have a profound effect on how we experience knowledge (e.g. real time, interactivity, always-on, geolocalized, oversaturated, blasé), on who creates and manages meaning (e.g. humans and actants), and on what type of content is added or developed (expert and non-expert content; simultaneous emergence of bottom-up and top-down forms of knowledge). (Almeida, 2016, p. 72)

One advantage when defining the importance of play is their existing gaming methods and as said for Bogost (2008) “all of these gestures being made possible by a set of rules” (p. 120) and restrictions – that would help to frame a methodology. Following Salen, Tekinbas & Zimmerman’s definition of play “free movement within a more rigid structure” (p.304) would also help to suggest opportunities for creativity and expression within this structure.

Daniel-Wariya (2016) argues that “computational media create at least four important possibility spaces for play” (p.32) [...] “In these possibility spaces, play 1) creates endless repetition, 2) adapts and is flexible to customized situations, 3) interacts with non-human things, and 4) makes variation prolific and inevitable” (p.38).

By utilizing Manovich’s definition of New Media as something that “record, store, create, and distribute” (p.6), Daniel-Wariya’s concepts could then be extended in order to propose a new framework (Fig. 5) instead of “conversations of play [...] often limited to a single stage of the composing process, such as invention” (Daniel-Wariya, 2016, p.37) this would show how the terminology could be included also in the “gameplay”.

I propose that for means of

1. Production – means of creation/work,
2. Consumption – being it the public space per se,
3. Distribution – being it the inhabitant’s counterpart in it;
4. Storage – being it a reflection on how the work stands time and
5. Access – being it how public interacts or counteracts with
these new media tools, in order to create an effective project in the realm of public space. Iterating these categorizations created by Manovich and reframing new media theory instead of inventing it.

![Play Framework Diagram](image)

**Figure 5.** Based on Manovich’s framework a Play Framework Proposal.

### 3.6 Play in New Media

In the context of our working lives, people generally work towards that accomplishment of goals that are corporate driven rather than personal. In contrast, location-based games enable the player to exercise a more liberating agency within the structural limitations of the programming and software. *(Chan, 2016, p.131)*

Play is symbolized as an endless result of mixing media objects made possible by new media’s computability *Daniel-Wariya (2016)*. That thinking arose out of two parallel movements according to *Manovich*
(2001), “the development of modern media and the development of computers” (p.23) this intrinsic wave of developments for the author means that all media that exists could be redefined into numerical data making the computer, a cluster for all these categorized elements (store, access, produce and distribute) to meet. Following Manovich's categorization, here paraphrased by Daniel-Wariya (2016) helped to distinguish between old and new media making it possible to be specific when defining characteristics of the new in which the author concludes it led to the creation of “large possibility spaces for a language of play” (p.38). Daniel created then a categorization by itself as a resource of meaning where “play—like image, sound, and movement—is recorded, stored, accessed, and distributed through computerized media in the form of multimodal textual products like video games” (p.38).

While for Salen et al. (2004) the definition of play being “free movement within a more rigid structure” (p.304) could help “visualize how play shapes and forms [...] within a variety of expressive mediums” (p.304) which according to Daniel-Wariya (2016) could then lead to four implications for methodology – borrowing the terminology from game design: 1) Play, 2) Possibility Spaces, 3) Magic Circles. These definitions of play introduced by Salen et al. (2004) suggests a new range of opportunities that once adapted to urban designing could lead to new creative methodologies. Daniel-Wariya (2016) claims that these would potentially be beneficial to implement in public space.

The ownership from bottom users helps play turns into engagement and it only depends on the openness of decision making – stakeholders to be prone of its ideas. Authors Schouten, B. & Waal, M. D. & Heerden, A. V. (2017) confirms that Play starts to become a mechanism to engage citizens in processes – enabling then as co-creators through gameplay and by doing that citizens would create meaningful contexts and social bonds – that we saw as required for the success of urban projects. Authors ultimately think that the “abound of groups of citizens that have turned away from centralized solutions” (p.28) would emerge, emancipating them and establishing a mechanism of creation of “ownership and meaning” (p.28).
The studies of cyberspace and virtual reality, on the other hand present a different challenge, as they were always “framed according to disembodiment and disconnection of the world around us” (Chan, 2016, p.129) but the exploration of Play techniques within the aim instead should be to create “mediated interaction” because that “cannot simply be disembedded from everyday life” (Tutt, 2008, p.1158) so AR (Augmented Reality) presents itself as part of the solution, when the digital layer is integrated and expanded within reality context “instead of having a clear demarcation between the space of a game and the physical environment” (Chan, 2016, p.130).

The question regarding play in regarding an architecture enhanced by technology at the center of people’s experience is that whether organizations would use it to make people support their interests instead of enabling “human experience, experimentation, and possibility” (Daniel-Wariya, 2016, p.45), making it hard to grasp the future of technology in regarding of society and cities and the subject of the next chapter.
In this chapter, I analyze how identity and attachment influence technology in regarding societal changes within cities – and how the concept of resignification and meaning was impacted by it.
4.1 Cities

Cities and Identity

It has been said that one often missed gap is the lack of identity modern cities have been suffering from. While place identity is highly important in both social and cultural aspects of urban areas, according to Kaymaz (2013) environmental psychology could explain it through lack of attachment and no sense of belonging, naming these “global cities”. The author states that “people intrinsically strive to develop a sense of belonging to a place” (para. 5), therefore in these contemporary soulless cities these bonds are cognitively difficult to be built.

Complex urban identities are a result of also complex relationships between individual self, the place identity, and its urban environment so the importance that meaning and belonging have to perceive urban identity requests “coherence in urbanization process” (Kaymaz, 2013, para. 40). Identity and identity of a city takes a central role in both the problematization and solution of modern city strives, when defining identity, an important aspect for Castells (2009) its the source of meaning and experience for citizens while Gleason (1983) complements this by defining that it is shaped continuously through a persons life cycle but highlights that it demands the social aspect – making it clear that while identity relies on evolving interaction with others, it is also what defines it. So while the concept swings between the idea of the uniqueness of a person and acknowledgment that engaged interaction are necessary, meaning and experience shape its concept defining its dynamic phenomenon and why identity can be mixed within concepts of place and space.

While identity of a person is important Kaymaz (2013) enumerated five crucial elements to define it.

1. Uniqueness of a thing or a person is central to the identity concept.
2. Identity requires a comparison between things of individuals.
3. Meaning and experience play an important role in the percep-
4. Identity is never a stable construct; on the contrary, it is a continuously evolving and dynamic phenomenon.

5. Identity involves interaction with others. *(Kaymaz, 2013, para. 14)*

Therefore, while identity is a concept analyzed and meant for individuals within a space, it could also determine the boundaries between it and place attachment. Authors Scannell & Gifford (2010) defines place attachment as: “a bond between an individual or group and a place that can vary in terms of spatial level, degree of specificity, and social or physical features of the place, and is manifested through affective, cognitive, and behavioural psychological processes” (p.5).

According to Finch (2012) place attachment is associated with meanings and experiences that often involve the need of other people involved – establishing a bond or relationship and this point defines the dimensions in which the individual is connected to its context. Scannell & Gifford (2010) proposes a framework of three dimensions of attachment (Fig. 6):

![Figure 6. The tripartite model of place attachment. After Scannell & Gifford (2010, p.3).](image-url)
Cities of the NOW

Cities are places of contrasts at all levels, mixing and divergent; they bear both opportunities and failures, comprising different inner worlds. Understanding the city is to understand the visible and invisible layers that compose and represent its environment. (Lima, 2016, p.51)

A city is an organism with its own features and characteristics, intrinsically the context of its inhabitants influence how they live and perceive in the most diverse ways. For Castells (1997) “The city’s spatial structure, as well as its planning (...) becomes more entwined with knowledge, information, and technology.” (p.15) proving this diversity, he then continues that while cities were always systems of communication-based on relationships between individual identities, and communal parties. They always shared their social representation and their ability to organize itself materially through its “forms, in rhythms, in collective experience and communicable perception” while the result “produces of sociability and integrators of otherwise destructive creativity” (Castells, 2000, p.111). So if those were the natural outcomes and what to expect of cities, how does technology has changed in the cities of now?

In my opinion, nowadays cities face a change of paradigm of what they are – to what they should become. For Lima (2016) The “digital city is like an information ecosystem that is constantly changing, yet which is also trying to adapt to as many users as possible.” (p. 55) which is merit but also a flaw because individual characteristics differ a lot from society to society, influenced by many factors. The new ways of interpreting the meaning of technological cities seem to create the called “invisible cities”, neutral spaces neither in the present nor looking at the future. Those seem to be the reality of cities of the “electronic information age” (Mitchell, 1996, p.5).

In this sense Shields (2014) says: “Cities are similarly understood as an abstract totality that is more asserted than experienced empirically all at once as a whole unless, for example, it is viewed from a great height. This turns the city into a mere diagram of itself.” (p.41) and by
using the idea of perspective Boj & Diaz (2008) complement claiming that the use of augmented reality systems will enable new ways of understanding the city. The question is how city space will respond to the fast assimilation of “technological devices in urban spaces, the advances in ubiquitous computing and embedded technologies” (p.145). They make the case for new developments in mixed reality technologies that bridge the digital and physical worlds as a possible answer. The two-way interaction enabled by three-dimensional computer graphics, creates a new configuration of hybrid space between the physical and the digital – giving birth to a third city space in augmented reality.

Landry (2017) points out that the digital helps to make sharing economy possible. It is true that a multitude of apps from car-sharing to swapping and buying from locals producers enables new dynamics. Those are features only of technological enhancements but they also involve access to private data creating a loop between citizens and decision makers. The author claims that instead of dangerous this could also reinvigorate democracy, empowering collaborative governance models.

For Arefi (1999) the problem doesn’t lay on the technology aspect per se but instead in not recognizing the importance of meaning in the context of cities:

The rejection of the past, glorification of the new, attributing urban ills to Â the old and the emergence and pervasiveness of cyberspace not only contributed to the proliferation of inauthentic places but also promulgated the idea that space and place were of diminishing importance. (Arefi, 1999, p.185)

The meaning of these technological cities, the cities of now is seen in Landry’s (2017) final thoughts: “Perhaps the city is a software, as its operations are completely software-driven” (p.12)
4.2 New Media and Affordance

Affordability is a term often misinterpreted that tells about the clues on how to empower citizens initiatives. Schouten, B. & Waal, M. D. & Heerden, A. V. (2017) claims that its “platforms provide new affordances for bottom-up self-organization around common concerns” (Pag. 28)

When talking about the relationship between city making and new media, smart cities is often the first term that comes into mind. The interplay between old and new, technology and space, private and public when the aim is to address new models of development, could lead to new forms of ownership and management of infrastructures. Such requests only emerge if the layers established by new media and urban design rely on affordability.

Placemaking is often a planning strategy that relies on affordance, as it enables citizens to creates a context based on local assets of places – a quality is often neglected by new media implementation in the creation of smart cities, affordance becomes capital mechanism which cannot be neglected.

4.3 Smart Cities

The overwhelming presence of technology-based sensors, data, and AI brought dilemmas, on how to deal with this pervasiveness?

The means of interaction, algorithms and collection data used in the discourse of smart cities have been mostly top-down as they’re led by capital from organizations – and examples of misuse of technology or at least some machiavelic use of it. Technology in service of interests of governments and corporations instead of focusing on improving life for citizens exemplifies why this discussion is so important.

The common claim is that smart cities are causes and caused by
globalization but on the contrary, Kaymaz (2013) defends that “although urbanization has some negative impacts on the sustainability of the environment, what really raises the concerns on the identity of urban areas is globalization process” (para. 41). The author continues by stating about the importance of bringing the studies of the phenomena, out of economic studies. As the urban environments not only show patterns in global production and consumption but are themselves a very important and a product of “global culture”. For Kaymaz (2013) the key consequence of smart cities is that they led to the homogenization of the urban landscape:

Global brands are everywhere, not only selling or presenting or serving their products but also bringing their unique architectural patterns, signboards etc. to wherever they open their branches. One can easily recognize a McDonald’s shop or HSBC branch any city in the world. (Kaymaz, 2013, para 48)

The concerning aspect in this scenario is the lack of cultural diversity when this cultural homogenization phenomenon influences a change of culture and citizen lifestyles, led in a global world.

Junkspace theory by Koolhaas (2016), is an answer to what the author calls “consumer architecture” and a valid counterpoint to smart cities. The author talks about how the individual processes exposed architecture to “loud and empty narratives” (Johannisse, 2017, p.9). And adds that junkspace can be read as smart cities – following author words “Junkspace pretends to unite, but it actually splinters. It creates communities not out of shared interests or free association, but out of identical statistics and unavoidable demographics, an opportunistic weave of vested interests” (p.23). Emptying the experience of places, not recognizable anymore and leading to isolation – “Real life is inside, while cyberspace has become the great outdoors” (Koolhaas, 2016, p. 37).

It is true that the changes brought within smart cities will continue to diverge how people experience their contexts because of the stimulus changed with the presence of technology. It is hard to quantify them but a reminder is to understand that the layer of technology
can’t surpass the fact that the experiences are still there. To consider these aspects, hidden from surface Stephan Petermann & Sander Pleij writes in the article “The Smart Cities Beta Testing”:

Paradoxically, compared to other successful infiltrations of smartness into our private lives, the smart city largely remains physically absent. Its most notable presence is still virtual” and that reflects the reality when we realize the smart cities are often sold as all around us, through media channels, but are often not really there (in practical terms) for what the authors noted “while they might exist, the slide deck still feels like its ultimate metaphysical form – an advanced piece of performance art. (Peterman & Sander, 2017, p. 64)

What the author counterposes is the fact that both the empty experience argument by Koolhaas (2016) and this one by Peterman & Sander (2017) leads a good discussion on the existence or non-existence of smart cities, but surely state their influence on our daily lives. A good discussion example is the city of Barcelona, in Spain. Where its massive investments and propaganda towards technology enhancements both from municipality (including private and government ventures) is supported, leading to the thought that maybe we have to wait and see what happens, or in the words of Peterman & Sander (2017) “intersect with the long-term supposed paths of smart evolution [...] If they really meet, where?” (p.64).

Lima (2016) states that digital cities are similar to an “information ecosystem that keeps changing, eliminating those that can no longer adapt” (p.55). The invisible threats of the “invisible city of the twenty-first century [...] a city of the electronic information age” (Mitchell, 1996, p.5) creates also the definitions of digitally mediated environments and those shape custom types of lives in communities. For Lima (2016) “this becomes important for understanding the possible impacts that informational commodities have in the experiences” (p.55) to what Mitchell (1996) concludes talking that these pervasive environments end up shaping and creating a layered texture in our lives.
It is clear that the physical and virtual challenges brought by digital media changed our desires, actions and therefore realities. A challenge that, still according to Lima (2016) was once formed by “potentially developing memorable architectural environments” (p.55) can still be the answer. If technologies could be mediated, within the time they would enable a new understanding of places and the creation of a new social interaction space. A space in which media will flow, grow and populate entirely our lives.

### 4.4 The Creation of a New social Interaction Space

In the book “The Production of Space” (1991) Henri Lefebvre says urban space is a complex social product, characterized by the production of its spatial practices. Within its practices, the technology is not meant to substitute human touch, contact, but instead to upgrade upon these – proposing and establishing new forms of interaction. A square with a media facade or sensors that track data is not a modern place only because of the addition of these technologies, but instead, a modern square should be a place that enables citizens to integrate and build stories, creating new meanings backed up by technology means.

The new urban landscape has to shift from the previous ideas of interaction to an updated version that pays attention to the fact that these practices have now to be mediated through technology. The relationships between advanced technologies and physical spaces for Hall (1997) is made “by our use of things, and what we say, think and feel about them – how we represent them – that we give them a meaning” (p.3) these meanings and practices of now are mediated in new ways. Certeau (1988) exemplifies that the act of walking is to cities what speaking is to language, demonstrating the importance of the human in the processes and the author continues saying that space becomes individuals personal statement – a form of expression.
Understanding the individual in context helps in creating the emphasis necessary in a framework that could be based on new models of social interaction. Chan (2016) suggests three key themes to redefine “technological mediation of spatial experience” being them “place, play and privacy” (p.125).

Fischer et al. (2012) exemplify the work of Lozano Hemmer as a good example that could be contextualized as “play” framework – because of its relations between architecture and their intersection with technologies. Mixing public space and audience, a performative art piece is created by Lozano’s facades. They range between 400 m$^2$ to 1800 m$^2$ and the optical effect by making them at the ground level doubles their impression. Fischer et al. (2012) point this out as a crucial aspect because establishes a strong connection between facade and interaction space described in his words:

“Strong floodlights are positioned at the opposite side of the plaza directed towards the façade. These allow people to cast shadows of 2 to 30 meters in size. On the same façade, multiple projectors display people in various positions that can be revealed and mimicked with one’s shadow silhouette. If all positions have been mimicked the projection changes. This technique creates an interaction field where passers-by automatically become part of the installation as they enter the plaza, willing or not.” (Fischer et al, 2012, p.6)

The strategy is successful as it allows the continuity of the performance even without the engagement of public making the non-participation a vehicle of participation and integrating fully space and practice in which Schouten, B. & Waal, M. D. & Heerden, A. V. (2017) defines its importance “Addressing the interplay between empowerment, digital technologies, and city making highlight the intersections between top-down formal planning regimes and bottom-up appropriation through social organization.” (p.28)
4.5 New Concepts of Space
(Towards Future Making)

Manovich (2006) says augmented spaces are custom user-defined where the physical space is added by a dynamic change of information. These augmented cities that convey a new reality – of augmented spaces should be filled with meanings in order to work for the citizen. Regarding future making, a conceptual space then has to contextualize different aspects of technology. One proposal framework brought by (Houghton, 2011) is to classify the ICT (Information and Communications Technology) impact through four areas on the urban form:

1. The layer of digital information – augmenting space;
2. Physical installations with particular reference to large urban screens;
3. Social networks and communication;
4. Community participation in planning – engaging the networked audience. (Houghton, 201, p.3)

To elaborate on theory of these new spaces, now surrounded by an informational layer, Johannisse (2017) comments: “If space is a continuum, autonomous space is the realm where the human individual will meet and interact with its automated and self-learning counterpart” (p.8) this proves that our concept of space changed from physical to an enhanced. And so it changed the need of physicality and interaction – taking different shapes both increasing “presence” of virtual space and by globalization phenomenon – that shrunk cultural and physical boundaries. Distances that are no longer are defined place distance, beginning or ending, as they become less relevant and the world itself feels smaller – while “cyberspace is increasingly being developed as an integrated part of our physical lives” (p.8).

The concept of place within space also changed, as LaBelle (2015) brings to attention by commenting about its intensification in regarding places that changed from “singular to transurban, from local to multiple” (p.267) recalling the concept of the global city defined
by Saskia Sassen previously. Where according to her, a global city complies economic flow being it a transnational product – defined by multi-corporate accumulation; and movement of capital. Other characteristics also define a global city: “networked telecommunication systems, and the general reality of displaced borders, dual nationality, and migrant workers” (p.267) and those are all indications of a contemporary society. These flows, according to LaBelle (2015) continue and reached a point of causing “fissures” of traditional structures of national power – being responsible also for the vanish of borders and changing reference about citizen-sovereignty in the creation of a “global soul”.

In this context spaces of the new cities demand faster responses. Agile approaches as technology advances at a faster pace. Robinson (2013) comments that “traditional approaches to software development attempted to address that challenge through the lengthy analysis of stakeholder requirements” (para. 4), while in contrast, a faster response would present quickly the first solution to stakeholders making it possible to be corrected based on their feedback. Aiming that a final solution lies in this co-creation through an increase of iterations.

Agile approaches are key figures as they grasp “the fact that when we start to create a new system, we don’t know exactly what the final result should be.” (Robinson, 2013, para. 4) and therefore is self-evident mistakes will happen in the creation of these new space, as Benjamin Bratton (2017) concludes the following pointing out that maybe the solution would be to embrace the digital realm as the new normal:

In some ways, the digital-urban mix is like the ‘horseless-carriage’ metaphor for the car: when something new has emerged, and we are not quite sure what to make of it, we refer to it as a hybrid of familiar things. This hybrid language allows us, at least for a moment, to believe that we have made sense of the new, but eventually, it invites confusion and frustration. Enough with the hybrids! Instead of marking things as exceptions from more familiar patterns, we need direct terms that measure things as they are, as ‘normal’ if not desirable. (Bratton, 2017, p.60)
4.6 Radical Experiences (Towards Future Possibilities)

In Chapter 4 “From the iron cage to the mediated city” of the book Digital Futures and the city of today: New Technologies and physical spaces (2016), Cristina Miranda de Almeida has a compendium of practices called “The Model of Radical Hybrid Experience” that shows interesting trends regards future making. The clarification of those would present clues on practices needed to elaborate and help in the construction of the intertwined space between new media and architecture. Those are:

**Physical-digital blending**
“The merge of physical and digital layers of data into the physical environment enabling reality to be augmented” (Almeida, 2016, p.79), that has been said numerous times in this work but with the advent of an ubiquitous computing that is pervasive and invisible and an additional everyday where more wirelessly, geolocalized and tagged networks break the frontiers between all organisms making it blurred, being it biological, mechanical or electronic.

**Global-local merging**
Continuous access to global, indicating nonstop and globalized forms of interaction. With physical objects and environment electronical-ly coded, tagged utilizing RFID, QR codes and upcoming advanced technologies will open up the “possibility for cities to integrate an emotionally subjective layer into the urban tissue” (Almeida, 2016, p.79) that will directly enable and integrate social networks into urban contexts erasing the barriers within organization and institutions, the private and the public offering a before inconceivable change to include “bottom-up creativity and knowledge construction processes in the core of everyday life” (Almeida, 2016, p.79) that will be backed by a merged layer of mobile social media. As a consequence of these aspects, the physical becomes enhanced shaping new forms in this new “strange reality” (Almeida, 2016, p.79).
Universal practices of knowledge construction
A world where humans and non-humans (i.e., computers utilizing AI) are producing data and sharing content. New challenges on media illiteracy but also important opportunities of inclusion, with the advent of a cloud computing network and its “pervasiveness of knowledge” (Almeida, 2016, p.80) this intermix will create also new contingency on “interdisciplinarity, multidisciplinarity and transdisciplinarity” (Almeida, 2016, p.80).

Dissolution of interfaces
Abandon of interfaces as they’re absorbed into the environment in what is a “result of a process of miniaturization and pervasiveness of micro-electromechanical devices (MEMs) such as smartdust, smart motes, nanobots, artificial intelligence, bio-inspired organisms, smart micro-organisms and drones” (Almeida, 2016, p.80). Making at the same time a more invisible technology once it is embedded in “tangible natural or artificial environments that substitute for computer screens” and as a consequence, a technology making itself more invisible and prevalent.

First person perspectives
The last innate trend is the evolution of the meaning of “first-person perspectives” regarding the use of these advancements. The author talks about “the uploading of date – personal biophysical (biometric) data onto online self-tracking platforms”. According to Simmel (1903), alongside the liberalistic ideal and the division of labor brought about by the Industrial Revolution, individuals have been liberated from historical bonds, opening the door to the emergence of individual expression as criteria of value.
In this chapter, I reflect on the reasons for doing this research and how meaning and resignification were implemented in my practice.
When I chose to analyze my own practice regarding the use of them entwined with public space and public realm, I often saw and thought (maybe naively) a city like Helsinki is an “easy fix”. After spending most of my life living in Sao Paulo, an underdeveloped capital bigger than many countries and by having lived in other bigger centers like Toronto, Montreal, Barcelona, Milan, and Copenhagen. I think it was clear to me that the contrasting characteristics of Helsinki made it easier to foresee the necessities of public spaces and quality life and how interventions (either promoted or exponential) are a necessity for making a living environment. In that aspect, Helsinki taught me they lack because many other factors play – from weather restrictions and cultural differences to prohibitions due to bureaucratic regulations, prohibitory initial high investments (for smaller players), private interests and societal resistance.

I still like to recall my first times here, the first months, when looking for benches (in parks, streets, etc), trash bins (walking from busy roads, bus stops, next to pedestrian ways and parks) and water fountains (and my memory from living in Italy and Spain where regardless often quality-suspicious, water fountains were always available), I thought solutions for these were close and reachable, even if they were not, but instead these thoughts were important in defining what public realm means (at least for me), and how to proceed with my research, work, and upcoming practices. I think back then I was already trying to create meaning unconsciously out of public spaces (Invisible Helsinki), resignification for me was a means to transform a not usable place into usable one (Conducting Senses) and smart use of technology when bringing attention to structural (Voices of Aalto) and societal problems (Invisible Helsinki) I felt I should highlight. It was a natural process putting “things into places” culminating to a bigger and expanded version of all I’ve been thinking about when doing “Reger a Paulista” back in Sao Paulo, my hometown.

For these reasons, I choose to present next and in chronological order Invisible Helsinki (2015), Conducting Senses (2015–2018), Voices of Aalto (2017), and Reger a Paulista (2018).
5.1 Invisible Helsinki

Problem: How to address minorities and enlight discussion in big cities about uncomfortable subjects? How to take a different approach to societal problems? How to tell stories that people don’t often read and see?

Genesis: Inspired by other projects HONY (Humans of New York) – http://www.humansofnewyork.com and SP invisível – https://spinvisivel.org, similar projects with an important social aspect, I thought “Invisible Helsinki” could be an addition to the discussion of what fragility, and for better assimilation I used the term “invisibility”, means. The goal was to reach and to tell different stories about people struggles and afflictions in a big city.

What: Invisible Helsinki was conceived as a platform to facilitate urban storytelling (promo video: https://www.youtube.com/watch?v=-RysrDZfPc4). It was made during a course taught by lecturer Andy Best, Media Intervention in the City, and in cooperation with Kampin keskus, where they provided a slot of 10 seconds within a minute for a week., in the Clear Channel panel towards Narinkkatori (fig. 7). The brief regarding my framework for this thesis was: “How to better use available communication outputs of the shopping malls to create an impacting intervention that lasted for a week”.

Role: My role in the project was the concept Idea, art direction, co-production and website/content design. The team was composed also by Deborah Baik (Exchange Student at Aalto) and Journalist/Photographer Meela Leino.

How: We executed it by raising a pop-up studio (Fig. 8) next to Kamppi square for interviewing and photographing citizens keen on telling their stories. The images were then transformed into a 10 sec “teaser” video (fig. 9) shown every minute for a week together with other advertisers (6 slots of 10 secs – one minute in total) in the main facade screen of Kamppi square The catch was that the video wanted to bring
people to the website (fig. 10) where you could browse all the portraits and stories. From early on the concept was to highlight otherwise unknown citizens of Helsinki and their everyday lives.
Reflection: The project was successful in bringing a different range of age, stories, backgrounds and overall, characters to the highlight. With ages varying from the 20s to late 70s and ethnicities including locals, European immigrants and immigrants coming outside of Europe we interviewed and successfully portrayed different aspects of living in Helsinki.

I believe the confrontational faces of a stranger, being seen in the facade of the shopping mall were a key aspect that created an impact on how people perceives the other, extending people’s interests to the website where people could get to know faces that are not familiar, generating empathy when universalizing afflictions and themes.

Possibilities: I would continue this project by focusing in addressing minorities and expanding the framework to other formats/initiatives, like focusing on specific themes/problems in neighborhoods or addressing directly the population niches that are often excluded from main media channels.
Analysis:

Figure 11. Invisible Helsinki - Analysis of the work in relation to resignifying urban space and contextualizing meaning.
5.2 Conducting Senses

Problem_ How to resignify an urban landscape transforming it into an immersive interactive projection.

Genesis_ Conducting Senses started in 2015 and already had 4 iterations to this date, those were: The premiere during Media Facades Helsinki (2015) (interview video: https://www.youtube.com/watch?v=d4V5vmqaklk) transforming the mattolaituri in Merihaka into a stage where people interacted with a projection 100mts away over the coal hills in Hanasaari Power Plant.
A second in room/stage in Kellohalli for a music festival – VISIO FESTIVAL (2016) that happened in Teurastamo, a third in Vapaan Taiteen Tila for the AAVE Festival (2016) (Fig.12). A performance (on the night of arts 2016) and exhibition during the SYSTEMS III Exhibition (figs. 14, 15) that happened from 25/8–11/9/2016 in the Exhibition Laboratory, at the University of Arts Helsinki. As all four iterations of the project had different aesthetics and different interactions, our challenge was to present new content and improve upon each of the exhibitions.

**What**_ Conducting Senses is an audiovisual experience that makes possible for audiences to interact with large projection mapping in city landscapes, the core of the project is to reactivate urban areas resignifying them. Two infrared sensors enable the capture of a wide range of hands in three different axis (X, Y, Z) that we then transformed into four different audiovisual instruments (meaning people would change images and sound according to the movement), exploring the interaction between sound and light, people and architecture. Engaging the public into making a large scale public art piece.

**Role**_ Art Direction, “Soft Coding” in Pure Data (first iteration). All custom software created by Fernando Visockis with my help in creative direction. This project is an ongoing partnership with interaction designer Fernando Visockis.

**How**_ From the first iteration during Media Facades Helsinki 2015, A stage constructed in the Merihaka’s “mattolaituri” served as interaction spot and stage for audience to come and perform with the two hand tracking sensors (Leap Motion) built on a table where 4 people at time would perform independent visual and sound elements on the coal hill of the power plant. The distance projected were about 100mts away so we had one chance to do it with a 40k lumens (Barco brand) projector.

*Figure 13. Interaction / Participants; Conducting Senses @ Media Facades Festival & SYSTEMS III Exhibition.*
Figure 14. Conducting Senses @ AAVE Festival.

Figure 15. Conducting Senses @ SYSTEMSIII Exhibition.
Figure 16. Conducting Senses - Analysis of the work in relation to resignifying urban space and contextualizing meaning.
Reflection_ Conducting senses was born out of a framework created for the performance “Ramshackle Dystonia” (2014) by Fernando Visockis. In his performances with the use of different sensors, he performs an audiovisual piece with generative sound and image. My input was too rethink and expand this framework for a format where we could create the tools but the audience would “conduct”, play the experience. For that reason, we choose in the beginning instruments that had a certain range of play in which the audience would “feel” and learn how to manipulate having their own experience. The second layer of thoughts was adding the large scale projection, including then the spatial aspect and scaling of work in the urban space. The work has been created to transform the experience of play into an empowering tool mechanism for places, creating context and establishing the dynamics between city and citizens, people and their architecture surroundings.

One positive aspect was that it all felt organically and ritualistic, in my opinion, we achieved our goal of creating a piece that would stand for itself and could be enjoyed even if not “played”. The whole atmosphere of the first iteration of it proved that the interaction not only happened through the sensors but with the almost 200 people that gathered during our first night for watching the “performances” while enjoying the beautiful landscape in which it was built.

Possibilities_ We challenged ourselves since the beginning of the project as each iteration had different visual and audio characteristics according to the different contexts in which they happened. The resignification plays an important role when thinking the work for indoor or outdoor spaces, it is a matter of scalability and how the conditions influence in creating the best experience for audiences.

The expansion of the system could be done with some hardware/software implementation, at this point, the creativity is the only limit towards which surface and areas the work can happen. I see Conducting Senses as a joyful large scale art piece in which both citizens and cities meet and greet.
5.3 Voices of Aalto

**Problem** How to redesign the use of an architecture school courtyard (Fig. 17). A space designed by Alvar Aalto within the context of a design competition “A-Pocket” from Aalto’s University ACRE – Real Estate.

**Genesis** This project goes in the heart of the merging aspects I am interested in regarding the use of public spaces. The contextualization and opportunity to twist this structure, bringing a new meaning and function to a whole building (fig 18, 19, 20), without having to construct much or changing architectural aspects, within a context of a university in the expansion. The process led to questioning the wayfinding for new (and just moved) students as there was no communication between the inside to the outside, the architectural aspects of the facades don’t really differ, making it difficult to identify to which school the building belongs - a clear affordance problem.

It seemed like a good case for the implementation of more human-centered approaches where placemaking were our approach strategy and focus. The journey started with a course taught by this thesis advisor, Anna Kholina where the idea of this thesis also started. We used the structure of the course to deepen our knowledge in the theories of space, non-places, place, placemaking and play and that culminated with the participation of the competition.

**What** Voices of Aalto, 2017 | Is a project about placemaking, a proposal for the use of a courtyard in the architecture school designed by Alvar Aalto. We wanted to open up the university, making it more charismatic and enticing and the campus more visible, both physically and digitally, to facilitate these interdisciplinary matches. Adding aspects of appropriation (to solve affordance problems), creative meanings (to contextualize the architecture) and belonging. A dynamic and transparent context that creates new stories and is an informative platform for the school that at the time was in full speed transformation.
Role Concept Idea, Art Direction, Design. Together with architecture and spatial designer Miki Sordi.

How Utilizing modern urban design methodology theory we wanted to open up the university by creating a new campus meeting area, a self-sustainable one that could be used both in summer and winter, with events and communication qualities, creating an ideal hub for encounters that could shape the future of Aalto University.

In order to transform the space into a place we needed to have a curated program focused on communication and event making, that would be shown projected in the marble walls of the courtyard (and in summer with fabric panels covering those). That communication channel was a novelty that would potentially blur the inside-outside problem of communication adding a hang out space where students could spend time both to learn and to familiarize themselves with school activities. Those encounters would potentially blur cultural barriers, helping integration and therefore culminate to the creation of new stories, generated from these encounters. The fact that the courtyard and the whole campus lacks affordance is the starting thrust to enable the use of the three marble walls for communication. Whole new signage would also make the university marketing strategy more visible both physically and digitally what would culminate in facilitating interdisciplinary matches.
The built part of the project was proposed as a wooden stage with benches area and modular panel walls (fig. 18, 19, 20), with optimal use during summer and spring (fig. 21, 22), for the propulsion of events. Three projectors and sound system would be integrated into the benches and be responsible for the audiovisual part (fig. 23), creating context mostly when the light is dim.

Figure 18. Map with the proposal for urban furniture.

Figure 19. Perspective view on the use of the marble walls, covered by video projection.
Reflection The project was awarded an honorable mention (2nd prize) in A-Pocket competition that happened in December 2017. Unfortunately, maybe the investment and changes would require a different mindset from engaged stakeholders. The project winner has not been implemented either at this point. Nevertheless, a university must embrace new perspectives and it’s an ideal place for experimenting new platforms.

Possibilities A whole structure and signage could be built upon the starting point of the projected premises and expanding afterward the model for other sites. One option would be to use LED walls (protected from weather) as an alternative to projectors for the light issue – during summer months in Finland. The costs would be increased thou.
Figure 22. Courtyard image render during summer.

Figure 23. Courtyard image renders during night/winter.
Figure 24. Voices of Aalto - Analysis of the work in relation to resignifying urban space and contextualizing meaning.
Figure 25. Reger a Paulista.
5.4 Reger a Paulista

The project happened in August 2018, in the Digital Gallery of SESI, in Sao Paulo (Fig 25), covering the facade of an iconic 20 stores led building in one of the busiest and most important avenues of the city (fig. 26,27).

Reger a Paulista ([https://vimeo.com/305373407](https://vimeo.com/305373407)) is an upgraded work from previous Conducting Senses (2105), the framework is still the interaction between audience and urban landscape through the use sensor captured movements that enable the participant to “con duct” (Reger in Portuguese) an interactive audiovisual experience on an urban scale.
The scenario for this work is particularly important as it happened in Paulista Avenue, one of the main avenues in Sao Paulo, Brazil. With estimated 800,000 commuters passing by every day the proportion and visibility of the work take a new range. The building “FIESP/SESI” where the exhibition happened its constituted by a 26,000 LED embedded Clusters (pixels) 3.700 m² metal structure (three faces) covering the FIESP building. Each Cluster/Pixel are formed by four LEDs: 2 red, 1 green and 1 blue (2R1G1B) with a luminous Intensity of 4.5cd / cluster. The building is home also to a theater, three galleries and the Federation of Industries of State of Sao Paulo (FIESP) demonstrating its multifunctionality.

Interactive art puts the action of the audience at the heart of its aesthetics. It is the action of the observer that gives shape, presence, and materiality to an interactive work, while its action is also the source of its aesthetic experience. It is when the observer takes a step beyond his traditional role in the history of art and also becomes a performer, director, and activator of the interactive experience.
The way the audience explores and tests the interaction interface is then the central component of Reger a Paulista. Its immersion exists not in “passive” communication, but in the process of “feedback” mediated by the technological interface offered to the interactors. And this interface has to be explored before any contemplation (or analysis) process can be initiated.

But the intentions of interactivity are not restricted only to the relation “man-machine”: The fact that the interaction occurs in pairs (fig 28, 29), is determinant aspect of the idea of social interaction that the work offers, proposing a unique moment of social interaction and mediated by an aesthetic process (fig. 30, 31) – essential for the concept of public art. It is precisely in this relationship of trial and error, in this game of apparent imbalance, that Reger a Paulista becomes relevant, relocating the spectator and the work, the city, its landscape and its dynamics of social interaction, in a mutual transformation that takes place during the development of the aesthetic experience and its various layers of process.
The sound and visual elements of *Reger a Paulista* were conceived in order to enhance perception and explore diverse possibilities of interaction between sound and light, public and architecture, the city and its citizens, exploring the landscape as a multidimensional screen that reactivates and redesigns urban spaces. Using a minimalist aesthetic that explores digital “errors” and music of the slope called microsounds, the work transits through different contexts, bringing references to a range of works of the digital art world contextualizing it in the 21st century. Resulting in an installation that, using emerging technologies, is renewed every time it is activated, giving new meaning to urban landscapes and inviting the public to take part in the creation of large-scale public works of art.

It was of special mention that the work was exhibited for a period of a month, being shown from 6 pm to 5 am and with the interaction being facilitated by guides happening from Friday to Sunday during the four weekends of the exhibition. There’s an interview about the work in the link following: https://vimeo.com/305372314.

![Figure 29. Early proposal of visual element for interaction.](image)
Figure 30. Map of interactions of Reger a Paulista.

Figure 31. Reger a Paulista - Analysis of the work in relation to resignifying urban space and contextualizing meaning.
6 ANALYSIS

In this chapter, I wrap up by summarising the theoretical perspective used in the thesis. I discuss how meaning emerges in the realm of urban space and points out the new (possible) ways to resignification of the future cities.
6.1 Towards Future Possibilities

We are in the midst of redesigning the world and all its systems – legal, moral, political, economic, physical – and infrastructures for a digital age, with informational and communication technologies (ICT) as one backbone. This has immense psychological and cultural implications. Yet our built environment has been designed for how we lived and worked fifty years ago and more. To adapt to the digitally empowered nomadic age, a reverse-engineering process is necessary to create new intelligent infrastructures, sensing technologies and objects that live within its hard-engineered fabric.

(Landry, 2017, p.12)

To understand how meaning and resignification emerge we have to first understand how people and places interact. How they form bonds, how the perceived new notions of space are established, how they rely on identity (and the dissolution of it) and to sum – how spaces can be contextualized in the digital age. Those should be the main concerns of planners, designers and artists to create liveable places. The transformations occurred, according to Almeida (2016) affect “how people and institutions behave, reflect, interact, socialize, create and distribute knowledge” (p.81) and this is key to understand “the nature of the relationship between technology and society when a new materialism is formed” (p. 81), meaning that we need to establish foundations – policy-making and regulatory new dimensions considering these factors.

This thesis analyzed that problems with actual digital platforms is their constraining regarding affordance and their rigid frameworks often neglecting people’s ability towards creativity and appropriation of those. It is very hard to believe that institutions (government, regulators and organizations) top-down will act in absorbing bottom down initiatives (citizens). To answer the question on how to mix these agents in new models for urban development and governance the only possible solution is the certain need of redesigning new paradigms for city making.
On behalf of these Institutions, they have to be more engaged and in all levels of planning projects in order to prevent “new kinds of digital illiteracy” (Almeida, 2016, p.81). According to Johannisse (2017) people are becoming “informational organisms” (p.8) so it’s key to have it in mind when Floridi (2014) writes about the influence of digitization in the experience of our reality in terms of identity – the present 24/7 is where barriers between reality and the virtual are dissolved.

But there are indications for optimism, according to Schouten, B. & Waal, M. D. & Heerden, A. V. (2017) policymakers may have referred to this as a new ‘citizen-centered smart city’ (p.28), when there are full involvements of citizens, participating and designing new platforms. I believe that with the help of government, the term smart cities should approach designing and these adaptive environments acknowledging their contrasting dimensions. For this to happen Aurigi (2016) says “it needs the strategic, empowered and public good-oriented ethos that an institutional involvement should provide; whilst at the same time it needs the agility, inclusivity and trial-and-error benefits of local, acupunctural interventions”. (p.23). Meaning that in the pursuit of a more democratic structure, it is fundamental and key factor that instead of adding major changes to the systems of the city “it would be far better to create the conditions for high adaptability, fostering the unfolding of new context-sensitive and gradual ecologies of space, people and high technologies”(p.25).

This would dynamize a sense of multitude and wide adaptation through fragmentation and collaboration, leading to an agile attitude that according to Aurigi (2016) would result “reduced risks for the city as a whole, increased resilience and a more ecological unfolding, thus benefiting from the wisdom of place and community” (p.25).

Arjen Oosterman in magazine VOLUME 51 (2017) complements, on the matter of designers as it is their role in “organizing and managing spaces, individuals, relations and ultimately societies.” (p.7) but noticing that these matters “became more and more pervasive and sophisticated, its consequences became more dramatically evident” (p.7), so resilience is key.
Regarding **architecture**, the once self-proclaimed mother of all arts, in this scenario has to be overtaken by design, adapting according to the realities as the author continues “Design is an all-pervasive condition we cannot escape. There may be a life without architecture, but there is no life without design” *(Oosterman, 2017, p.7)*.

6.2 Towards Future Cities

“Cities are not images but living entities deeply connected to and fabricated through collective memories, social relations, and built structures expressed in material culture. But even though cities are not images, they are images before they are cities – they are imagined, dreamed, and planned.” *(Darroch & Marchessault, 2014, p.3)*

It’s important to acknowledge that we are still dealing with cities. Strongly entwined by real places and their context qualities. New media works should evolve and iterate in an agile way with space for error and mistakes. Augmented technology has a design potential of overpassing boundaries – political and physical, replacing those by redesigning both and ourselves. It’s an opportunity after all of regaining private and public space merging the virtual and real.

Diminishing the layers in between government, NGO’s (Non-Governmental Organizations), POs (People Organizations) and Private sector the decentralization and debureaucratization of systems could lead a short form implementation by diminishing times for implementing technology infrastructure. This would be validated as measurements representing resilience and to trigger nonstop additive cultural assets – a suggestion to the cities of the future – foldable and flexible.

Following the rapid advancements of technology, these cities could then follow a path of growth, adapting quickly and without losing their unique character shaped by history and meaning. Resignification by new media design becomes key in this process as it opens
possibilities to add the meaning layer to the context of cities, otherwise “the city of the future might thus become even more heterogeneous and complex than it already is” (De Waal, 2014, p.173).

6.3 How New Media Design Can Resignify Urban Landscapes

In my work practice, I faced many obstacles regarding the implementation and transformation of spaces into places. I believe it’s a difficult task to contextualize and resignify urban landscapes giving them meaning, it’s clear that the digital per se is not the solution and a digital platform alone is not enough to transform spaces into places with meaning and context. “What we now need is a new generation of test cases that can translate the design approaches that have been discussed here into practice” (De Waal, 2014, p.177) so in the next paragraphs, I reflect about my experience with these experiences.

In Invisible Helsinki I utilized resignification as a key aspect where a digital-led facade used mainly for advertising became an anchor for a social project. The context was built by adding the cultural aspect to a previously commercial space. In this particular case, the government could demand a “quota” from public space advertisers to showcase cultural led projects, based on social context and resignification of spaces. If we utilize the number of digital panels the city of Helsinki has, there could be a real potential in transforming these panels into meaningful works.

Voices of Aalto, on the other hand, faced difficulties on adapting a campus area that needed appropriation and affordance; resistance by a corporate institution in not understanding (in my opinion) new demands of infrastructure – led by a designed augmented space to revitalize an old and non-utilized courtyard. These rigid frameworks that drive institutions block creativity and end up resulting in empty built environments – that in the case of a university are very dangerous. Furthermore, after the opening of the new Arts and Business building, the university saw the demands of the students to partic-
ipate in building the context of the new school. To this point what the students see is an aseptic project, well executed by the architect office but that lacks spirit and meaning for students.

**Conducting Senses** in this scope dictates the renovation I try to bring when, by utilizing a carpet washing pier as a starting point, we were able to propose an interactive digital event that brought new meaning and resignified a little visited area. The participation of the community happened in attending the event and being co-creators of the work itself – when interacting with the participatory piece, De Waal reassures the importance of Play mechanisms in this context “Playful elements can play an important role here, temporarily suspending existing protocols and creating the basis for new interactions” *(De Waal, 2014, p.175).*

Although the work is successful in its ideas it didn’t have a continuation (since it happened as a one night show - part of a festival), thus demanding preparation and a nonpermanent installation on site.

Leading to **Reger a Paulista**, where an established cultural asset – the led facade of a building that holds museum, galleries, theater, etc – of a major city like Sao Paulo was taken by us (me and Fernando Visockis) for a one month exhibition where an interactive piece in the facade of the building that is located in one of the busiest streets of Sao Paulo. We could establish a deeper dialogue between citizens and their environment, mediated by technology. The work benefited from an existing platform (the led building facade) resignifying the space by adding the interaction element. Where citizens could in real time interact and iterate on the platform of Reger a Paulista by playing with the visuals and sounds that were shown in the monitor of reference and in the facade of the building. This work in my opinion deal with the themes analyzed in the thesis because as it breaks barriers of creativity and defines appropriation and participation, the dialogue between the real X virtual is established when the redesign of frameworks is established towards new paradigms of city making.

The cities of the future have their foundations still relying upon old methodologies as **Arefi (1999)** explains "loss of meaning not only
indicates a major paradigm shift in urban form but also reflects how people’s perception of attachment to place has transformed over time. (p.183) and while it’s important to underline the fact that it seems we are living in times of “premediated cities” (p.101) a term used by Flores & Wilson (2016) these premediated scenarios are built by constant promise of the future through media (films, books, magazine, video, IoT, etc) it creates a constant alertness sense or “low-stress” (p.101) into our daily routines.

6.4 Conclusion, Utopies, and Reflection

Through the lens of premediated factors that influence modern cities, they often feel like never-ending cycles of ideal cities that turns utopic. Matthews & Perin (2016) explains that when the city is neither the one promoted and expected by civic authorities nor the desirable one by a touristic passing it instead becomes a third thing, a “city activated by a disruptive design practice” (p.119). This inconclusive product that erupts becomes a sum of image artefacts, city views, polluted landscapes of color and brightness that alters the way urban space is understood, adding that “the capacity to disrupt the image ensures that the representation of the city is a heterogeneous and complex trace of multiple spaces” (p.120) and these spaces permeated by technology are distressful.

When acknowledging my findings and reflecting on my learnings in regarding resignification and meaning – the extensive theories about it from different fields: Design, Art and Architecture make it very hard to solidify solutions. It is a matter or understanding the context in which the design work can be done – within redesigning paradigms for city making in mind. Although institutions and government play a larger toll in defining possibilities for new media design in the context of urban landscapes, I experience that places like universities are key figures in allowing these experiments, and performing freedom.

I here finish by making some suggestions that rely on the process of production of my works and reflect about the important choices on
designing new media for bringing context to cities, creating places with meaning and resignifying spaces.

- Bringing the pixel unit to the core of generative creation, as a metaphor to ideas, or “series of procedural strategies that subverts the politics of the branded city image from within” (Matthews & Perin, 2016, p.120) making the same apparatus that is intended to normalize discourse and transforming it into an instrument of technical disruption – instead of branded images utilized by advertisement.

- Ensuring a new type of space is an effort and everyday practice, “between sign and signified that provides a mechanism for opportunistic intervention in the material and immaterial systems that mediate our experience of the city”. (Matthews & Perin, 2016, p.120). Matthews & Perin (2016) concludes that “To achieve this utopic urban condition, architecture and urbanism must not only redraw its own disciplinary boundaries but must also reform its own formal, spatial and material expectations.” (Matthews & Perin, 2016 p.120).

- Enable the transformation of a Smart City into a Social City (De Waal, 2014), a city in which the technology is aiding urban infrastructure – making it more efficient and a city in which “citizens must retain agency” (De Waal, 2014, p.176).

The digital landscape can propose new ways in which we understand city landscapes, but in order for them to exist maybe, we need to distance ourselves of what we nowadays perceive of it and instead provide citizens mechanisms based on equality of powers for them. Platforms designed not to be perfect examples of technology imbued by products of some company, neither privatized nor commercialized but instead with visible elements of for example platforms of communication – that could lead for citizens to organize themselves in the public space realm.

New media design, with all its artifacts, can highlight content and
transform spaces through its use, resignifying them and bringing meaning to places – but maybe aiming at developing and implementing participatory technologies in the urbanscape requires too much of our attention, and it gets old faster (thus doesn’t allow the slow process of placemaking), rather than the low-participation of ad-screens.

In the pursuit of reinvigoration of urban landscapes in future context we need also to think fully about inclusion - as Sil Bahia, coordinator of Pretalab and Olabi (a social organization that seeks to democratize the production of technology) puts: “Innovation needs different looks and varied experiences, if not, we are not bound to limitation and exclusion. Technologies carry the vision of the world and the culture of those who create them.” (Bahia, 2019, para. 14). In conclusion, maybe new media design in the urban should be anticipatory for the transformation of spaces into places – making it subtler; while the resignifying context of cities should be addressed aiming for a longer impact.
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List of Figures

Cover. Photo courtesy of Aukusti Heinonen.

Figure 1. Human Activities on Public Spaces after Gehl's definition (Gehl, 2011)

Figure 2. Graphic summary on causes of Death of Place after Balula (2011).

Figure 3. Summary of Theory of Place and Placelessness. Andre Vicentini.

Figure 4. Manovich framework in the context of Meaning – Identity and Place – Resignification. Andre Vicentini.

Figure 5. Based of Manovich’s framework a Play Framework Proposal. Andre Vicentini.

Figure 6. The tripartite model of place attachment. After Scannell and Gifford (2010, p.3).

Fig. 7. Studio Pop up for Invisible Helsinki.

Fig. 8. Website design for Invisible Helsinki.

Fig. 9. Image for video that was screened in the facade of Kamppi.

Fig. 10. Invisible Helsinki in Narinkkatori.

Fig. 11. Invisible Helsinki - Analysis of the work in relation to resignifying urban space and contextualizing meaning.

Fig. 12. Conducting Senses show at Merihaka. Photo courtesy of Gabriela Juganaru.

Fig. 13. Interaction / Participants; Conducting Senses @ Media Facades Festival & SYSTEMS III Exhibition.

Fig. 14. Conducting Senses @ AAVE Festival - Vapaa Taiten Tila (2016).

Fig. 15. Conducting Senses @ SYSTEMSIII Exhibition - ExLab - Uniarts (2016). Photo Courtesy of Camilla Loreta.
Fig. 16. Conducting Senses - Analysis of the work in relation to resignifying urban space and contextualizing meaning.

Fig. 17. Voices of Aalto Courtyard render. Miki Sordi & Andre Vicentini.

Fig. 18. Map with proposal for urban furniture. Miki Sordi & Andre Vicentini.

Fig. 19. Perspective view on the use of the marble walls, covered by video projection. Miki Sordi & Andre Vicentini.

Fig. 20. New function of the courtyard (Resignifying the Courtyard). Miki Sordi & Andre Vicentini.

Fig. 21. New function of the courtyard (Resignifying the Courtyard). Miki Sordi & Andre Vicentini.

Fig. 22. Courtyard image render during summer. Miki Sordi & Andre Vicentini.

Fig. 23. Courtyard image renders during night/winter. Miki Sordi & Andre Vicentini.

Fig. 24. Voices of Aalto - Analysis of the work in relation to resignifying urban space and contextualizing meaning.

Fig. 25. Reger a Paulista. Photo courtesy of Lucas Barreto.

Fig. 26. Artwork folder for the event. Andre Vicentini.

Fig. 27. People interacting with work (opening night). Photo courtesy of Lucas Barreto.

Fig. 28. Fernando Visockis & Andre Vicentini interacting with work. Photo courtesy of Lucas Barreto.

Fig. 29. Early proposal of visual element for interaction. Andre Vicentini.

Fig. 30. Map of interactions of Reger a Paulista. Andre Vicentini.

Fig. 31. Reger a Paulista - Analysis of the work in relation to resignifying urban space and contextualizing meaning.

Fig. 32. Reger a Paulista. Photo courtesy of Lucas Barreto.