SMART MILAN

An account on smart urban development on the crossroad with sustainability

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Smart Milan, an account on smart urban development
on the crossroad with sustainability

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Abstract

The ‘smart city’ concept has developed throughout the last two decades as a contemporary solution to rising global issues and as a continuously advancing blueprint for a better future. A ‘smart city’ is set to deal with growing issues such as increasing urbanization, centralization, and urban infrastructural challenges in an era of a rising climate crisis. The term ‘smart city’ thus proposes green and sustainable solutions, reduced energy consumption, economic efficiency, enhanced mobilization, and improved technological infrastructures for a more efficient and easy life for the modern, smart citizen. This literature-based analysis explores the relationship between smart and sustainable in a critical account. Based on data from secondary sources, this thesis illustrates the ways in which Milan is transitioning into a smart city. This process is discussed as a double-bind, a contradiction between economic growth and environmental sustainability. By taking a step back and looking at the world as an accelerated and globalized space, this thesis investigates the effects of urban regeneration. The concept of the ‘smart city’ is constructed and exists alongside processes of neoliberal policies within a technocratic landscape. Looking at the effects of these processes, this thesis investigates the meaning of ‘liveability’ and ‘quality of life’ within the smart city of Milan.

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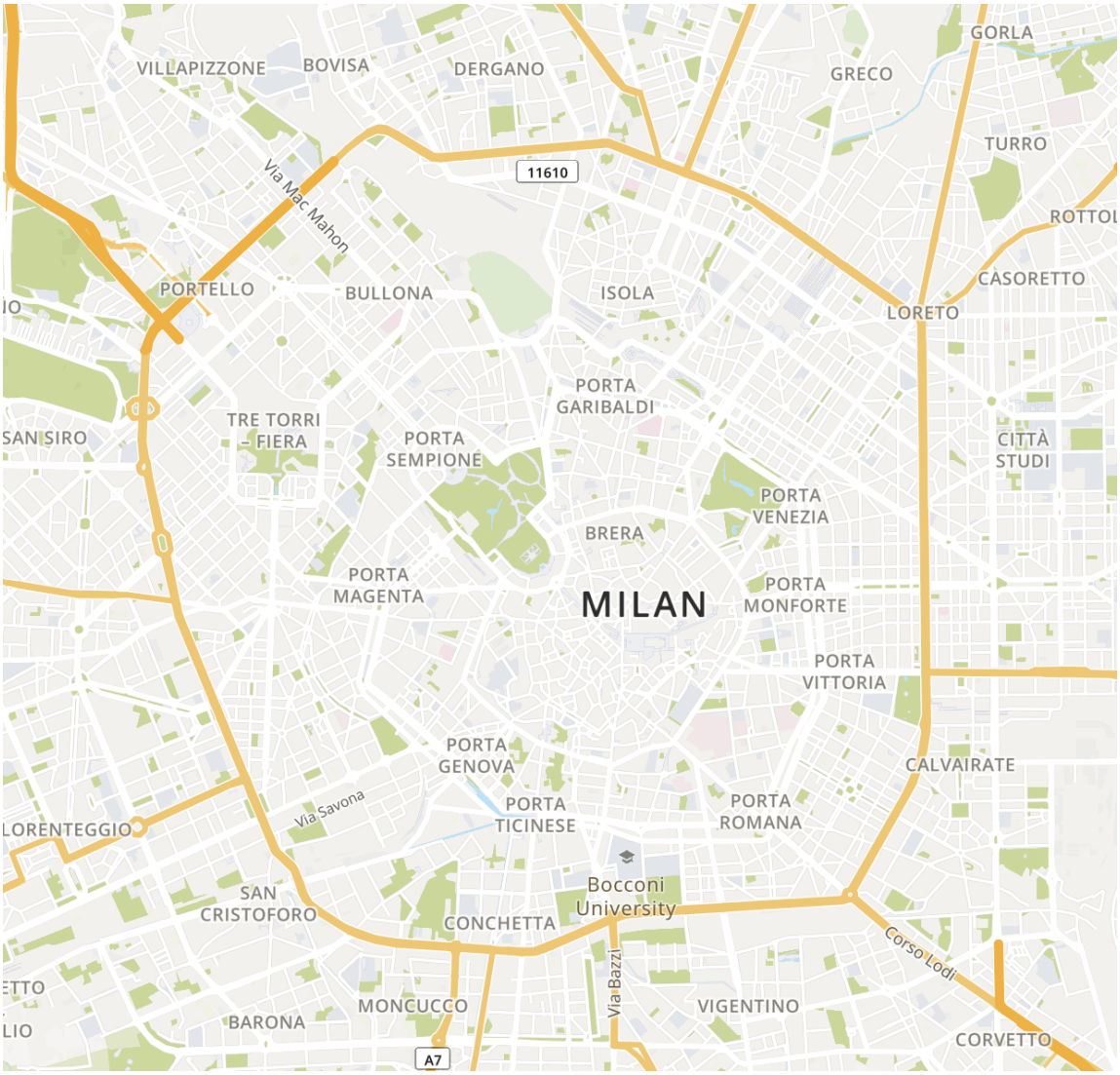
Figure 1

Map of Milan



Source: screenshot from https://www.mapquest.com/

Content

Figures

1. INTRODUCTION

Smart cities are on the rise, an urban trend that promises a better life and greener grass. Or at least smarter. Appearing as an ideal utopian society, smart cities are embedded with visions of a better future. A technologically driven urban space that ensures efficient and sustainable solutions, as well as innovative economic measures for fast growth. The smart city has been developing into a global phenomenon since its first mention at the end of the last century, through continuously growing and advancing research (*Ingwersen & Serrano-López, 2018*). The smart city has become a modern symbol of urban development into a more sustainable, efficient, and better lifestyle. The term has materialized in different ways throughout the world and is applied to both the retrofitting of existing cities as well as to new cities built from scratch. Smartness has become a value that symbolizes an efficient and easy lifestyle for the modern woman and man.

As a young woman entering the world, I am trying to establish myself as an individual at the same time as I am finding my place in a globalized society. Some big questions are being asked in the transition into an independent and autonomous individual. After working on what kind of person I wish to be, the questions remaining are dealing with what the dream job could be, a perfect living situation, enough money for freedom and travel, and my most desired lifestyle. For the people that are actually lucky enough to be able to answer these questions, they might seem like too much. Many people find themselves overwhelmed by the freedom of their choices and settle on a way unable to deal with the world at large. Others will gladly accept the world as their own, working and living life in whichever direction it may take. In the middle of the chaotic road of choosing which way to go with one's life, how can we remember to take into account the state of the world around us as well as the world we leave for future generations? How can we be sustainable in this modern, globalized, and fast-moving world?

The current state of the world has been identified as the era of the Anthropocene. Feeling and seeing the consequences of the human touch for the first time in the history of the world. It has rightfully received the status as an 'overheated' planet, where *speed* and *growth* are the keywords (*Eriksen, 2016*). Leaving us in a double-bind in the contradiction between economic growth and environmental sustainability.

The world is rapidly changing at an unprecedented rate. Never before have this many people been living on this globe, connected in new ways both physically and digitally. It seems like the world is at our feet with every corner open for exploration. We can explore the other side of the world with just a keystroke. Fast access gets us what we want and money can suddenly appear from our credit accounts and into real life. Or so we think. Through the evolution of the smartphone, our window into the rest of the world has grown exponentially, at the same time as this window is constantly taking on different shapes and sizes. In other words, our view changes drastically from where we stand. The smartphone has become the

glue that holds society together as well as the essence of what separates us (*Eriksen, 2021*). Which reality are we truly seeing? Social media has become 'somewhere we live' (*Miller et al., 2021*). We are constantly reminded of what is out there, looking at what other people are doing, and comparing our lives with a new set of values. How is this shaping the way we imagine what a good life is? How is the border between our imagination of a good life and reality being stretched? And more importantly, is it possible to lead a sustainable lifestyle within this new reality between life as we know it and the life we desire?

The smart city is the perfect site for exploring these questions. A conglomeration of the past, visions of the future, mixed together with people, cultures, relations, religions, lifestyle, time, and space altogether in one giant sphere. The smart city is the meeting point between the past and the future in the way that it presents itself as a solution. For the regeneration and improvement of urban life, the smart city has presented itself as a blueprint for a better future and an urban living lab for change. Putting the smart city under a lense makes complex and interdependent structures and relations visible, as a web of knowledge. As smart cities continue to materialize throughout the world, there is a growing need to ask critical questions about their outcome in modern society.

Research question

Since the concept of the smart city began its life in the early 1990s, academics and researchers have shown a great interest in its technical qualifications and challenges. The concept of the smart city was initially explored by measuring the success of the newly introduced technological and digital solutions to urban development. The main focus has been on the smart city's use of ITCs, Information and Communications Technology. The highlight of what has been written about smart cities, either in academic articles or in the general media, has been on the use of new and advanced technology, rather than on people and society. As the idea of developing smart cities has grown throughout the world and got a foothold in many governments, so has the academic interest grown into looking beyond its first technological premisses. There is therefore a dire need for long-term and qualitative data that can put the focus back on the people living in the smart city.

The smart part of urban development can be divided into 6 characteristics: *smart - economy, people, governance, mobility, environment and living* (*Vanolo, 2014, p. 887*). Most of all, *smart* has become a promise of securing the future of the world through sustainable measures and dealing with the climate crisis in new and better ways. The concept of *smart* has from a single word become a complex set of values interconnected in different ways throughout the world. For this thesis, my research question is as follows:

> how is *sustainability* aligned with *smart* in the current globalized, neoliberal, and technocratic landscape?

To clarify my approach to sustainability, I am basing my definition on the same way UNESCO, The United Nations Educational, Scientific and Cultural Organization, is. Sustainability is "*a paradigm for thinking about the future in which environmental, societal, and economic considerations are balanced in the pursuit of an improved quality of life"* (*UNESCO, 2019*). From this definition, I wish to use sustainability as a concept to discuss some of the most important issues surrounding the smart city. Such as urban development as climate oriented and environmentally friendly, political policies as democratic and not as a top-down approach, economic structures to enhance equity and remove class-blindness, and most importantly a sustainable approach to citizen implementation and development of the social processes within the smart city.

I have chosen to narrow my field of research to the city of Milan, Italy. A country with a long history of development, growth, and great pride in the label 'Made in Italy'. Many defining processes that have led to the political and financial landscape of today have originated in and around Milan, which makes the meeting point with contemporary global influences particularly interesting. Milan is currently repositioning itself as a cosmopolitan and modern city, by undertaking the label as *smart*. As we will see, the complex nature of transitioning into a *smart* city affects all aspects of the Milanese lifestyle. For that reason, I have chosen to take a rather open approach with my research question and to look at the Milanese society as an organism where every part is changing and interdependent.

The research question includes some of the main aspects of what constitutes modern life in a smart city. I have included the aspect of the city as a globalized site because at the current state of time there is no way to escape the fact that we are so connected to the rest of the world, in every way. The comprehensive significance of a globalized world is upon us, as we have all been painfully aware of during the past two years of a pandemic. I have included neoliberalism as a crucial factor in the construction of the smart city, not just as a financial policy, but as a value that now affects so many parts of our lives. Finally, I have included technocracy for the importance of directing an anthropological gaze upon the power structures of our society. For this 'holy trinity' of influential concepts within the modern world, the main focus of them all is put on *sustainability*. This will be the red thread throughout this thesis and pose as the most critical reason, action, and outcome in the construction of smart cities.

Theory and methodology

This thesis is based on research and ethnographic data from secondary sources. Theoretically, I have gathered data and research about smart cities and Milan from a number of different articles dealing with different aspects and challenges concerning the subject. By searching through a myriad of research on the development of smart cities, urban planning, the rise of technocracy, sustainability, and ethnographic research from a global perspective, I

am attempting to patch this together in a clear and distinguished way to pose the right questions and provide some answers on the subject. Methodologically, I have experienced Milan through small fragments of time and places. I have visited the city a few times over the years, if only for a few days at a time. This has led me to be able to have my own sense of the city. I do feel more justified writing this thesis from a country far away having actually been there myself. This diminished the risk of putting the city on some sort of pedestal made from the words of others. I have included the accounts from three informants living in and around Milan, to illustrate the Milanese way of life, and to provide some sentiments from a locals' point of view.

In order to produce a thesis that would deal with a contemporary relevant societal issue and that could actually contribute to and bring the conversation on smart cities forward, I have landed on a theoretically dispersed base that includes discussions on several important aspects. The theoretical basis of this thesis is built on interdisciplinary research that crosses several theoretical directions in its formulation of the smart city. The main disciplines being used are social anthropology, economic and political anthropology, sociology, geography, political science, and just a hint of philosophy. If I were to write this thesis again, I would include a more in-depth philosophical account of the meeting point between the ideas of what constitutes a good life and the modern-day world through its accelerated praxes. I would also provide a more extensive account based on anthropological and qualitative data, as that has been one of the main challenges for this thesis. There are not many anthropological accounts from smart cities, and close to none from Milan that has been relevant for this thesis. For that reason, I decided to include some accounts based on local and international newspapers as they could provide an alternative angle to the urban development of smart cities and the people who live there.

For me, the most important underlying approach to discuss any relevance to smart city developments is the one on sustainability. There exists no doubt for me that sustainability should be the main focus for any kind of development in the world as we are entering a one-way street. The theories used to describe the development of cities becoming smarter should reflect that. As well as critically asking whether such a transformation really is sustainable, in the way that it supports the balance of environmental, societal, and economic considerations into the future.

Another theoretical aspect that should be taken into consideration is that of inclusion and exclusion, based on nationality, class, education, or financial status. If the use of the word sustainability does not apply to all, it is not equitable, and thus cannot provide a sustainable balance. This thesis attempts to build its theoretical basis upon equitable notions of inclusion, in its formulation of sustainability.

Positionality

Italy is starting to feel like a second home for me, as I live in Norway with my Italian boyfriend, Massimiliano. I have visited the country numerous times alone and with him, experiencing fragments of an Italian lifestyle. Living with an Italian is like constantly doing fieldwork and feeling the cultural differences on the skin. This personal experience has opened up my mind and forced me to take a step back viewing the world more objectively. It has also led me to learn Italian so that I could better speak to the informants that Massimiliano introduced me to. Even though I did not get to perform long-term fieldwork and experience the joy and challenges of being deep in the field myself, I have been able to extract small fragments from my own short experiences and from the accounts of my informants.

I intended on doing long-term fieldwork in Milan for 6 months, but because of the current global circumstances of Covid-19, it became impossible, and I was forced to rethink the scope of my project. I am deeply disappointed that I was not able to perform ethnographic fieldwork that could potentially contribute to more relevant research on the actual consequences and effects of smart urban development. In the current state of the world, I was forced to decide between fulfilling my desire to finally being able to perform my very own fieldwork, feeling the field on my skin, and gathering data for my own reflections, and the state of my health. I spent a long time questioning my decision to put my health first, imagining inserting myself into a society that suffered a great deal more from the effects of the deadly virus than my own did.

As my chosen site of fieldwork, Milan, became heavily restricted by curfew and limiting movement throughout the city, any attempt on doing fieldwork seemed more likely to end up as mainly sensorial fieldwork. Thus lacking the voices and reflections of the inhabitants throughout the city that a critical account of smart urbanization so desperately needs. For these reasons this thesis is a critical account of the already existing literature on smart cities, woven into accumulated research on different parts of the Milanese society, and will not focus on how the health crisis of Covid-19 hit the Italian nation nor its aftereffects. Although there are many interesting as well as needed research projects that could take place as a truly life-changing situation ravage through the world, I am excited to see the development of the field and hopeful that anthropologists will continue to contribute to and change the course of grand projects such as smart cities. This thesis has not achieved its original wish of contributing to the smart city discourse with a qualitative account based on the long-term fieldwork that it needs. But, this thesis studies the fragments that together constitute the smart city, from tangible circumstances in the local to intangible and globalized structures that constitute the modern-day world we live in.

Overview

This thesis is divided into 5 chapters. In the first chapter, I have introduced the scope of this thesis as well as some important terms and discourses to take on. For the next part, I will define the concept of the smart city, as well as looking at an overview of the existing knowledge on smart cities. How has the academic field changed over the past two decades of smart city discussions? Continuing to the chosen field of the thesis, I will be presenting both the historical and current political and financial status of Milan. This part will include some of my own experiences in the city as well as responses from my informants. The third part deals with the relationship between cities and sustainability and explores the aspect of the double-bind, the contradiction between economic growth and environmental sustainability. I explore urban sustainability in terms of social cohesion, liveability in Milan, and how urban walkability affects both physical and mental health, and inclusion of age. Chapter four investigates smartness as a neoliberal value and the creation of the 'smart citizen'. As an outcome of globalized technocracy, the concept of the smart city can be put in the power balance between techno-feudalists and the local government. The fifth and final chapter offers some concluding remarks.

2. THE SMART CITY

"*...smart cities as places where information technology is combined with infrastructure, architecture, everyday objects, and even our bodies to address social, economic, and environmental problems*" – (*Townsend, 2013, p. 15*).

I stumbled upon the phenomenon of the "smart city" through working on my bachelor thesis. As I was free to choose any topic of interest, it became important for me to choose a topic that had an impact on the modern world, particularly on the climate crisis and the direction of global sustainable development. Going through a vast amount of topics and academic articles, I came across some rather new projects called *smart cities*. Reading more about this, it struck me how powerful and enticing the vocabulary of these projects were, presenting realizable urban utopias with highly advanced technological infrastructure as a modern dream come through. Some of these new cities coined as smart cities have been described as; sustainable city, intelligent city, ubiquitous city, green city, cosmopolitan city, or knowledge city, depending on the meaning of the word 'smart' (*Ingwersen & Serrano-López, 2018*). Intelligent, wise, and wittily translating as different synonyms of the word 'smart', in the case of urban planning, 'smart' seems to have become an umbrella term without any clear definition.

The definition from the European Commission can provide a good example, explaining the concept of smart cities as "*cities using technological solutions to improve the management and efficiency of the urban environment*" (*EC, 2021*). The general image of what a smart city is like has been described in projects and different media as *modern, efficient, master-planned, ecosystem, dynamic, vibrant,* and *clean*. All of which are positive connotations. The discourse was clear: there is nowhere better to live than in a smart city.

Through deeper research for my bachelor thesis on smart cities, I discovered the particular case of such a city built from scratch, namely Songdo in South Korea. The interesting aspect of this particular smart city is the grandiose project of building the city from scratch, designed as an international and financial hub not far from the airport of Seoul, South Korea's capital, planned and developed as the largest private real estate venture in history as a shared cooperation by South Korean Posco Engineering & Construction and American developmental firm Gale International (*Kshetri, Alcantara, Park, 2014*). One could almost imagine a city that never sleeps and is open for whatever need you might have at any time, getting in your car to work and taking the highroad (read: flying) to avoid even the need for asphalt. Of course, in a city as "smart" as this, there would be no traffic jams, just a continuous flow that never stops. A lifestyle without any stress, with the aid of any robot made for your demand. A futuristic city such as the one shown in the movie Blade-

runner, or in several other movies produced in the last couple of decades to address the coming robotic revolution where the robots will eventually be smart enough to eliminate the entire human race.

The smart cities of today are facing other challenges, although the elimination of the human race is taken into consideration as an effect of climate change rather than a robotic revolution. Urban projects through regeneration risk the lifeless consequences of homogeneity. Some urban contemporary development of cities could be imagined as a sort of miniature world, where you could take a stroll from Central Park to a replica of the Eiffel Tower without even getting into an airplane. A city that has gathered the best parts from all around the globe, and put it into one site of a global mix. Such as some of China's 'ghost cities', built for the modern and cosmopolitan man and woman, but inhabited by non. Or the planned urban landscape of Songdo which has taken the best parts of urban design from around the world, just waiting to be filled with life. The question is only if this city is as open to a cultural mix of people as it is to its enticing monuments and modern landscapes.

The smart city of Songdo is not a unique project. There has been a rising popular movement in building new cities throughout the world during the two last decades, as many as 150 new cities have been launched in more than 40 countries, not including China which would increase that number substantially (*Moser & Côté-Roy, 2021*). This rising movement of urban regeneration project cities as "a distinct brand, architectural identity, and vision of the future, a sort of mirror opposite of nearby cities" (*Moser & Côté-Roy, 2021, p. 2*). That is, from a contemporary point of view of modern urban planning where urban megadevelopments are designed and constructed both geographically and administratively separate from already existing cities. New cities as such do not have a clear definition but have been framed as:

> "*new cities, new towns, new communities, satellite cities, new urban poles, new centralities, new urban peripheries, future cities, urban fantasies, instant cities, neoliberal utopias, parallel cities, private cities, urban enclaves, fast cities, and popup cities"* (*Moser & Côté-Roy, 2021, p. 10*).

Cities as such are often described as being built from scratch on a tabula rasa, but Moser and Côté-Roy importantly note that new cities are often constructed not on unused tracts of land, but rather in villages, farms, sites of religious structures, or indigenous reservations that are "cleared by builders to ensure the purity of vision of the future city" (*Moser & Côté-Roy, 2021, p. 10*). In the case of Songdo, the new smart city was constructed on a new piece of land created by placing landmass in the ocean and expanding the area of land. Like China's free trade zone of Shanghai, Songdo constitutes the center of the city of Incheon, also known as Incheon Free Economic Zone (IFEZ), which allows the city

to be financially separated from the rest of the nation with the aim of becoming one of the future top three economic zones in the world (*IFEZ, 2021*).

The city of Songdo as such could be described as a sort of international hub, an enclave separated both physically, fiscally, and socially from the surrounding areas. Some research indicated that already in the first years as a functional city, Songdo reinforced already existing class structures by building social and financial barriers (*Kshetri, Alcantara, Park, 2014).* Contrary to the two grandiose city-building projects in the middle of the 20th century known as Brasilia, in Brazil, and Chandigarh, in India, which were driven by a civic "and socialist-infused ethos" (*Moser & Côté-Roy, 2021, p. 2*).

Contemporary city-building projects can be characterized by their exclusionary new city plans and escapist urbanism for an economic elite, at the same time as being driven by a need to boost economic growth and attract foreign capital. This seems to be the basis for the development of cities to become smart cities, whether they are already existing cities or the grandiose projects that have the possibility to create whole cities from a "tabula rasa". The driving force behind the smartification of urban areas whether those built from scratch or existing cities seems to come from most of all a financial incentive, put forward through a sustainable development aspect, as is becoming increasingly clear through the smart city discourse. But as Kitchin (2015) notes, there is a big difference between retrofitting existing cities and building brand new ones on greenfield sites.

Through a critical view of the discourses that surround the growing trend of smart cities, I do not wish to sustain the narrative of the smart city as a one-size-fits-all. The smart city should in fact not be addressed as such, being *the* smart city, but rather as *a* smart city. Reviewing it as *the* smart city insinuates that there actually exists a singular or fixed way of conceiving it, a blueprint to successfully implement into any urban area to improve its current state for the better. Instead, the smart city can be put as a textbook example of what is referred to as an 'empty signifier' in urban planning, that is, a concept "virtually void of any substantive meaning" (*Haarstad, 2016, p. 424*). This way of critically thinking about the terms and words we use also applies to the way that we choose to criticize the concept as such.

Kitchin (2015) has in fact accused critical scholars of cherry-picking atypically techno-economic driven models, such as Songdo in South Korea or Masdar in the United Arab Emirates, as a way of critiquing the concept of a smart city without taking into account the ways in which attributes of smart cities could in fact contribute to improving urban livelihoods. I have to admit to having been challenged by this very same notion with an overly critical viewpoint in discussing smart cities such as Songdo, as well as feeling conflicted in the way of longing for several smart city characteristics in my everyday life in my hometown Oslo. At the same time as maintaining a critical gaze on the direction the concept of the smart city could take us, and witnessing how its qualifications could improve parts of society in many ways, there are some things to keep in mind.

First of all, the concept of a smart city could very well seem like a textbook example of an empty signifier, but as Haarstad (2016) notes, there is a reason why empty signifiers catch on, and that is not necessarily a bad thing. It provides the opportunity for actors and institutions to use the smart city framing to mobilize resources and ideas for their own agendas. In this way the right question might not be what a smart city *is*, but what the smart city, or the smart city framing, *does* (*Haarstad, 2016*).

Second, the concept of a smart city is not a zero-sum game. Although elements and terms might seem like dichotomies, like fast and sustainable, inclusive and privatized, and some anthropologists might argue master-planned yet dynamic, these are parts constituting a smart city that could work to both fulfill and challenge each other.

Third, discussions on smart cities should be interdisciplinary. As the concept itself is highly dynamic and complex, so should the discussions surrounding it be as well. The layers of a smart city consist of urban planners, politicians, entrepreneurs, consultants, and bankers to name a few, and last but not least the tech firms that bring forward the technological and smart parts of the development. But who is a smart city for if not its inhabitants? And so the need for qualitative data and reflections of anthropologists and sociologists are becoming increasingly needed. As Kitchin (2015) notes, the reason for the focus on technologically driven and one-of-a-kind cities like Songdo or Masdar is the lack of qualitative data and in-depth empirical case studies from different places. In that way, the information we have on smart cities comes from government or corporate documents instead from interviews and ethnographies that could enlighten urban development in smart cities from a human perspective. But first off, let us take a deeper look into what constitutes the complex nature of smart cities.

Defining the smart city

Contemporary projects such as the new cities mentioned above and the smart city as a growing international concept, raise a myriad of questions and discussions that critically needs attention for the continuing urban developmental projects throughout the world. The smart city, then, as a framing having been increasingly used throughout the last two decades, has already received criticism and is continuing to develop as a concept being implemented in different ways across the world. There exists no clear definition of what constitutes a smart city, but scholars seem to generally agree that a smart city is an urban site where the presence of ICTs, Information and Communications Technology, enables more efficient solutions for mobility, reduced energy consumption, innovation as an economic factor, and improved technological infrastructures for a more efficient and easy life for the modern, smart citizen.

Kitchin (2014) divides the term ‘smart city’ into two distinct but related understandings, one area of usage that stresses the use of ICTs to enable ubiquitous computing, monitoring, and big data, and another that stresses innovation, creativity, and

the creation of a knowledge economy. Harrison et al. (2010) break the 'smart city' definition into three aspects; instrumented, interconnected and intelligent. Instrumentation in a smart city consists of ICTs that enable near real-world data through the use of sensors, personal devices, meters, kiosks, and social networks to name some, from both physical as well as virtual sensors. Interconnected implies the integration of such data into an enterprise computing platform and the communication of such information between different city services. Intelligent refers to the inclusion of complex analytics, modeling, optimization, and visualization in the operational institutional processes to make improved operational decisions (*Harrison et al., 2010*).

Through the use of this approach, Harrison et al. (*2010*) argue how city services can be adapted to better suit the lives and behaviors of the inhabitants of a city. This happens in ways that can enhance the optimal use of physical infrastructures and resources, as they exemplify by the management of waste processing and transportation systems or in sensing and controlling the consumption of energy and water. C. Harrison has been a leading figure as the inventor of Smarter Cities technical architecture at International Business Machines, more widely known as IBM. The American company has been heavily invested in the technological development of smart cities in their goals to build a smart planet, as IBM declares as not just a new strategy, but "an assertion of a new world view" (*IBM, n.d.*).

Smart cities can be seen as an urban landscape through which big international tech firms are heavily invested and cooperating with local governments for the continuing development of physical infrastructures, wireless networks, sensors, high-speed broadband, open platforms, and cloud computing to name some. IBM and Cisco are two of the top companies invested in the development and building of smart cities, followed by Schneider Electric, Siemens, Microsoft, Hitachi, Huawei, Ericsson, Toshiba and Oracle that all contribute to a rising global market value of billions of dollar (*Smart City Hub, 2017*).

The popularization of the term *smart city* comes from a challenge brought forward by IBM in 2010, namely the 'smarter cities challenge'. IBM invited cities from all over the world to take part in a competition that would grant them consultancy, technical assistance, and grants with the goal of developing technological solutions to nine grand city challenges. This included solutions for "administration, citizen engagement, economic development, education and workforce, environment, public safety, social services, transportation and urban planning" (*Kitchin, 2015, p. 135*). Consequently, IBM ended up trademarking 'smarter cities', noting an important milestone in a struggle between IT companies over visibility and legitimacy in the smart city market (*Söderström et al., 2014*).

But it is not only the big tech firms that are driving the digital race forward at an unprecedented speed. Billionaires themselves, such as Elon Musk, founder of Tesla, and Jeff Bezos, founder of Amazon, are currently competing in their own space race. Indeed, it seems that according to billionaire and entrepreneur Elon Musk the solution is clear. If all else fails and our planet succumbs to our environmental failures, we can always settle the best of

humanity on the next planet. This, of course, includes only those with enough money for such a futuristic adventure. It might seem completely crazy that in a world ravaged by human touch struggling to survive, we are talking about outer world settlements without joking. How is this even a thing? It is visible in news articles such as this one titled "'Star Wars' Class Wars: Is Mars the Escape Hatch for the 1 Percent?" by American news magazine Newsweek. A rather amusing description of the declining state of the world as shown here:

> "*The world sucks right now. Terrorism. Climate change. Political acrimony. Nonstop Justin Bieber songs. It's nice to know Elon Musk and Jeff Bezos have a plan. They will help the richest people in the world go to Mars and start over, leaving the other 99 percent to suffer on a dying, warring planet*" (*Newsweek, 2015*).

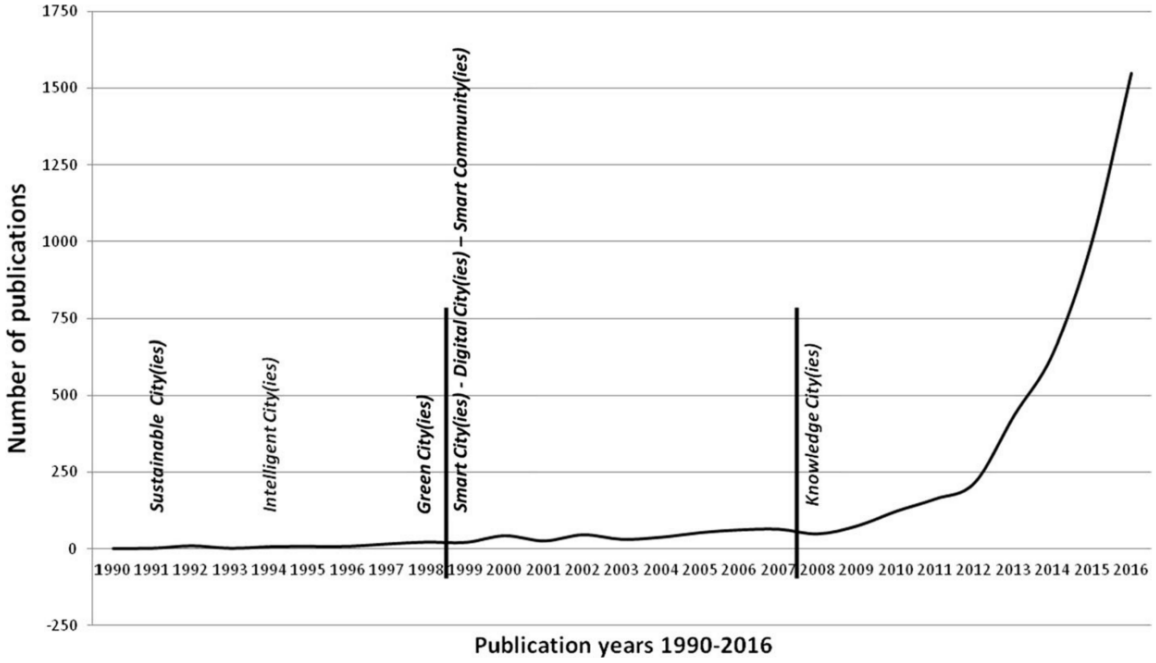
This article is not alone in the media landscape to illustrate the bizarre development of intergalactic travel and the current state of the planet's sustainable direction. One cannot be sure of the seriousness of billionaire proposals on conquering space. But what is serious is that current debates on climate change have taken an extraterrestrial turn. Instead, it is not aliens from Mars that are extraterrestrial, but the poor and otherwise lower-class people that feel the effects of our climate change the most. In the light of this public discourse on climate change, sustainability, and the future of our planet and of humankind, is the smart city the solution? Or is it also contributing to the discourse of alienating a major part of the world's population? This is an interesting discussion that I will come back to in chapter 4. But first, I will explain and demonstrate in-depth the current status of smart cities, as well as how Milan is becoming a smart city.

Mapping the smart city knowledge domain

Exploring the academic and scholarly literature on the landscape of smart cities, Ingwersen and Serrano-López (2018) have performed a scientometric analysis on the area of 'smart city(ies)' in the period from 1990 to 2016. Through this, they are presenting the academic developments or lack of developments in the field of smart cities. In figure number 2 presented below, we can see the gradual development of the number of publications in different publication titles of the central topics through the years 1990-2016, and how the central topics change from 'sustainable cities', 'intelligent cities', 'green cities', to 'knowledge cities', as 'smart cities' are introduced as a term in 1999 (*Ingwersen & Serrano-López, 2018, p. 1209*). Throughout the 27-year period measured, 'smart city(ies)', is the leading retrieval concept and shows a highly exponential growth during the most recent period 2008-2016 (*Ingwersen & Serrano-López, 2018*).

Figure 2

Publications on "smart city(ies) 1990–2016" (n = 4725), divided into three analysis periods (vertical lines). The first appearance in publication titles of the central concepts from search profile shown vertically. WoS, Nov. 2017 (*Ingwersen & Serrano-López, 2018, p. 1209*).



This data substantiates the idea that the study of smart cities has evolved from a focus on urban sites becoming more sustainable and green in an effort to deal with environmental challenges, to that of a greater focus put on a technological and digitized evolution of urban infrastructure. Zhao et al. (2021) also validate this idea through their data, having performed a holistic and state-of-the-art literature review of smart cities, noting how the publication volume has more than doubled since 2009. The research usually deals with four different areas: the technological aspect, which includes technological infrastructure as well as a support network for building smart cities, the socio-cultural aspect which includes citizen engagement, the political-institutional aspect that tackles government support and policies, and lastly the economic-business aspect with a focus on business models and profitability.

The review by Zhao et al. (2021) is based on a review of 191 smart city research works stretched from 2009 to 2021. The 191 publications were spread across 56 journals, from a combination of different disciplinary areas, such as "technology, management, entrepreneurship, urban government and planning, intellectual capital, transportation,

supply chains, tourism, and many more" (*Zhao et al., 2021, p. 4*). Based on this complex review, they define the concept of smart cities as a strategy to tackle challenges that city governments face, through the generally agreed upon objective to enhance economic growth and social development through innovations in technology and heightened collaboration (*Zhao et al., 2021*). They also note that the reviewed smart city works indicate a strong multidisciplinary nature published in a number of disciplinary areas ranging from "technology, management, entrepreneurship, urban government and planning, intellectual capital, transportation, supply chains, tourism, and many more" (*Zhao et al., 2021, p. 3*).

This coincides with the data reviewed by Ingwersen and Serrano-López (2018) as they lay out the change of the leading WoS, Web of Science, categories for 'smart city(ies)'. They show that sustainable aspects through 'environmental sciences' are dominating the first period of research from 1990 to 1998. These are being outrun and replaced by 'engineering electrical electronic' and 'computer science information systems' in the two periods measured from 1999 to 2007 and from 2008 to 2016 as the research becomes more centered on the technological aspects. A concern risen by Mora et al. (2017) about how smart city research risks being undermined by a highly technological knowledge by nature. And thus lacking the social intelligence, cultural artifacts, and environmental attributes needed for the future development of this new and promising field of study. Zhao et al. (2021) present some interesting research that indicates a generational shift to the so-called 'smart city 2.0'. This is defined as a strategy that put people first and emphasizes technology as a tool to use in the service of citizens. Unlike the 'smart city 1.0' which has been referred to as an "idealized, technologically driven, largely automated city that was developed from the top-down in conjunction with large data and technology companies" (*Trencher, 2019, p. 118*).

Most of the smart city research focused mainly on the technological aspects of infrastructure and policies but neglected the most important element that constitutes urban development, namely the people who live in the city. Through my research on the smart city of Songdo for my bachelor thesis, I argued that the sustainable and smart discourse becomes an elitist discourse that marginalizes and excludes people who are not able to be a part of it. This can mean people that do not have sufficient funding to live in an urban environment that pushes the prices up, those who do not possess the knowledge, education, or are in jobs that are becoming an invisible or scarce part of the city.

From the perspective of a social anthropologist, it becomes evident that there is a lack of qualitative research and especially long-term fieldwork from new and smart cities. What I learned from my research on a smart city built from scratch is how implications of urban development under the smart city discourse could lead to greater segregation, as smart cities seem to have little space for those who are 'uneducated' in technology, poor, or otherwise marginalized by the smart city discourse (*Vanolo, 2014, p. 893*). Instead, values of smartness become a field of social control by producing "smart citizens" as an instrument of "government at a distance" (*Vanolo, 2014, p. 894*).

The processes that took place in the smart city of Songdo are in many ways implemented in a neoliberal manner. Neoliberalism is the capitalism of our time, brought forward by the people who wanted an economy devoid of state intervention and a free market. Neoliberalism is capitalism as we know it, but also something completely new, at the same time (*Stalsberg, 2019*). But the idea behind the imminent success of a neoliberal economy is starting to break down. As it becomes clear how the theoretical basis in the construction of such an economy is not working in practice, the division between rich and poor keeps growing.

Theories such as the trickle-down effect that expected the direction of money leading to the richest people would in turn benefit does at the bottom in the form of new workplaces, instead end up in private bank accounts on the Cayman Islands. The seducing words of people like Milton Friedman, Margaret Thatcher, or Ronald Reagan can no longer hide behind the real effects of a neoliberal economy and politics. But neoliberalism has penetrated our society in more ways than we can imagine, and in some ways we are still blind to. It becomes a wave that takes with it everything in its path, pulling the people unable to swim down into a maelstrom impossible to get out of.

For Songdo, the city could easily be referred to as a 'neoliberal utopia' in its ways of implementing a privatized market that increases its prices based on a smart discourse, in the process removing those unable to participate from the city altogether. The fact that the South Korean state was an investor in the project only comes to show the depths of neoliberalism in the politics as a globalized technocracy. The less democratic the state of a nation becomes, the more technocratic are the solutions proposed. And the more economic and neoliberal principles rule the nation, the less equity and democratic justice are left for *all* of its citizens. In such a globalized world as we find ourselves in today, neoliberal and technocratic solutions find its ways across borders. It becomes an ideology, in its ways of shaping our thoughts into actions, the link between what is and what should stay (*Stalsberg, 2019*). The smart city is built around ideas and ideals of neoliberal urbanism, promoted as a living laboratory for citizens viewed only as consumers and users, prioritizing private investments in public infrastructures and services, while chanting the mantra of sustainability (*Di Feliciantonio, 2017*). Are smart cities becoming the neoliberal epitome of gated communities? How is a neoliberal ideology visible in Milan, and how does it take part in the construction of the smart city?

Milan

Milan is the second biggest city in Italy after the capital Rome but has long been referred to as the business and financial capital of Italy. For reference, out of the country's two air hubs, *Milano Malpensa* comes in second after Rome's *Leonardo da Vinci-Fiumicino*. Milan is situated in the northern part of Italy, constituting as the capital of the Lombardy

region, and serves as the home of about 3.26 million inhabitants in its metropolitan area and about 1.4 million within the city proper (*City Population, n.d.*). With a long tradition of both manufacturing and service production, Milan is traditionally renown for fashion and design, mechanics, chemistry, agrifood, and Life Sciences (*Coppola et al., 2018*).

The pride of labeling regional products with 'Made in Italy' brought forward the idea of Italian products as a brand of authenticity. The success of small-scale industrial development in the central and northeastern regions of Italy has been described as an alternative model to large-scale industry (*Blim, 1990*). The 'Italian Model' become known for its expertise in finding a niche in export marketing, specialized as well as flexible knowledge in manufacturing and production, and its spread of small-sized and family-owned businesses. But behind the myth of its success laid the secrets of *lavoro nero*, black work, and the role of kinship and friendship in its organization (*Blim, 1990*).

Italianist John Foot sums up the city's importance as "much of Italy's history is bound up with that of Milan, and the story of Milan can be read as the story of the nation" (*Foot, 2001, p. 3*). He elaborates on how Milan has been the epicenter of "all the crucial movements, booms, slumps and moments in twentieth-century Italian history", such as the making of the first trade unions, the home of fascism and Socialist reformists, the leading of the resistance in the second world war, as well as the center of the economic miracle that transformed Italy (*Foot, 2001, p. 3*).

The city is characterized as a city with a long and flaming history. The image that stands out most clearly for me is that of the dead bodies of fascist leader Benito Mussolini and some of his accomplices in *Piazza Loreto*. Milan was an important site for the leader of Italy's fascist regime, and the piazza become an important place and symbol representing the terrors of Mussolini's regime. Elements from the times of Italy's fascist era are still visible throughout the city's architecture, and unfortunately so are some of the fascist ideals found in small groups of people. Milan experienced a period of tension in 1969, through a series av strikes from workers and students, in what has later been described as *autunno caldo,* the 'hot autumn'. The rapid growth of the metropolis had shaped a new middle class which in turn had fueled the creation of a mass-consumption society, leading to increased inequality between the new industrial middle class and the working class, those who had not "reaped the benefits of their country's 'economic boom'" (*Monza, 2017, p. 240*). The protests kept Milan in a state of constant tension, that "took the form of violent political terrorism from the extreme right-wing and radical left-wing" (*Monza, 2017, p. 240*).

During this time the city was also shocked by the death of sixteen people in the bombings of a bank in *Piazza Fontana* (*Ginsborg, 1990*). Political turbulence and terrorism from revolutionary groups lasted for several years, later referred to as *anni di piombo,* "the years of the bullet" (*Ginsborg, 1990, p. 379*). Including notable events such as the bombing of the Bologna train station killing eighty-five people, the exposure of *Propaganda Due* as a sort of 'shadow government' which included a large number of high-ranking people, such as

Berlusconi, and the kidnapping and killing of former Prime Minister Aldo Moro by the infamous terrorist group *Brigade Rosso,* the Red Brigades (*Ginsborg, 1990*).

Italy experienced its economic miracle in the 1950s and 1960s with an extraordinarily intense period of economic development, first in Milan, then following the rest of the nation as well. This golden age was characterized by a blossoming Fordist workforce in the manufacturing area and a regime built upon low-wage and high unemployment pursued by Italian leaders (*Muehlebach, 2012*). But after a process of deindustrialization started in the 1980s, old Fordist industries such as Pirelli, Alfa Romeo, Breda, and Falck were replaced by the city's new economic bosses of Armani, Prada, and Versace (*Foot, 2001*). I include this to highlight just how structurally profound the change was in finance and labor processes in the late twentieth century in Milan. Changes that not only turned the economy around from a Fordist labor force to a service and knowledge economy that would promote a whole new type of worker but a change that made structural repercussions of the Milanese society well into modern-day contemporary labor systems. If we want to understand the contemporary globalized, neoliberal and technocratic landscape of Milan as a smart city today, we need to take a look at its history as well.

Historically, the socio-political-economic landscape of Italy has according to Andrea Muehlebach (2012) seemed to have been inviting, as well as anticipating, neoliberalization. The ways in which the labor market and structures within the Italian society have developed over the years have led to a nation that should be seen as an "experimental laboratory where our future is being worked out" (*Muehlebach, 2012, p. 17*). In her book called *The Moral Neoliberal* (2012)*,* Muehlebach identifies how the increasing neoliberal structures within Italian society shapes its ethical subject. Such a subjectification of the individual is shaped by embedded structures in each society, cultural, financial, religious, and so on. For this part of the thesis, I wish to shortly explore how the financial structures of Italian society have developed through the years and how Milan has turned into a smart city.

Italy's economy has been suffering since the 1990s with a long period of slow or non-existent growth. After the financial euro crisis in 2008 Italy has faced "a series of dip recessions" that has resulted in a rapid deterioration of the quality of life for the country's inhabitants (*Tintori & Romei, 2017, p. 50*). The reasons for Italy's economic suffering are many and controversial, with a mix of its high public debt, an inefficient bureaucracy, low productivity rates, and falling competitiveness. This can be linked to "relatively high unit labour costs, excessive regulation, lack of R&D spending, an excess of small sized businesses -, political instability, inefficiency, corruption and uncompetitive marketable services" (*Tintori & Romei, 2017, p. 50*).

Both the political and financial structures of Italy have long been known as sites with high levels of corruption. A corrupt system will lead to a lack of trust in the political institutions, and the leaders of the nation will have trouble uniting and leading the nation safely and efficiently. Many of the structures in the Italian context of work, economy, and

politics in which features are central to that of neoliberalization. Such as an increase in subcontracting, which David Harvey identifies as being central to the neoliberal reorganization of industry, has allowed for "older systems of domestic, artisanal, familial (patriarchal), and paternalistic ("godfather," "guv'nor" or even Mafialike) labour systems to revive and flourish as centerpieces rather than appendages of the production system" (*Harvey, 1990, p. 152*). Such labor systems have been constitutive of the Italian economy all along (*Muehlebach, 2012*).

The current economic situation in Italy is affected by high numbers of unemployment, particularly among women and young people. As much as almost half of the female population is inactive at 45%, mainly because there is a lack of good job opportunities as well as rewarding careers for women (*Tintori & Romei, 2017*). The labor market for young people, from 15 to 24 years old, is mostly characterized by temporary contracts, even though the government claims there has been a positive impact for recently imposed 'job acts' (*Tintori & Romei, 2017*). And for those that are unemployed, they statistically remain unemployed for longer periods of time, as 60% remain so for more than 1 year with the risk of having difficulties re-entering the labor market. According to Tintori and Romei, the result of the current economic situation is that real disposable income is deteriorating and it "is now at lower levels than in the early 1990s, while it is over 60% higher in the Eurozone" (*Tintori & Romei, 2017, p. 51*). More so, the effects of the current economic and social situation are more visible from data on poverty rather than unemployment. This comes from the fact that "the percentage of the population that is severely deprived is much higher in Italy than in other Western European countries", and double of what it was in the pre-crisis period (*Tintori & Romei, 2017, p. 51*).

Today, the city's economic structure is that of a knowledge economy with a strong international vocation (*Coppola et al., 2018*). Milan's distinctive economic structure has attracted and kept together a strong network of foreign multinational companies, large firms, medium firms, but also small family-owned enterprises (*Coppola et al., 2018*). Northern Italy and especially Lombardy is known for its financial success of family-owned businesses that have survived the competitive and international surge of the neoliberal economic model. But on the other side of the success is the shadows of an undocumented labor force. Behind the small and medium-sized family-owned enterprises lies the work of women, children, and retirees (*Muehlebach, 2012*).

Emigration of the workforce

Some statistical information shows us that Milan does have a positive population change of 1.3%, contrary to the whole of Italy which shows a -0.03% based on data from 2011 to 2021 (*City Population, n.d.*). Italy is also among one of the countries with the highest excess mortality, recording the highest decrease in population. This decrease was mainly

driven by negative natural change, supplemented by negative net migration. This means that the number of deaths was larger than the number of live births and that the number of emigrants out of the country exceeded the number of immigrants into the country (*Eurostat, n.d.*). I have included in **figure 3** on the next page a demographic balance between countries within the European Union from 1st January 2020 to 1st January 2021. This is to highlight how much the numbers of Italy differ from other countries.

Figure 3

Demographic balance between European Union Nation states, 2020.
Numbers shown in thousands. *(Eurostat, 2020)*

Demographic balance, 2020
(thousands)

	Population, 1 January 2020	Live births	Deaths	Natural change (¹)	Net migration and statistical adjustment (²)	Total change between 1 January 2020 and 2021	Population, 1 January 2021
EU	*447,319.8*	*4,047.4*	*5,186.8*	*-1,139.4*	*827.1*	*-312.2*	*447,007.6*
Belgium	11,522.4	114.4	126.9	-12.5	56.1	43.6	11,566.0
Bulgaria	6,951.5	59.1	124.7	-65.6	30.7	-34.9	6,916.5
Czechia	10,693.9	110.2	129.3	-19.1	26.9	7.8	10,701.8
Denmark	5,822.8	60.9	54.6	6.3	11.0	17.3	5,840.0
Germany	83,166.7	*773.1*	*985.6*	*-212.4*	*200.7*	*-11.7*	*83,155.0*
Estonia	1,328.9	13.2	15.8	-2.6	3.8	1.2	1,330.1
Ireland	4,964.4	*56.0*	*31.8*	*24.2*	*18.3*	*42.5*	*5,006.9*
Greece	10,718.6	*84.6*	*130.6*	*-46.0*	*10.0*	*-36.0*	*10,682.5*
Spain	47,332.6	*338.4*	*491.6*	*-153.2*	*214.8*	*61.6*	*47,394.2*
France	67,320.2	*736.6*	*669.1*	*67.4*	*52.0*	*119.4*	*67,439.6*
Croatia	4,058.2	35.8	57.0	-21.2	-0.6	-21.8	4,036.4
Italy	59,641.5	*404.1*	*746.1*	*-342.0*	*-41.9*	*-383.9*	*59,257.6*
Cyprus	888.0	*9.9*	*6.4*	*3.5*	*4.5*	*8.0*	*896.0*
Latvia	1,907.7	17.6	28.9	-11.3	-3.2	-14.5	1,893.2
Lithuania	2,794.1	25.1	43.5	-18.4	20.0	1.6	2,795.7
Luxembourg	626.1	6.5	4.6	1.9	6.8	8.6	634.7
Hungary	9,769.5	93.8	141.3	-47.5	8.8	-38.8	9,730.8
Malta	514.6	*4.4*	*4.1*	*0.3*	*1.2*	*1.5*	*516.1*
Netherlands	17,407.6	*168.7*	*168.7*	*0.0*	*67.8*	67.8	17,475.4
Austria	8,901.1	83.6	91.6	-8.0	*39.6*	*31.6*	*8,932.7*
Poland	37,958.1	355.3	477.4	-122.0	3.9	-118.1	37,840.0
Portugal	10,295.9	84.4	123.4	-38.9	41.3	2.3	10,298.3
Romania	19,328.8	*176.8*	*297.0*	*-120.3*	*-22.4*	*-142.6*	*19,186.2*
Slovenia	2,095.9	18.8	24.0	-5.2	18.4	13.1	2,109.0
Slovakia	5,457.9	56.7	59.1	-2.4	4.3	1.9	5,459.8
Finland	5,525.3	46.5	55.5	-9.0	17.5	8.5	5,533.8
Sweden	10,327.6	113.1	98.1	15.0	36.8	51.7	10,379.3
Iceland	364.1	4.5	2.3	2.2	2.4	4.7	368.8
Liechtenstein	38.7	0.4	0.3	0.0	*0.3*	*0.3*	*39.1*
Norway	5,367.6	53.0	40.6	12.4	11.4	23.8	5,391.4
Switzerland	8,606.0	85.9	76.2	9.7	*51.3*	*61.1*	*8,667.1*
Montenegro	621.9	7.1	7.3	-0.2	-0.9	-1.1	620.7
North Macedonia	2,076.3	19.0	25.8	-6.7	-0.7	-7.4	2,068.8
Albania	2,846.0	28.1	27.6	0.5	-16.7	-16.2	2,829.7
Serbia (³)	6,926.7	61.7	116.9	-55.2	0.0	-55.2	6,871.5
Turkey	83,155.0	1,112.9	:	:	:	459.4	83,614.4
Bosnia and Herzegovina	:	:	:	:	:	:	:
Kosovo (*)	:	:	:	:	:	:	:

(:) not available

(¹) Live births minus deaths.
(²) Total change minus natural change.
(³) Due to a lack of data on migration, the demographic balance is based exclusively on the natural change.
(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (online data code: demo_gind)

eurostat

The contemporary focus of the Municipality of Milan has been to attract innovative, young, and creative people and support startups. And for good reason. In recent years Italy has seen a new surge of emigration out of the country. Historically, high levels of emigration have taken place in countries in times of recession or crisis. The first diaspora in Italy was

after the Unification of Italy had taken place in the middle of the 19th century. After that, there was an increase in emigration after the Great Recession at the beginning of the 20th century and lastly rising numbers post euro crisis in 2008.

After years of being a 'country of emigration', official statistics show that Italy has had a positive net migration since 1974 thus turning into a 'country of immigration' (*Tintori & Romei, 2017*). But these statistics only highlight the levels at which foreign immigrants are let into Italy and do not hide the fact that there are still high levels of Italian people that leave their country. The numbers of emigration based on Italian citizens only from 2013-2014 show the highest numbers in 10 years. The history of Italian emigration has shown that many Italian citizens do come back to their country, but the numbers are lower now than they used to be. According to Eurostat, Italy had in 2012 the "smallest share of returning migrants among all European countries (excluding Cyprus and Luxembourg)" (*Tintori & Romei, 2017, p. 52*). The preferred countries of emigration by Italian citizens have been mostly Germany, Switzerland, France and in the last years also the UK. The average of an Italian emigrant is around 34 years old and predominantly males over females at 57.6% (*Tintori & Romei, 2017*).

Italian emigration has for years been characterized as having a 'brain drain', a high number of educated citizens that leave the country for lack of sufficient work opportunities. In their article, Tintori and Romei (2017) discuss whether Italy is currently affected by a 'brain drain' or not. Their data show that the number of graduates emigrating between 2011 and 2013 increased from 11.9% to 30.6%. They note that even though there is a rise among graduates emigrating, they are still a minority of the emigrant population. In 2013 the top countries for graduates to emigrate to was first the US, then the UK, Brazil, and Switzerland before Spain.

Interestingly, emigration seems to have become a permanent trait of the Italian society, economy, and culture (*Tintori & Romei, 2017*). That is to say, the idea and perception of what Italian emigration entails have changed drastically. The recent migratory waves have been re-labeled as *nuove mobilità*, 'new mobility', in public discourse, in a way to distance it from that of past emigration. Whereas past migrants featured unskilled and poorly educated individuals and families forced to leave their country to survive, the migrants of the *nuove mobilità* consist of so-called "Eurostars" to "make the best out of the 'human face' of globalization" (*Tintori & Romei, 2017, p. 58*). They are characterized as a "generation of highly skilled and intensely mobile people who are equipped to roam between 'Eurocities' and global capitals" (*Tintori & Romei, 2017, p. 58*).

Woven into this change of narrative are the public statements of members of the political elites that contributed to pushing and encouraging young graduates to take their talents and leave Italy to start their careers. Together with media and popular blogs, the public narrative of young emigration popularized the phrase *fuga dei cervelli*, the Italian equal for 'brain drain', that was applied "indiscriminately to every (relatively) young Italian

who goes overseas, regardless of their qualification and occupation" (*Tintori & Romei, 2017, p. 58*). But as Tintori and Romei argue in their article, this "partially true and extremely over-simplistic rendition of Italy's current mobility patterns" does not prove that they actually bring their 'brain' too with them (*Tintori & Romei, 2017, p. 58*). The numbers and statistical data to measure the fatal loss of young graduates and the 'brains' of Italy are not capable of actually showing the human capital of those who leave, their occupation, wage levels, type of job contracts, and length of stay abroad (*Tintori & Romei, 2017*).

The Municipality of Milan plans to put Milan back on the map as an attractive urban site for innovation and growth. How is this process happening in the light of being a smart city? In this next part, I will demonstrate the ways in which Milan constitutes itself as a smart city before I illustrate this with the experiences of both my informants and myself.

Smart Milan

The Municipality of Milan has during the last decade focused on promoting an economic transformation that is necessary to tackle its pressing societal challenges. First, this has been to adopt a "set of strategic policy frameworks on sustainable mobility, sustainable energy and smart agenda with a vision to become more sustainable, resilient, smart and circular" (*Cassinadri et al., 2019, p. 85*). As defined by the Municipality of Milan, the vision for Milan as a smart city can be summarized like this:

> "*Smart* in the way it dialogues with the citizens and promotes projects that respond to their needs; *Inclusive*, with respect to its diverse communities and stakeholders; *Attractive and responsive* to the needs of those who are living and working in the city; *Green and Sustainable*" (*Trivellato, 2016, p. 343*).

The overall aim has been to produce both a governance strategy as well as a project that is tailor-made to the specific needs of Milan. The Municipality has during the last decade actively implemented new policies and plans to push for sustainable action to take place in the city. Specifically, that has been the Sustainable Energy Action Plan (PAES) that the Municipality adopted in 2014, where "energy transition is encouraged through measures regarding energy efficiency of buildings, optimization of public lighting and conversion of the fossil system to a carbon neutral one by using renewable energy sources" (*Cassinadri et al., 2019, p. 85*). Also in 2014, the Municipality approved a document to adopt Smart City Guidelines, that officially affirmed the city's "overarching strategic objective and political priority to transform Milan into a smart city" (*Cassinadri et al., 2019, p. 85*). Later, in 2018, the City of Milan approved the Sustainable Urban Mobility Plan (PUMS), aimed at "meeting the mobility needs of the population while ensuring the reduction of atmospheric and noise pollution levels and of energy consumption by enhancing public transport and share mobility services" (*Cassinadri et al., 2019, p. 86*).

Since 2012, Milan has been a part of the Sharing Cities 2020-SCC1 project supported by the European Union (*Sharing Cities, n.d.*). Next London and Lisbon, Milan has been a 'lighthouse city' aimed at creating a 'smart' district with 'near-zero' emissions to tackle urban environmental challenges and to improve the daily life of its inhabitants (*Cassinadri et al., 2019*). The Sharing Cities project has been a part of the Horizon 2020 Framework Programme, where the European Union has granted funds to 437 projects for a total of over 189 million euros (*Politecnico, n.d.*). This includes research projects within areas such as excellent science, industrial leadership, societal challenges, and cross-cutting initiatives. For example, the COHSMO Project that deals with spatial justice, social cohesion, and territorial inequalities in Milan, which I will explain more in-depth below.

The Sharing City Project is mainly focused on the three lighthouse cities, and next to these are the three 'fellow' cities of Bordeaux, Burgas, and Warsaw. As for the lighthouse cities, they have already established several smart aspects of the city that the fellow cities are to possibly implement. Some of the smart parts implemented in the cities are the introduction of shared electric mobility services such as bikes and cars, installation of energy management systems, smart lamp posts, the retrofitting of buildings, and an urban sharing platform in consultation with communities and residents (*Sharing Cities, n.d.*).

According to its website, the Sharing Cities project promotes "an agile and collaborative smart cities ecosystem that delivers liveable, attractive, and resource-efficient cities" (*Sharing Cities, n.d.*). As a major international project connecting 23 partners from across government, industry, and academia, its main focus lies on "energy use, low carbon transport and buildings, and harnessing data for the good of the city" (*Sharing Cities, n.d.*) Financially, the project has received €24 million in funding from the European Union, and its aim is to trigger €500 million in investment and to engage over 100 municipalities across Europe.

In Milan, an area of demonstrating this project and a smart approach is the *Porta Romana - Vettabbia - Corvetto* area. With the aim of fueling economic growth in both wealthy and stagnant metropolitan areas, the city of Milan is using the smart city discourse as a tool in order to bid for EU funding (*Di Feliciantonio, 2017).* The area in question is a stagnant and deteriorating part of the city. The Municipality of Milan has since its adoption of the smart city strategy decided to focus on limited parts of the city to test "innovative solutions with the aim of scaling up to the rest of the city" (*Cassinadri et al., 2019, p. 85*). The area is a brownfield development area of 216,614 m² and a former railway yard now under complete redevelopment. The project is aimed at stitching together to a vast area that has been geographically, economically, and socially separated. Following this transformation, the area will include a "functional mix of private and social housing units, the multimodal integration of transportation systems around a new station, and a large park of 187,226 m²" (*Sharing Cities, n.d.*). The numbers from the Sharing Cities Project reveal that more than 24,000 m² retrofitted land have led to a 60% energy consumption reduction,

including 60 new charging points for electric vehicles, 150 new electric bikes, 35 kilometers of new cycle paths, 1,000 smart lamp posts and 350 smart parking spaces so far (*Sharing Cities, n.d.*).

In the concluding remarks from Cassinadri et al. (2019), we can see some examples of different EU-funded projects that apply smart city features in the city of Milan through the Sharing Cities initiative. To mention a few there is the EUGUGLE project that "focuses on buildings energy efficiency demonstrating the availability of building renovation models" with near-zero energy consumption (*Cassinadri et al., 2019, p. 92*). Following this there is the CLEVER project (Cities Co-designing Locally tailored Ecological solutional for Value added, socially inclusivE Regeneration in Cities), that "contributes to defining the regeneration of urban spaces concentrating on the role nature-based solutions", that would be solutions that are borrowed or supported by nature leading to environmental, cultural, social and economic benefits (*Cassinadri et al., 2019, p. 92*).

Finally, I would like to mention the interesting COHSMO project that investigates the relationship between territorial cohesion and social investment strategies, and goes under the title: "Inequality, Urbanization and Territorial Cohesion. Developing the European Social Model of Economic Growth and Democratic Capacity" (*COHSMO, 2021*). Despite being a leading-edge city in terms of inclusive local policies, Milan has seen rising levels of social inequality. This is visible through increasing numbers of youth unemployment, a huge increase of non-EU migrants that are paving the way for high segregation risks in some parts of the city, and deteriorating housing conditions of the poorer in the last years due to cuts in social housing programs (*COHSMO, n.d.*).

The final report of COHSMO underpins the ways in which its focus and contributions can be applied across different countries and in different types of urbanization. In a way that could strengthen the European Social Model as well as contribute to positive change after the economic crisis of 2008 and of the current pandemic crisis. The research project's main contribution highlights the important topics that are spatial justice, economic growth, and democratic capacity, which is not an easy task but a very important and necessary project at this time.

I would like to highlight the importance of having a research project such as COHSMO to investigate the levels of inequality differing between the center and the periphery of the city. Because we see such a strong power of centralization taking place throughout countries, it seems more important than ever to put the focus on the imbalanced power relations that take place in the urban relational space. The COHSMO report has seen an uneven spatial distribution across Milan from municipal policies and resources. These are mainly targeting the central parts of the city, with the result of "exacerbating existing conditions of socio-spatial polarisation" (*COHSMO, 2021, p. 43*). During the last ten years, the Municipality has committed itself to promoting a more equitable and fair distribution of well-being throughout the city, but as the report says, most of the actions taken have been of

a 'remedial nature' (*COHSMO, 2021, p. 37*). This means that the focus of the Municipality has been on the most vulnerable neighborhoods, as exemplified by areas such as Lorenteggio, Giambellino, and Corvetto, rather than focusing on a structured and consistent strategy that would embrace the whole city of Milan. As I mentioned above, the Corvetto area is a part of the Sharing Cities initiative as a part of a local transformation of the neighborhood. Hopefully a successful retrofitting of this area will improve its liveability.

Strategies adopted by the City Council of Milan in 2019 to approach territorial inequalities are aimed to "contribute to reorganize in a polycentric way the system of public services across the city, aiming at improving the quality of life in distressed urban neighbourhoods" (*COHSMO, 2021, p. 43*). The peripheral areas of Milan are a particularly interesting case of spatial fragmentation because of the many voids of former industrial areas that need to be generated. The former factories and abandoned areas are ugly, unsafe, and expensive to get rid of. Some of these spaces have with different initiatives been transformed into innovative and creative hubs. Such as the previous factory owned by Nestlé has now been taken over by Armani as a fashion showroom, as well as fashion brand Prada has rebuilt another post-industrial space (*Jansson & Power, 2010*). The Tortona district which used to be Milan's Factory District before the economic crisis is now taken over by creative businesses and fashion brands. Milan really has been taken over by new economic bosses.

Expo-2015

The main event that put Milan on the global map as an innovative, forward-looking, and 'smart city', was the Expo-2015. The successful organization of the renowned and long-established world exhibition was seen to have contributed to framing Milan as a bridge between Italy and the rest of the world (*Boczy et al., 2020*). The theme of the year being 'Feeding the Planet, Energy for Life', allowed the city of Milan to show how technology, innovation, culture, traditions, and creativity relate to food and diets in new and sustainable ways. The event can be referred to as a turning point for Milan's international recognition as an innovative and connected city, and as a milestone in turning the city into a smart city. The expo-2015 is mentioned in a lot of smart city literature as a way of "re-connecting the city to the international stage" or "positioning the city as a global city" (*Gonzáles, 2009, p. 3, Boczy et al., 2020, p. 201*). The event was thus an important part of the re-imagining of the city of Milan as a global hub. On the one hand, the successful mobilization of an international event of this size reveals Milan's triumphant approach to urban transformation projects. On the other hand, the city of Milan is changing, as described above, in a more spatially diffused and minimal way.

Mega-events such as World Expos have the potential to "exert enduring economic and social effects on host cities" (*Magno & Dossena, 2020, p. 1*). But international events of

this kind might also be used by the local government as a decoy to show the best parts that they have to offer at the same time as hiding its flaws. There are a number of events and international happenings to exemplify this happening. Most recently the execution of the latest Olympic Games held in China has received criticism for displaying a perfect image of a nation while people are suffering, unable to criticize the state. Particularly the case of the man who was a part of designing the arena for the games, the now-famous *Bird's Nest,* as the national stadium in Beijing for the Olympic Games in 2008. The Chinese architect Ai Wei Wei expressed his discontent over the way China handled their human rights situation and is now in exile with a low probability of ever returning to his home country.

In another example, the local government of Laos was pushing for initiatives to modernize and improve the village of Vientiane before hosting an international meeting to build diplomatic status and credibility with trade partners and potential investors (*Namba, 2017*). In the end, the improved infrastructures ended up having a hollow value of visual improvement, unable to have any actual effects on the lives of the locals. According to Namba, big developmental projects hold the potential of turning into what she calls 'fetishized spectacles' (*Namba, 2017*). In this way, the concept of infrastructural fetishism can be understood as a symbol of modernity, rather than infrastructure developed for the needs of the people in the village. The use of fetishized spectacles and events such as Expo-15 shows off some parts, but it also hides something else. It is a diversion to change the focus of those watching. Who are the drivers behind this process in Milan? Who produces it and who promotes it?

A leading figure in the Milanese society is the infamous Silvio Berlusconi, with nine years of experience as Prime Minister of Italy, as well as founder, and owner of FinInvest, the previous owner of Italian football club AC Milan, and owner of Mediaset, the largest media company in Italy (*Ginsborg, 2004*). Asking some of my Italian friends about Berlusconi, I am left with descriptions such as "*bunga bunga"*, referring to his scandalous sex parties, and "*l'immortale*", describing him as 'immortal' for seemingly never growing older or leaving Italian politics. In other words, Berlusconi is a controversial character throughout the whole of Italy. Historian and expert on contemporary Italy, Paul Ginsborg, asks the important question in his book whether Berlusconi's model of media and political power announces a new model of political control in modern democracy (*Ginsborg, 2004*). Berlusconi's position as both a media oligopoly and the leader of the nation does raise some red flags, and the former should be considered when seeing the success of the latter. The concluding remarks from Ginsborg make an important point:

> *"Berlusconi will probably fail … But the political and cultural trends of which he is one of the most striking expressions are here to stay, and they weigh heavily upon our collective democratic future*" (*Ginsborg, 2004, p. 190*).

In fact, the political legacy of Berlusconi, described by Western media with the term *Berlusconism*, was a mix of conservatism, populism, liberism, anti-communism, and Atlanticism. Berlusconi has played a crucial role in the neoliberal wave of Italy and has certainly surfed on top of that wave. Together with his political legacy, Berlusconi played an important part in the construction of the master-planned community *Milano 2*, built in connection with his firms *FinInvest* and *Edilnord SaS* (*Monza, 2017*). Built during the 1970s, the community represented at its time a better and more habitable Milan, hence its name, in response to unsustainable development and the spreading public housing politics of the 1960s (*Monza, 2017*). It was the first gated community in Italy, located in the municipality of Segrate (*Di Feliciantonio, 2019*).

Master-planned urban models such as *Milano 2* are the private developers' expressions of urban and societal visions and need to be viewed from a more critical point of view. In this privatized sphere, urban sustainability becomes according to Monza produced by "creating a series of strict rules which every resident must follow in order to live in the community" (*Monza, 2017, p. 239*). She underlines that urban sustainability thus turns away from common ideas on sustainability such as renewable energy or mobility, and onto the creation of social control that would lead to a sense of safety and cleanliness. In other words, master-planned communities become a part of a process of "gaining political power to decide, to exclude, to construct hegemonies and create and maintain social inequalities" (*Mössner, 2016, as cited in Monza, 2017, p. 239*).

One of the more desirable outcomes of the community, acclaimed as an innovation in Italian urban planning, was the separation between cars, pedestrians, and bicycle lanes. The community was initially intended to host 10,000 people but is today home to just about 6,500 residents (*Monza, 2017*). A possible reason can be put on the majority of elder residents living in the community, in turn pushing the younger generations closer to the city center.

According to Monza, *Milano 2* "encourages a 're-definition' of urban life… and established a new social order" (*Monza, 2017, p. 240*). Included in this is the 're-definition' of lifestyles and the 're-definition' of administration. Such as the communication of a specific set of values to "(re)produce the 'right' way of urban life", or the promotion of an urban vision built on both a discursive and a material level (*Monza, 2017, p. 241*). On a material level, this involves architecture of an intriguing aesthetic, an attractive environment, and high-services. On a discursive level, the developers construct through the administration a social discourse. For *Milano 2*, the social discourse promoted the community as a safe place away from the current crisis in the center of Milan, with strikes and threats of terrorism. In this way, the master-planned community of *Milano 2* provided a new narrative for urban politics, in a way completely different from 'normal' cities (*Monza, 2017*).

For the smart city of Milan, many of the same points can be made. For instance, the city's first smart community, *Milano 4 You*, set out to regenerate a 300,000 m² brownfield

site (*Di Feliciantonio, 2019*). The project is located in Segrate, one of the wealthiest municipalities in the Milan metropolitan area, which is also the location of *Milano 2*. The project has been promoted as a "new urban model centered on technological innovation and sustainability for both housing and business activities", and set out to connect the area to the main urban core (*Di Feliciantonio, 2019, p. 100*). Before the initiation of the smart district, Segrate is experiencing a strong real estate dynamism, the construction of what has set out to be the biggest mall in Europe, and the intention to construct a metro line extension to the center of Milan (*Di Feliciantonio, 2019*). It is an area with the aim of growing and attracting the 'right' type of residents. According to Di Feliciantonio (2019), there are five main objectives listed in the advertisement of *Milano 4 You*. With these objectives, the smart community directs its attention toward attracting residents that envision themselves as "self-entrepreneurs willing to re-appropriate their data and sell them for profit, while sharing a 'smart' lifestyle" (*Di Feliciantonio, 2019, p. 99*).

The first objective is the 'zero cost city', a city that reduces energy and maintenance costs through advanced construction technologies. Also aiming for the use of 'local' renewable energy sources. This objective also stands out from the smart city ideals of the local government, published on their website as intending to "*emergere il capoluogo lombardo quale polo di innovazione e fucina di idee nel settore della sostenibilità e dell'attenzione a tutto il mondo green*", which translate to: "bring out the Lombard capital as a pole of innovation and a hotbed of ideas in the sector of sustainability and attention to the whole green world" (*Comune di Milano, n.d.*).

The second objective promises 'safer life' with digital technologies which allow constant and long-distance surveillance. Very similar to the promises of *Milano 2*, which presented its gated community as a safe space compared to the dangerous city center of Milan. It essentially positions itself in a comparative state, defining itself as the best outcome of the comparison. This objective reifies one of the main narratives of smart cities and digital technologies, highlighting the question of data storage, surveillance, and control.

The third objective deals with 'inclusion and participation' of a diverse community with residents of all ages and social classes, as the project also includes social housing. The fourth objective improves the quality of life for residents through the creation of different services and reduces costs of living through sharing platforms for care work and transport. Finally, the fifth objective involves a new work model "by creating the infrastructure which enables work at a distance, co-working, and other forms of digital work" (*Di Feliciantonio, 2019, p. 104*). The last objective is of particular contemporary importance, as *smart work* has suddenly been spread throughout Italian society because of the Covid-19 pandemic.

The beginning of *Milano 4 You* started as the 'Integrated Intervention Program' was approved in late 2018, and in June of 2020, the work on the construction site started after two years of waiting for several administrative approvals (*Milano4You, n.d.*). The latest update from the website shows the beginning of renovations of houses and a free lot for

residents in 2021 (*Milano4You, n.d.*). Although the project has not been completed as initially expected for the year 2022, the project is a great example of the planners and vectors behind the smart city discourse in Milan. It is a result of a partnership between different private actors, a number of partners that are listed on the official website for *Milano 4 You*:

> *Cisco, Drees & Sommer, EFM, Five sixty, Cimolai, Laboratori Guglielmo Marconi, Marazzi, Ospedale San Raffaele, Politecnico Milano, Poliedra Politecnico di Milano, Siemens, Di Bari & Associates*, and *ARD&NT institute* (*Milano4You, n.d.*).

The main actors behind the project are real estate company R.E.D. and Sagitta SGR, which manages the project through all of its phases, "from its conception to its realization, with a coordination of all the players involved, from public institutions to partners" (*Milano4You, n.d.*). The organization behind the *Milano 4 You* project shows the agency behind the structures of the smart community. While both of the main actors managing the project are companies based in Italy, they are subsidiary companies of other subsidiary companies based in different countries. Following the line of ownership shows a globalized thread going through almost the whole world. The ideas and ideals of the smart city thus become realized through the structures of a globalized technocracy, a network of national and international partners.

The smart city becomes technocratic through the ways in which specialists and experts from different fields of knowledge provide technological solutions which slowly replace deliberative democratic policies and initiatives. The Municipality of Milan is the main vector behind the promotion of smart urban regeneration projects, in an endeavor to increase economic growth and to receive funding from the EU. The role of the local government in cooperation with privatized companies takes shape as technocratic governance in a neoliberal network. It becomes neoliberal through the "limitations of public sector competencies, inefficiencies in service delivery, and the need for marketisation of state services and infrastructures" (*Kitchin et al., 2019, p. 204*). There is a dominant neoliberal conception of smart cities that works to "promote the interests of capital and state power and reshape governmentality" (*Cardullo et al., 2019, p. 1*).

Events such as the Expo-15 fetishize urban regeneration projects for an international audience and are a part of creating a new narrative of Milan as a smart city, removing itself from its blood-stained history of political turbulence. In the same way, could the smart city present itself more as a fetishized spectacle rather than a concept that would actually contribute to a better and more sustainable life?

Sensing the city

My first visit to the city of Milan was in 2017. With a total of four visits during the last five years, all of which lasted only for a few days, I have only gotten a taste of the city, small fragments, and impressions of what constitutes the second biggest city in Italy. Despite of the short amount of time, I still managed to get a sense of the city. My sensory experience was through the eyes of a tourist, seeing fragments of popular culture scattered throughout the city. Even though I was not able to experience long-term fieldwork in Milan, I did get to walk through the city as the *flâneur* of Walter Benjamin, as "one who walks without haste, at random, abandoning himself to the impressions and sights of the moment" (*Pink, 2008, p. 180*). To walk through the city becomes according to anthropologist Sarah Pink a sort of process of place-making that can differ from the traditional ethnographic fieldwork. Sensing, smelling, feeling, tasting, and seeing the city becomes a multisensory experience. Especially when experiencing the urban space with a friend, a local or an informant, this sort of fieldwork can show their routes in the city as well as an understanding of their ways of being in the world (*Pink, 2008*).

My first impression upon entering Milan in a sweltering summer heat was the noisy streets full of traffic and Vespas coming from every direction. People from all around the world preoccupied the sidewalks, but there was a clear distinction between the tourists and the locals. Never have I seen so many well-dressed people going about their life, almost like a real-life fashion show from some of the best Italian designers, Armani, Versace, Prada, Dolce & Gabbana… Quality really is an Italian trait. Experiencing Milan for the first time with a friend, we were shocked to find the bars brimming with people in the afternoon, as if they had appeared out of nowhere. It was my first, of many, meetings with the Italian *aperitivo*. Like a daily national event and cultural trait, the *aperitivo* celebrates the end of the workday and opens up the appetite with delicious Italian snacks and products. The *aperitivo* is usually complimentary next to drinks and is an important social event throughout all of Italy. People gather to talk about their day, gossip, or discuss politics and other important happenings. The *aperitivo* is a great example of the Italian need for socializing.

Looking up from the people are the grandiose buildings showing the wealth and long history of the city. Coming from my hometown of Oslo it is always so fascinating to see places with a history lasting longer than just a few hundred years. It gets almost incomprehensible walking on a street when someone tells you that these stones were laid during the Roman Empire, a couple of thousand years ago. Italy is a country with a great and long history, which makes the meeting point with modernity particularly interesting. Such as the restaurant with the best view of the *Duomo di Milano*, the world-famous and centuries-old Milan cathedral, is a McDonald's. And I can promise you that not many locals have set foot in that place. Most of the Italians I know are quite particular about what they

characterize as 'real food' or 'real coffee', and big businesses such as McDonald's and Starbucks do not fit under these categories.

In another part of Milan lies the *Porta Nuova* district, translating to 'new gate'. Looking at a map of Milan we can see that the city center is located within a circular shape connected by different gates, *porte*. This is a defense structure that dates back to the times of Ancient Rome, which surrounded the city center with accessibility only through the different gates. The *Porta Nuova* area is named after one such gate, which now constitutes the most contemporary and high-tech district and is one of the main business districts of Milan. Walking through this area is a completely different atmosphere than what you get from some of the other districts full of historical buildings and popular tourist attractions.

In *Porta Nuova,* you will find modern architectural sights such as *bosco verticale*, the 'vertical forest' with greeneries on each floor, and more than 800 trees as a tall, green oasis in the middle of a concrete jungle. The residential building has received a lot of attention internationally as an architectural icon and is according to the architect "the prototype building for a new format of architectural biodiversity which focuses not only on human beings but also on the relationship between humans and other living species" (*Stefano Boeri Architetti, n.d.*). The *bosco verticale* is surrounded by a big park as well as a number of other modern buildings, like the Unicredit skyscraper covered in glass, visible throughout the city as the tallest building in Milan, as well as in the entire country. *Porta Nuova* has clearly distinguished itself as a modern district in many ways, even though it is one of the oldest parts of the city. Viewing the emergence of this district is particularly interesting because of its meeting point between the ancient history of Milan and the modern urban landscape of today.

On my latest trip to Milan, I entered the *Porta Nuova* district by foot and was immediately set back by its open spaces and grandiose, tall buildings. Walking from the city center with a sense of chaotic life into this area was like taking a step into the future on another planet. The streets were noticeably wider and still leaving more than enough space for the pedestrians on the sidewalks. The skyline was made up of high-reaching buildings dispersed throughout the landscape, leaving me with a great sense of space at the same time as feeling particularly small. The sense of space in a vast landscape felt uninviting for me as a pedestrian. A feeling that reminded me of the sentiments of anthropologist James Scott on how the planning of urban spaces is changing the social dynamics and mobility of people and providing legibility for the state (*Scott, 1998*).

Modern cities are planned and built with a grid-like pattern to provide a better overview and access for the state. The focus on vast open spaces makes it more difficult for spontaneous or planned demonstrations to happen in the streets, as well as making it easier for the state to intervene with force. A designed environment with a main focus on wider streets for traffic will ultimately drive pedestrians to use collective transportation and cars. This shifts the aspect of spontaneous social encounters in the streets towards more planned

appointments between people in designated areas of parks and other open spaces. For Italian people, most spontaneous encounters seem to happen quite easily, especially at the local bar over an espresso.

The layout of Milan's city center can be described as monocentric, which means to have a single center. In other words, it can be described as an urban hierarchy, as the city center exposes the wealth of the region through its "golden quadrangle of designer shops, luxury flats, the *Duomo"* and the famous opera house *La Scala* to name some (*Gonzáles, 2009, p. 9*). Such an urban centralization imposes hierarchical structures through the ways in which the more centrally someone lives, works, or socializes, the better connected they are to networks of power, wealth, and status.

Having spent some time in the small Italian village where my boyfriend, Massimiliano, is from, I have witnessed just how easy it seems for Italians to strike up a conversation with a complete stranger. Unusual for my shy Norwegian independence, a lot of practice was necessary to loosen my tongue and stutter out the few Italian words I knew. Luckily, I could leave the conversation to Massimiliano and take on the observing role as the anthropologist myself. I have yet to take part in the somewhat loud and typically Italian conversations flying through the small alleyways between apartments and the street. It becomes clearer from time spent away from typical tourist locations just how important and natural a sense of community is for the Italians. But then again, Milan is not a typical Italian village, but a globally connected city that offers a completely different lifestyle.

Milanese Living

What is it really like to live in Milan? Not having been able to experience this cosmopolitan city full of life myself for longer than a few days, I have to rely on secondary sources. To spruce up a thesis based solely on secondary scientific research, I asked a few Milanese friends to share some thoughts on their life, work situation, and overall satisfaction, or dissatisfaction, with living in Milan. For me, it was interesting to get a sense of their relation to the city, the way they use it, and the ways it affects their lives. I have had three Italian acquaintances answer my questions, all of whom I have been introduced to through Massimiliano. These include two women and one man, all living in and around Milan, between the age of 34 and 41.

Methodologically, I have sent my informants a few of my most curious questions, that they have answered digitally in their preferred language. Aside from Michela, whom I had the pleasure of spending some time with on one of my short visits to Milan, I have not met Ferndinando or Andrea in person. This shows again that fieldwork can be both digital as well as fragmented. The answers I have received from my informants are not representative of a Milanese lifestyle, but they do provide a small insight and some thoughts on the subject. I have been interested in how they experience living in Milan, and in what ways they

experience Milan as a smart city. I have also focused on their overall satisfaction in both life situations and work status, in an attempt to locate a sense of the Italian work-life balance. As for their answers regarding Milan as a smart city, it is clear that the city's smart transition has not been broad enough to affect all of its inhabitants yet.

Qualitative responses

My youngest informant, that I have given the pseudonym Michela, lives in the city center in her own apartment. She has a permanent position at a firm and a job that she tells me is satisfying and interesting. When asked how she experiences living in Milan, Michela writes: "*I really love (*to) *live in Milan. … I love life in the city the possibility of having everything at hand, certainly the cost of living is certainly higher but I am willing to support it in order to stay in Milan."*

I met Michela for the first time in 2019 when she welcomed Massimiliano and me in Milan and showed us the city center. She took us to see a few of the most important cultural landmarks such as the *Duomo di Milano, Sforzesco Castle,* and the *Parco Sempione,* the biggest park within the city center. Michela shared her interest in architecture, and we identified some buildings that originated in the fascist era, under the regime of Mussolini, such as the *Torre Branco* as one of the tallest landmarks in the city skyline, as well as the busy central station *Stazione Milano Centrale*, built to carry the great patriotism of Italy. It is always interesting to see how this kind of architecture hides in clear sight, reminiscing of another era. After a slightly superficial walk viewing Milan on the surface, Michela took us to the *Navigli* district, one of Milan's more charming areas with canals, small bridges, and streams of lights for a romantic atmosphere. Alongside the canals were many different bars and restaurants like pearls on a string, and we settled for a small bar brimming with local Italians talking and discussing passionately.

Over a shared *aperitivo,* Michela and Massimiliano discussed the phrase *vivere per lavorare o lavorare per vivere,* translating to 'living for work, or working to live'. They both shared their perspectives on the idea, each of them identifying with the phrase opposite of the other. Michela had gotten her permanent position at a firm, meaning she was able to save and spend her money on experiences and travel outside of the country. For Michela, working to live, time became separated with a clear boundary between work and pleasure. On the other side, Massimiliano had not had the same opportunity to settle down in a well-paid job and was driven to start his own company outside of Italy in order to grow financially. He is living for work and dreaming of returning to Italy, but in the meantime suffering the consequences of having no separation between work and life.

I believe the phrase *vivere per lavorare o lavorare per vivere* is a valid controversy for many Italians, usually determined through access to education, access of funds, and access to work. Because of Italy's current political and economic situation, particularly after

the euro crisis in 2008, the work situation of most Italians has been a challenge. Not to mention how many businesses have gone bankrupt during the Covid-19 pandemic. The insufficient nature of the Italian welfare state has a long and difficult road ahead with structural reorganizing.

For the purposes of this thesis, the focus will stay on the matter of how important a well-functioning system is for the quality of life. Within the mix of labor systems, money, political and economic policies lay the most important aspect of being able to be happy and content with one's life. Not all can reach the top of Maslow's pyramid, but I do not believe that a faulty and corrupt system should keep you away from picking from the top. Can the smart city offer a lifestyle within these structures that can actually improve the level of quality of its inhabitant's life?

The responses I received from my Italian informants living in and around Milan were also dispersed as to the benefits of living in the city. As Michela highlighted the joy of being connected to the center of urban life, both of the other two had decided to move out of the city center. Their decision was made based on noise levels, pollution, and prices. Federico wrote to me that "*as far as I'm concerned, the city is still too chaotic*", as he had decided to live 20 kilometers outside of the city center but commuting to Milan every day for work. Federico expressed how the city life "*…is mostly influenced by fast pace, I am not a lover of urban city life …. the people here are too much the same, sometimes basic personal relationships are lacking, in a city like this you often don't feel like a person but a number among many others who run too fast*".

Andrea answered that she lives with her children in a small village outside out Milan, but also works in Milan. "*Per me vivere a Milano è bello perché è una città che offre tanto, puoi fare tanto. A partire dall'istruzione che è ottima, si può scegliere di studiare tutto quello che desideri, a livello lavorativo offre tante opportunità, anche come hobby e tempo libero c'è molta scelta*", which translates to: "For me living in Milan is nice because it is a city that can offer a lot, you can do many things. Starting from education which is excellent, you can choose to study everything you want, at work level it offers many opportunities, even as a hobby and free time there is a lot of choice". Andrea added that: *"La vita a Milano è buona, forse sta diventando un po' cara e comunque è anche parecchio stressante."* "Life in Milan is good, maybe it is getting a bit expensive and also quite stressful."

Quality of life

From the beginning of working on the subject of smart cities, *quality of life* has been an important factor. In so many ways this aspect seems like the most important end product of modern development, increasing the levels of quality. The question is of course in what ways the quality can be increasing, and for whom. Taking a step back and seeing the bigger picture, the world as a whole, I see in many ways *quality of life* at the same level of

sustainability, a somewhat superficial goal we are tempted with but not really capable of choosing in dept what it means to us. *Quality of life* has been defined by the World Health Organization (WHO) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (*WHO, n.d.*). On an individual level, the quality of life is based on a feeling, a sense of satisfaction and joy that comes from what you surround yourself with.

In the article *Happiness and Quality of City Life* (2009), Italian researchers Balducci and Checchi investigate how subjective well-being is correlated with the opportunity for personal relationships. Which, they claim, are given both by the town's physical structure, such as availability of meeting places, accessibility of local shops, mobility, and by the existing social organization of life, which could be local meeting opportunities and volunteering (*Balducci & Checchi, 2009*). They use an ad hoc survey conducted in 2006 in ten metropolitan areas of the developed world, Beijing, Berlin, London, Milan, New York, Paris, Seoul, Stockholm, Tokyo, and Toronto.

While the literature on quality of life is growing mostly based on economic factors such as wealth or income, health status, occupation, marital condition, and education, the relationship between subjective well-being and the quality of life is still rather unexplored. Balducci and Checchi note that it is challenging to collect information about local amenities such as climate, environmental, and urban conditions in surveys. And when such data is available they prove that location-specific factors, such as air pollution, climate, and excess noise levels, do have a direct impact on life satisfaction. The two researchers refer to Richard Florida, an urban study theorist, as having further explored the relationship between *quality of places* and happiness. Florida is known for having coined the term 'creative class', that according to him highlights the importance of talented and creative people who help spur high-tech growth. He bases his analysis on what has been described as the 'three T's' of economic growth, i.e. *talent, tolerance,* and *technology*. The key point from Florida was that the kind of place where we live is a key factor for the personal success of creative people (*Florida, 2008*). A way of thinking that is very similar to what the current urban project of the Municipality of Milan seems to be all about, that I will get back to later.

In a more recent article, Florida et al. (2013) separate the levels of happiness from a national level to a city level. They base this on human capital as the central role in the happiness of cities, outperforming income and every other variable. Human capital, as skills, knowledge, and experiences possessed by an individual or population, constitutes another set of values that act as interdependent with urban development. The article lists the ways in which human capital increases the levels of happiness and quality of life within the metropolitan area. Higher levels of human capital are associated with better employment opportunities and show that people with an education, such as a college degree or higher, are more likely to have a flexible set of skills and knowledge, thus being better prepared for changing work and positively affecting unemployment rates. Stable social relationships and

social support are also related to higher levels of human capital, which again cause more stable marriages and increases subjective well-being.

At the metropolitan level, Florida et al. list several aspects affected by higher levels of human capital, such as "better health outcomes, lower levels of smoking and obesity, lower levels of crime, better schools, better quality housing, more natural amenities, higher levels of consumer amenities such as restaurants and cultural amenities, higher levels of openness and diversity, and a higher quality of life more generally, all factors that can and do affect happiness" (*Florida et al., 2013, p. 624*). Because human capital "affords people opportunities and resources to enrich their lives", we can see that has both direct and indirect effect on happiness (*Florida et al., 2013, p. 623*).

In Milan, one of the richest and most internationally oriented Italian cities, the inhabitants express one of the lowest levels of satisfaction, contrary to the rather "cliché perception about Italians" (*Balducci & Checchi, 2009, p. 26*). This is happening despite having high levels of employment and income and highlights how economics is not the key determinant for quality of life or happiness. The survey carried out by Balducci and Checchi is organized in eight sections, exploring the aspects of the quality of urban life; *economy, culture and education, welfare, safety, environment, living conditions, city,* and *community life* (*Balducci & Checchi, 2009*).

Interestingly, for each of the ten different cities that were included in this survey, the inhabitants put weight on some aspects more than others. Inhabitants in Stockholm and New York expressed their appreciation for the cultural opportunities in their cities, Beijing and Paris for the quality of welfare provisions, Berlin and Tokyo emphasized the quality of living conditions and lack of pollution, London and Seoul highlighted the economic opportunities, while Toronto and finally Milan expressed their appreciation for the level of community life (*Balducci & Checchi, 2009*). As for Milan, a possible explanation for the inhabitant's low levels of satisfaction is put on the dramatic change taking place in the last thirty years as of the structure and form of the urban area, exemplified by issues of enlargement, deindustrialization, increasing mobility, immigration, loss of population, polarization, etc. (*Balducci & Checchi, 2009*). These issues have according to Balducci and Checchi brought a worsening of the living conditions perceived by Milan's residents. In relation to other European cities, the socio-cultural infrastructures and quality of life in Milan are lagging behind (*González, 2009*).

Having looked at the ways in which the city of Milan is transforming into a smart city, the next chapter will explore the relationship between *smart* and that of *sustainability* in cities.

3. CITIES AND SUSTAINABILITY

Cities are sites where most of the modern world has grown, and they are arguable "the most important social, economic, cultural, and defensive structures that humankind has ever produced" (*Harrison, 2010, p. 1*). But, cities are also part of the 'urban paradox' where problems such as inequality, high energy consumption, and pollution thrive. In the 21st century, cities emerge as key places of social and economic experimentation in new ways, a shift that Armondi and Bruzzese (2017) describe as being led by changing work practices, digital technologies, and a transition towards a knowledge- and service-based economy within contemporary capitalism. Within this transition, they note an "increased collaboration, decentralized networks, and the creation of marketplaces where the design, production, sale, and consumption of products occur", as well as a transformation of traditional manufacturing and the management of urban services (*Armondi & Bruzzese, 2017, p. 28*). Intertwining these three forces, Armondi and Bruzzese point out the need to reconsider the role of urban space in connection to technological and organizational innovation, both through economic activities and through urban management (*Armondi & Bruzzese, 2017*).

In other words, cities come through as the leading sites of contemporary change in modernity and post-modernity, and the sites from which change must come from. Therefore, the modern urban landscape is in continuous and rapid change, affected by a number of different global processes. This shift and rapid acceleration has rightly been put under the metaphor *overheating* by anthropologist Thomas Hylland Eriksen, in its way of describing an unprecedented growth in the era of the Anthropocene (*Eriksen, 2016*). The Anthropocene, a concept proposed to define a new era that through rapid and unparalleled change since the 1950s where human activities can be said to have "rapidly changed from merely influencing the global environment in some ways to dominating it in many ways", that according to Eriksen now has established itself as a household word (*Crutzen & Steffen, 2003, as cited in Eriksen & Schober, 2018, p. 1*).

Questions on urban development and a sustainable future for cities become an important topic to raise as data from the UN predicts there to be 60% of the population of the world, one in every three people, living in cities with more than half a million inhabitants within 2030, as cities continue to grow in both size and in number (*United Nations, 2018*). The world population is expected to increase by billions within the next few decades, as we have grown into seven billion people since reaching human kinds first billion people around the year 1800, and the second billion by 1920. From then on, the growth has been going at an unprecedented rate, as well as with energy consumption. Eriksen and Schober identify that "energy-use worldwide has expanded at a much faster rate than the growth of global population", as they show how energy consumption has doubled only between 1975 and 2013 with a minimal decline even from rising concerns on climate change (*Eriksen & Schober,*

2018, p.2). Numbers are at an all-time high, the data is concerning to say the least, and actions for a chance of a sustainable future need to be put in place as effectively and as soon as possible.

The depths of such numbers and statistics tell the urgency that lay behind it. As cities are in constant growth, they become the hub of global processes and where processes of change may start from. For the evolution of smart cities, it is, therefore, crucial to be able to take a step back and look at global processes that have shaped the concept and in what ways they should be changed for a better future, for all.

The Double-bind

In their article *Economies of growth or ecologies of survival? (*2016*),* Eriksen and Schober are bringing attention to what I believe to be one of the most important topics of our time, the contradiction between economic growth and environmental sustainability. The reason I call that relationship a contradiction is based on the idea that in order to get out of the environmental issues and human-made climate change is to do *more*. The solution becomes to build more but build it better. To introduce new technologies for a sustainable future at the same time as the old technology is thrown away to rot in the ground. It is like new electric cars, such as the Tesla visible on every street corner in Norway, that has become a symbol of a sustainable lifestyle at the same time as the old batteries are piling up in landfills full of heavy metals and toxins. It is the mentality that more is better, new is better, and let us look forward and forget about the trail of trash we leave behind. It is like putting a pretty bandaid on an infected wound. Eriksen and Schober call out the contradiction of capitalism in the early twenty-first century as the growing realization that the fossil fuel revolution, a blessing of prosperity and the foundation of the human world as we know it, has become a "double-edged sword and ultimately a curse" (*Eriksen & Schober, 2016, p.2*).

The contradiction between economic growth and environmental sustainability can also be put into the analytical framework of Bateson's concept of a double-bind, a sense of being pulled apart by contradiction, that might shed some light on the reasons why it seems so difficult to move away from that double-edged sword. The concept of the double-bind has been used to explain the duality of a process in many different situations in research but was initially used by Gregory Bateson to explain a change in the epistemology of an alcoholic through complete submission to the power of the alcohol in order to get control of the self (*Bateson, 1971*).

This idea grew out of systems theory and cybernetics, and shows the circuits of a closed system as a whole, like a thermostat, always in relation to each other and all parts playing a role in affecting each other. Like that of ontology and epistemology as two world views that cannot be separated, but each exists in relation to each other, and must be true for the one that views. In our everyday modern life, the double-bind becomes a duality between

our choices of taking care of the planet in a long-term and sustainable way, and our wishes and needs of accommodating our environment to fit our modern lifestyle. In many ways, the concept of the smart city has become the modern symbol of the duality between economic growth and environmental sustainability. At the tipping point of taking sustainable action for ourselves, the quality of our life, and the planet, the idea of the smart city seems to provide an easy solution that will grant us both the pleasures of fast and comfortable living as well as long-term solutions for a better planet.

Through rapidly increasing population growth, centralization, and more and more cities becoming megacities with more than 10 million inhabitants, urban landscapes become the hub of innovation, work, and development, the nerve of the national economy, and a platform for optimization, effectivization, and the implementation of forward-looking and sustainable policies. For all of the topics above, smart cities suddenly stood out as the solution and blueprint for urban development. For two decades now, the smart city has established itself through "the language of radical innovation and transformative governance enabled by disruptive technologies" that are put into use to create an "urgency for the adoption of smart urbanism" (*Joss et al., 2019, p. 17*). In other words, the role of the smart city becomes to produce a demand it is supplying itself.

The red thread going through the body of literature on the consequences of climate change and the Anthropocene is how our traditional understanding of nature is changing and thus limiting the human imagination and our ability for collective action (*Eriksen & Schober, 2016*). And as Crutzen and Steffen (2003) diagnose the Earth as operating in a no-analog state, the rates of change are unprecedented and unsustainable as both the natural state of the planet as well as the way we perceive this natural state is rapidly changing beyond our control. If we locate the double-bind, can we begin to better understand the relationship between the different aspects that constitute the double-bind? How can we understand and see clearly the processes that happen before our eyes, and if we are forced into a corner blinded by invisible contradictions? And how can we change if we do not understand? It is a complex process with interconnected relationships forming both locally and globally and shaping our actions.

Neoliberal Sustainability

The complexities of being able to understand the relationship between ethics, neoliberalism, and power are discussed in an article by Benatar, Upshur, and Gill (2018). How can understanding this relationship be a step towards improving the health of people and of our planet? By understanding the challenges brought by a neoliberal capitalist lifestyle and the ideology that comes with these values, they highlight the ethics and a form of egoism that exists within growing coercive and destructive frameworks of power. At the tipping point between sustainability and non-sustainability, they propose the necessity for

"another swerve towards newer ways of thinking about life and living", in an attempt to "reverse the effects of missing the tide of peaceful progress" that took place in the 1990s, that could have taken the world in a different direction (*Benetar et al., 2018, p. 169*). Instead, they argue that we are descending into the "violent maelstrom of a global civil war between the elites who enjoy modernity's choicest fruits while the uprooted masses who, on finding themselves cheated of the same fruits, recoil into cultural supremacism, populism and rancorous brutality" (*Benetar et al., 2018, p. 160*). In other words, the direction and speed the world has taken are continuously increasing a great division, both nationally and globally, as well as leading us on a track that might be irreversible for the planet as a whole.

A division between sustainable or unsustainable ways, between rich and poor, between the corporation and the individual, and between those in power and the people is restricted by the power relations. With the current late-capitalist, neoliberal values within a globalized world structure, the ethical ways we follow might be changing and rebranded. If there is happening a rebranding of sustainability and the ethical consequences of our time, is it a dual relationship that we have to our life? Are we not continuously put in a contradictory way of deciding between short-term and long-term thinking, that puts us in a double-bind with all of our actions in life?

In an individualistic society focused on short turn gain with both monetary and momentary happiness, the long-term repercussions of avoiding taking an ethical responsibility are placing the world in an unsustainable state. In other words, a society colored by the values of late capitalism. As Benetar et al. note in their article, the planet is close to many tipping points and a shift towards a more ecologically aware perspective on life is of utmost importance. For them this means fostering the ethics of "greater cooperation, mutual respect, deeper democracy, solidarity and enhanced social justice", and only then could we "facilitate the development of sustainability as a maxim of wisdom and praxis" (*Benetar et al., 2018, p. 155*).

In the current neoliberal era, the increasing dependence on fossil fuels and nonrenewable resources as being driven by an "unsustainable energy-intensive, wasteful, consumerist, individualistic and ecologically myopic lifestyle" that they refer to as a "neoliberal capitalist market civilisation" (*Benatar et al., 2018, p. 156*). The neoliberal era that is associated with an acceleration in the transformation of planetary systems has also been associated with an increase in inequality both within and between nation-states (*Benatar et al., 2018*). Even with such an extensive economic inequality, the neoliberal way has since its entrance into society in the middle of the 20th century been considered a norm in public policy and as a self-evident representation of progress and a pre-requisite for further progress (*Benatar et al., 2018*).

Social Sustainability

Having described how Milan constitutes as a smart city as well as its relationship with that of sustainability, in this section I wish to highlight the role of social sustainability. Social sustainability reaches beyond the green and environmental sustainability we associate with nature and onto people. It goes beyond that of economic and political structures of the world and looks at how the community acts as a living, breathing organism. It enables the current and future life that is from social cohesion, quality of life, network and community, and of course that of socio-cultural infrastructures in an urban site. The city is a living, breathing organism of its own, so in what ways does the urban life affect social sustainability? More specifically, in what ways can smart also be socially sustainable?

This is the question that Benedetta Trivellato (2016) asks in her article based on semi-structured interviews and participatory observation from Milan. From participating in fieldwork throughout both 2008-2010 as well as in 2013-2014, she has studied both Milan's urban planning processes and the construction of its Smart City strategy. The research was conducted by interviewing several members of Milan's municipality, such as the Head of the Department in charge of Economic Innovation, Smart city and University, a member of the Mayor's Offices at the International Affairs Department, and an external consultant in charge of the technical secretariat of Milano Smart City (*Trivellato, 2016*). As well as attending seminars, webinars, and events such as the Expo-2015.

I find this article particularly interesting and relevant to this literature-based thesis as its focus and methods are similar to what I imagined to have conducted myself, would long-term fieldwork in Milan have been possible. While there exists no unique definition of social sustainability, Trivellato includes this proposed definition in her article:

> "*Social sustainability concerns how individuals, communities and societies live with each other and set out to achieve the objectives of development models, which they have chosen for themselves, taking also into account the physical boundaries of their places and planet earth as a whole"* (*Trivellato, 2016, p. 338*).

Trivellato adds that from an operational viewpoint the definition should also include:

> "*traditional social policy areas and principles such as equity and health, with issues concerning participation, needs, social capital, the economy, the environment, and more recently, with the notions of happiness, well-being and quality of life"* (*Trivellato, 2016, p. 338*).

In discussions regarding sustainability, the focus is often placed on environmental or economic perspectives, particularly when it comes to urban planning and regeneration. In the case of the smart city, it becomes even more important to highlight social sustainability

because of its excessive enthusiasm for opportunities created by smart technologies. It seems easy to overlook the fact that the smart city is supposed to be a concept applied *for* the people, instead of its priorities being placed on digital and technological resources, or new and specially developed appliances for the urban citizen. Such an unbalanced focus will increase both the social and digital divide within the city and have negative implications for equity as well as social inclusion. Trivellato notes several shortcomings in debates regarding social sustainability, such as a lack of clarification on prioritizing the level of focus and intervention, whether individual or societal, as well as the lack of clarifying the relevant roles in deciding which and whose needs are to be addressed and resolved. In order to address some of these limitations, the article includes an updated definition of social sustainability:

> "*Social sustainability refers to the personal and societal assets, rules and processes that empower individuals and communities to participate in the long term and fair achievement of adequate and economically achievable standards of life based on self-expressed needs and aspirations within the physical boundaries of places and the planet as a whole"* (*Trivellato, 2016, p. 340*).

The interesting difference between the definitions is that the latter includes a more direct focus on where the responsibility lies and involves that it should be fair and long-lasting. The point is to direct the issues of responsibility so that rules, processes, policies, and other programs are in fact made and put in society for the benefit of both the individual and the society as a whole. A reason why it might be challenging to promote social sustainability is the difficulty of finding suitable measures of success (*Trivellato, 2016*). How is it possible to measure the levels of social sustainability within a society?

Researchers have proposed a simplified 'Social Sustainability Assessment Framework' (SSAF) that includes "a set of sustainability indicators measuring the social dimensions of urban regeneration" (*Trivellato, 2016, p. 340*). The framework considers 10 dimensions, and each is scored with points ranging from 1 to 5, where the indicators are both quantitative and qualitative. The 10 dimensions are:

> *demographic change (aging, migration and mobility); education and skills; employment; empowerment, participation and access; health and safety; housing and environmental health; identity, sense of place and culture; social mixing, inclusion, and cohesion; social capital;* and *well-being, happiness and quality of life* (*Trivellato, 2019, p. 341*).

By using the 'Social Sustainability Assessment Framework' and scoring the list of criteria above with how they each address issues that include social sustainability, it becomes possible to measure the realistic success of a smart city project or policy. And because the

SSAF has been developed to be applied to individual regeneration projects, "it may be used as a framework for the analysis of planned or ongoing initiatives that are developed within a Smart City strategy" (*Trivellato, 2016, p. 340*).

Milan sticks out from other European cities in its attention that is devoted to social sustainability, an approach that has characterized the city's urban governance over the last decade as well. Both the process, that is for the construction of the smart city strategy, as well as the content of the strategy, are at the core of Milan's approach to social sustainability. According to Trivellato, this means a focus on adopting a role based on co-creating with the citizens and other relevant stakeholders, such as firms, universities, financial institutions, the third sector, and other public administrations (*Trivellato, 2016*). Even before the official Smart City Strategy was implemented by the municipality in 2014, several projects and programs of a smart character were already in place and under development.

The major change in urban governance in Milan was visible as the new center-left administration took over from the previous center-right administration and implemented several projects co-dependent on citizens and other stakeholders. The approach taken by the local municipality was to purposefully refrain from top-down decision-making and planning concerning the Smart City strategy. Instead, the focus became to integrate both the objectives and the strategies that were proposed by the citizens and other stakeholders with those that the municipality was developing internally.

Two projects that were launched in 2013 and have devoted much attention to their social sustainability aspect are the establishment of FabriQ and the partly EU-financed *My Neighbourhood - My City* project. Both of the projects can be analyzed with the SSAF and both projects have had positive effects on the social sustainability of the Milanese society in form of its attention to social innovation. The former project was planned as the city's first incubator for social innovation, and the latter included a 'Living Lab' to promote entrepreneurship and social innovation at the local level. The project *My Neighbourhood - My City* took place in the formerly run-down neighborhood of *Quarto Oggiaro* with the belief that "public sector interventions within particularly neglected contexts can be significantly improved through a mix of ICTs and service co-design" (*Trivellato, 2016, p. 346*).

There were two initiatives that resulted from the desire to motivate citizens within the local neighborhood to take part to renew their area through ICTs. First, the *Quarto Food Club* was developed with local students and hosted by the local school to enable a catering service for the local elderly. Second, the *Quarto Gardening* also involved students as well as other residents to improve and maintain the neighborhood's green spaces. In addition to these projects, the establishment of a technological platform was being enabled at this time to "facilitate the scalability of projects that are developed at the local level" (*Trivellato, 2016, p. 346*). There is no doubt that positive effects that can come from projects that implement social sustainability into people's lives. Social sustainability is not just affected by the level of

face-to-face interaction and local community, but also by the matter that surrounds us. Increasing liveability in a smart city is not just about the people, and definitely not about the number of skyscrapers or modern glasshouses. It is also about a sense of freedom. Freedom is both subjective and objective, and for the urban individual, it can mean a sense of safe space to move freely.

Urban Walkability

To live in a breathing organism that is a city, one must be able to breathe and feel more than exhaust and asphalt. Although some people do thrive in confined spaces of modern gray glasshouses and busy streets, I would say that most people thrive in places they can feel free and connected to nature in some way or another. Humans are, obviously, not made for the modern life of sitting at work, sitting in the car, and sitting on the sofa. I hope no one will argue against the fact that we do stem from monkeys, and in that way seeing a tree might indeed have a positive benefit on our health. There is no surprise that green and open spaces within a city can affect both the physical and mental health of the people living there.

Part of the urban transformation of smart and modern cities is the implementation of green and environmentally friendly places. Taking place in Milan's transformation is, as I mentioned above, the implementation of a big park where it used to be a brownfield area and an old railway station in the Porta Romana area. Originated from the urban spaces of Milan is a new type of assessment framework referred to as the Milano Walkability Measurement (MWM) by researchers (*Rebecchi et al., 2019*). The framework is aiming to point out the strengths and weaknesses of urban space and to identify and hopefully prevent non-communicable diseases such as obesity. This happens by developing the city's positive effects of the built environment, for example, a walkable urban space.

The article y Rebecchi et al. (2019) highlights the importance of walking. Walking for physical benefits as well as to avoid the deterioration of our mental health. Walking is also the most environmentally friendly transport option, low impact, free, and suitable for every age group. Sadly, walking does not appear as its own dimension in the Smart City strategy of Milan. Mobility is an important aspect of the development of the smart city but puts its main focus on transportation using smart technologies for a more efficient traffic system for cars, as well as improving its public transportation such as the metro system. So it seems important to note that there has in fact been a clear demonstration of the link between urban forms, increased physical activity, and health benefits. Several studies have shown that both the choice of route and the behavior of pedestrians are highly influenced by the qualities of urban design (*Rebecchi et al., 2019*).

Some of the most important aspects of a more walkable environment are "density (including transport and food environment), land use mix (including green spaces and

building use), and urban design (concerning aesthetics, safety, and cleanliness of the neighborhoods)" (*Rebecchi et al., 2019 p. 3*). Urban walkability affects aspects of sustainability in many ways, both environmental, social, and that of quality of life within the city. In that case, the issue of urban walkability and a pedestrian focus should receive a greater focus without being just a positive side-effect of other urban development.

Numbers from Milan show that in 2012 as much as 60% of all movements within the municipality were made by private cars and the average distance covered within the city was 4 km, a distance easily accessible by bike. The city thus has a high car dependency. As a solution, the municipality has currently implemented a smart city initiative with both shared EVs, electric vehicles, as well as a number of bikes dispersed throughout the city. But to ensure safe usage of bikes and pedestrians within the city requires more than just accessibility, but also a matter of ensuring the safety through the traffic system that might require some more structural changes in the urban planning.

What I have mentioned here can be illustrated with the case of the regeneration of the Navigli area, a high-profile project initiated by the Municipality of Milan in 2012. As I described earlier as having visited with one of my informants in this area a couple of years ago, the district is a popular area with canals brimming with bars and restaurants. A century ago, Milan was known as 'little Venice' because of its network of canals throughout the city. But as transportation methods shifted from boats onto vehicles on land, many of the canals were covered to give room for buses and trams. Now, the reopening of the *Martesana* canal is aimed at connecting the North of Milan to the South and bordering the central business district to the East (*Mariotti & Riganti, 2021*). The *Navigli* project aims at improving the quality of life of both Milanese residents as well as visitors by "enhancing recreational amenities, improving environmental quality, and reducing negative externalities related to traffic congestion and air pollution" (*Mariotti & Riganti, 2021, p. 2*).

Since the initiation of the project in 2012 the Municipality has been clear about including the people of Milan to take part in the decision-making process of the project. In an informal referendum in 2011, there was about 94% of the votes in favor of reopening the *Navigli*. In 2012 the proposal was included in the official planning documents, and in 2018 the then Major of Milan, Guiseppe Sala, arranged a public consultation consisting of more than 400 citizens. The public meetings recognized both the strengths and weaknesses of the project, as well as informing the citizens of the costs. On average, it seemed that residents of Milan were more in favor of the completion of the project than that of city users.

Some benefits of the project were an increase in urban quality, the beauty and liveability in the area, as well as "new public and green spaces and rest areas, development of a new pedestrian area close next to the Naviglio, new bike paths, the opening of new service (shops, bar, restaurants)" to new some (*Mariotti & Riganti, 2021, p. 4*). Those that were against the project underlined these reasons: "increase of congestion and car traffic, slowing down of the automobile flows, parking lots reduction, uncertainty about the good

maintenance of the new infrastructure, inconveniences during the construction site, use of the public money for other purposes, inconveniences related to the location of new bars, restaurants, night clubs opened during the evening and night, uncertainty related of the construction of the project" (*Mariotti & Riganti, 2021, p. 4*).

Data from Milan shows that the percentage of people that mainly use local public transport is about 52%, while 43% of people prefer to walk, about 31% use a car, 26% on bike, and 9% prefer motorbike as a means of transportation (*Mariotti & Riganti, 2021, p. 4*). The data also show that those who prefer the use of private cars were less favorable to the realization of the project, which is clearly related to the negative reasons underlined above. This was also true for people over 65 years old, that showed little interest in the realization of the project because they were unlikely to be able to enjoy the final result themselves, instead just having to deal with the noisy and chaotic time of constriction. The final results from the article on the *Navigli* Project show that by further developing a social cost-benefit analysis framework, more reliable estimates can be produced for urban regeneration projects (*Mariotti & Riganti, 2021*). That means that it will be easier to see the real value in the field of urban cultural heritage and guide inhabitants and policymakers to prioritize projects that will increase both liveability, walkability, and quality of the urban environment.

Sustainability of age

Within the smart city equation is also the matter of *age*. It has become clear that the aim of the local municipality is to attract young, innovative, and smart entrepreneurs to increase the city's human and social capital. To create a safe and easy community, without the risk of ending up like Berlusconi's *Milano 2* project where the larger part of elderly citizens resulted in the relocation of its younger residents. The question that remains is whether a big city such as Milan has the capacity to take care of its elderly citizens at the same time as developing a smart community for the young and cosmopolitan individuals. For social sustainability within smart cities, inclusion is the keyword.

Italy is among the 'eldest' countries in the world, with an increasing number of elderly, decreasing birth numbers, and increasing emigration of young Italians. The progressive aging of the population at the global level seems to be one of the most pressing challenges related to contemporary urban living (*Mariotti et al., 2018*). I include this section to highlight the importance of prioritizing social inclusion for *all* within urban development and to avoid the consequence of smart cities becoming too smart for their elderly citizens. It is becoming more and more difficult for elderly people to be able to navigate the complexity that modern cities have reached. Being able to move freely and safely within the city is fundamental for carrying out everyday activities. For elderly people, the levels of mobility and accessibility are crucial for both healthy aging and their well-being.

Sustainable mobility is a key factor for the urban regeneration of Milan. And in 2016 the city was in fact awarded the 'Access City Award' by the European Union. For being the most accessible-friendly city, particularly for people with disabilities (*Mariotti et al., 2018*). Although the article disclosing how Milan is a city for the elderly has received some responses from their elderly participants that show remaining improvement for the city (*Mariotti et al., 2018*). Some of the participants of the research expressed concern about using public transportation. For example, the elevators in the metro system seemed to regularly be out of function. Or the possibility of falling or hurting oneself on a fast-moving bus. For these reasons, it becomes clear that many elderly prefer to use their own car to get around or out of the city. With the expansion of sites with shared vehicles, maybe that could be a step toward removing some of the cars from the cityscape.

When it comes to the young people of Milan, there are also some challenges for improved liveability in a smart city. The most prominent challenge for young people is the ever-increasing market prices for both renting and buying a place to live and an unfriendly housing system. For this challenge, house sharing has become a trend among young people for better or worse. A solution that some are forced into due to economic constraints and might find themselves sharing a small apartment with strangers. Whilst others might benefit from sharing costs and space with people they know and have a good experience. Young people have a more precarious lifestyle and can find themselves victims of a small housing market, increasing prices, unstable sources of income, and mostly excluded from welfare support (*Bricocoli & Sabatinelli, 2016*).

The feature of carsharing has been implemented in Milan, also a part of the smart city project to strengthen urban mobility in a sustainable manner. A feature of high relevance for college students, as for their "low car ownership, heavy smartphone users, sharing propensity, commuting to the city center, multi-mode oriented, etc." (*Rotaris et al., 2019, p. 249*). As it is being slowly implemented into a few Italian cities, carsharing is still in the process of finding the balance between controlling costs and making a profit. For young people like college students in Milan, carsharing is being used on more of an occasional basis, such as traveling late at night when there is no public transport available, or traveling with a group of friends (*Rotaris et al., 2019*). Carsharing is a feature that might be used more by younger people than by the elderly in the implementing phases but contributes to making the smart city a bit more sustainable.

Sustainability is becoming more aligned with smart as the concept of smart cities develops and becomes more visible in the urban sphere. As Milan continues to retrofit existing social, bureaucratic, and economic structures in smarter ways, it is clear that sustainability has a place in the development. The Municipality of Milan has been clear from the beginning of the smart city implementation that their focus was placed on social sustainability. In that way, Milan is a part of the 'smart city 2.0' trajectory that increasingly puts citizens in the center of attention rather than just technological innovation.

4. Neoliberal Smartness: The Smart City as an Outcome of Globalized Technocracy

Having looked at how the complexities of sustainable choices and economic growth can leave us in a double-bind that is difficult to escape, this part will deal with how smartness is embedded with neoliberal values in a globalized technocracy. Neoliberalism is first and foremost an economic policy and concept in which its meaning can alter according to the intention of the researcher. It is a concept used to describe the ways in which it differs from other economic directions such as capitalism, but not to say that neoliberalism has replaced capitalist structures in the world system. There is a co-existence and interdependence that moves with high speed in continuous change.

In an anthropological fashion, I do not wish to use neoliberalism as a definite concept that exists in established ways, but rather as an indicator of the structures that lay behind. As an economic philosophy based on the liberalization and privatization of market principles from the state, neoliberalism is referred to as the *freedom* of markets, labor, and money by Hungarian thinker and political economist Karl Polanyi (2001). His reflections on the development of a neoliberal free market-based society lay the basis for the idea of a disembedded economy, which infiltrates all aspects of our society. His term 'embeddedness' is important to know to fully understand how modern economic principles influence our way of thinking, acting, working, buying, loaning money, and living within a sphere of *financial freedom* (*Polanyi, 2001*). In a self-regulating economy devoid of state interventions, the economy becomes disembedded from society, instead taking control of it.

The aspect of freedom is questioned by anthropologist David Harvey (2005) as to where this *freedom* is leading us, and what kind of freedom it really is. In his point of view, the good versions of freedom, freedom of conscience, freedom of speech, and freedom to choose one's own job, are in this neoliberal regime of freedoms turned into mere excuses to spread corporate monopoly and produce immense concentrations of power to a narrowly defined capitalist class. Anthropologist Loïc Wacquant (2012) agrees with this perspective, providing us with a metaphor of a centaur state - where there is little oversight for those at the top and strict control of those at the bottom. The centaur state also works as a good metaphor for the hierarchy within the European Union, where the nations consisting of a competitive export-driven growth model takes control of the European "free" market, leaving the debt-driven countries with further decreasing economies. Wacquant also makes a good argument considering the problems of both the Marxist political economy approach by a variant of market rule and class society, on the one hand, and a Foucauldian subjectivity approach focusing on governmentality and the power of the state, on the other hand. Wacquant rather suggests a polarized model between the two, leaving us room to be able to

separate how neoliberalism is supposed to radically differ from capitalism or authoritarian regimes. These arguments give a more sufficient basis for viewing neoliberalism not as an economic regime, but as a political project.

How does the economic basis of society change us, and how do we adapt to this global and changing landscape? There is a long tradition of theorizing how different labor regimes are molding and shaping different types of workers, and thus particular kinds of people into being as well. An example is how Italian Marxist philosopher Gramsci connected the habits and desires of men that were formed hand in hand with the rise of the Fordist economy to the nineteenth-century development of a "new sexual ethic suited to the new methods of production" (*Gramsci, 1971, as cited in Molé, 2012, p. 13*). In other words, "daily practices, identifications, and bodily experiences cohabit in intimate proximity with emergent neoliberal labor structures, modes of governance, and ideological orders" (*Molé, 2012, p. 13*).

It is not just the economic principles and labor regimes that play a part in our lives, but culture, politics, and religion are shaping our ideas and values in all aspects of society. This process that takes place both in society and within the working subject is shown in a great way in Elizabeth Dunn's work. In her book *Privatizing Poland. Baby food, big business, and the remaking of labor* (2004), Dunn brilliantly and thoroughly examines a business and its workers in its transition from socialist Poland, through privatization to a neoliberalist form of labor that was introduced from the American firm and a new form of flexibility and responsibility takes shape.

Through the privatization of Alima-Gerber, new and neoliberal ideas from the American corporation meets the history and traditional ways of labor of the polish workers, and a new form of flexibility and responsibility takes shape in the labor processes. Dunn follows the development and transition into the privatization of the business and questions how the introduction of new processes of labor affects the relations within the factory. She builds on the theory of Polanyi that labor is a fictitious commodity the worker itself owns, and a commodity without a buying or sales value. In the transition towards neoliberal values, the labor transitions to a commodity through wages, and the labor is embedded in certain qualities like impersonal relations based on rational decision-making and transparency of boundaries. The idea of who you are and what you have, or who you are and what you do, becomes less clear in the construction of new relationships. Through this ambiguous image, the worker itself turns into a generalized commodity that can only be separated through the construction of individual subjectivity or knowledge. This is called privatization of people, or 'entrepreneurs of the self' as Dunn calls it (*Dunn, 2004*).

It is within transitions such as going from socialist Fordist production to a Western neoliberal mode of working, that we can really see the depth of its effects. In the same way, there has been a transition from the golden ages of Fordist manufacturing to the 'new economy' in Milan. The 'new economy' refers here to the ways in which the state's campaign

to advance economic reform of the labor market. They do this by creating "fast, flexible, and technologically innovative business organizations" that symbolize a new "social, political and economic order or scientific institutions with social capital and intangible resources" (*Molé, 2012, p. 7*). In other words, the rise of neoliberalism.

As I mentioned in the section on 'Smart Milan', the residents within a smart community are envisioned as self-entrepreneurs, as fast, flexible, and technologically driven individuals. There is a neoliberal privatization of people that takes place as communities and cities become containers of smartness. Imagining a smart community as an ecosystem, a cybernetic system where everything is connected and interdependent. What makes a city smart? Both the advanced technological infrastructures and the citizens who work as sensors to improve these technological infrastructures. A process referred to as cybernetic citizenship, which "emphasises their immersion into informational environments" (*Zandbergen & Uitemark, 2020, p. 1733*). The aim is effectivization and improvement of products, that again are marketed for the consumers within smart communities. The entire premise behind the smart city concept is to produce a product that can only be used in a smart context, to supply the demand it is producing itself. In that way, the smart city itself becomes a double-bind.

The shift that has occurred within the processes of neoliberalism has been described as "the decline of social citizenship, individualization, constructing citizens as 'subjects of choices and aspiration to self-actualization', and the actions of individuals who 'take responsibility to protect themselves from risk" (*Molé, 2012, p. 11*). These terms simply imply that under neoliberal conditions, citizens are going through a process of being refashioned. An idea that becomes even stronger through ideologies that view political subjects as rational and calculating. In Noelle Molé's (2012) book, this process takes place through investigating 'mobbing' in the Italian workplace, a process that allows a view of how such an intangible transformation of subjectivity takes place. For the citizen in a smart community, smartness becomes a value both sought after and necessary for a smart lifestyle.

The rise of technocracy

Technocracy comes from greek *tekhne* and *kratos* translating to skill and power. The concept of 'technocracy' was introduced at the beginning of the 20th century, as to accumulate the ideas of different philosophers, political scientists, and engineers that over time proposed a sort of government or formal institutions designed for political decision-making based on technical or scientific expertise (*Esmark, 2021*). Technocracy became a conflicted term in a polarized political landscape often proposed as a solution during times of crisis. Its aim became to advance social and economic welfare by addressing problems such as unemployment, inflation, failing schools, a dysfunctional health care system, and drug addiction, an endless list initiated by German philosopher Jürgen Habermas arguing

how technocracy became a functional response to every capitalist dysfunction (*Habermas, 1970*).

Political scientist Jeffrey Friedman suggests his working definition in his critique of technocracy in *Power Without Knowledge* (2019) as "*a polity that aims to solve, mitigate, or prevent social and economic problems among its people*" (*Friedman, 2019, p. 5*). Habermas argued that technocratic experts successfully meet the need to use public policy to solve social and economic problems caused by capitalism by offering the masses "a guaranteed minimum level of welfare, secure employment, a stable income, social security, and the chance for individual upward mobility" (*Friedman, 2019, p. 3*). All in all a concept both supported and rejected by the people, a technical solution that might find the most logical answers to a problem, but still a political solution that could damage the democratic state of a nation.

Throughout different nations of the world, technocracy has had different roles and positions within society. The Technocracy Movement came to life during America's great depression in the 1930s, but never got a foothold in government. In governments such as the Communist Party of China, a more authoritative style of leadership has allowed a more technocratic form of government. Surveys on municipal governments of cities that consist of a population of 1 million or more in China have found that more than 80% of the government personnel had a technical education (*Cheng & White, 1990*). Unelected persons of government with specialized knowledge or other education rather than political affiliation, parliamentary skill, or political popularity can be defined as technocrats. During the eurozone crisis that hit European countries from the end of 2009, several countries within the European Union were appointed technocratic governments as a solution in a time of crisis. For many, this became the embodiment of the European Union's democratic deficit (*Merler, 2019*).

In Italy, there have been as many as four governments led by an unelected technocrat since the 1990s, often chosen by the President of the Republic of Italy during times of economic downturn or to strengthen their relationship with the European Union. In the most recent case, the fourth Berlusconi government had been pushed out of government, both as an economic necessity posed by the EU's institutions but also as a result of a lack of legitimacy and confidence in his government after several scandals. Berlusconi's government was replaced by a fully technocratic cabinet led by unelected and apolitical Mario Monti, an economics professor and former European Commissioner from 1994 to 2005. The technocratic Monti cabinet remained in charge of government until losing support in parliament in December 2012, and as Mario Monti ran for prime minister in the elections of February 2013 he was heavily defeated. 10 years after the fully technocratic Monti cabinet was put in government, the President of the Republic chose Mario Draghi as Prime Minister in 2021, another economist and previous President of the European Central Bank, who can be seen as a technocratic expert in the same way as Monti.

One article has also appointed him as *Super Mario 2*, playing on the similar names from the game Super Mario, as one could imagine the two super Marios as brought in to save the beautiful princess, Italy, from the dragon, economic recession (*Garzia & Karremans, 2021*). During the last 30 years, Italy has had as many as 4 unelected technocratic leaders of government, Prime Ministers Carlo Azeglio Ciampi (1993-1994), Lamberto Dini (1995-1996), Mario Monti (2011-2013), and lastly Mario Draghi, all men with economic background and education without political experience (*The Conversation, 2021*). All of whom chosen to lead the country in a time of economic need. An article in The Conversation (2021) written by two Italian political scientists starts with the statement: "Italy loves technocrats", as they raise the question on everyone's mind if such a high technocratic presence in government is a cause for concern.

A phenomenon that once was exceptional, they note that about 20% of government personnel (ministers, vice-ministers, junior ministers) have been recruited from outside parliament, a direction that carries the risk of growing dissatisfaction with the functioning of democracy among the Italian people (*The Conversation, 2021)*. As I am writing this, Mario Draghi is in the running to possibly be elected as President of the Republic of Italy, so it will remain to be seen if his technocratic expertise will give him the highest position in government. The current election depends on the votes of people in parliament as well as representatives from the counties of Italy, and not a referendum by the people of Italy. Some of my friends in Italy express frustration over the country's future as driven by a banker, questioning whether his allegiance lies within the European Union or in Italy. But they express as well a sense of joy as previous Prime Minister Silvio Berlusconi has withdrawn from the presidential election. For both the cases of Mario Draghi and Mario Monti, one of the main reasons for their appointment to Prime Minister was to increase credibility among the EU institutions, which raises the question of whether responsibility being placed above responsiveness, one where EU-credibility criteria outweigh domestic socio-economic demands (*Garzia & Karremans, 2021*).

Much of the knowledge we have on technocratic governments and their position and validity domestically has been thoroughly discussed theoretically. Still, there is a clear lack of qualitative studies and a lack of empirical foundations in citizens' attitudes. Investigating Italian people's satisfaction and trust in democracy from the time of the implementation of the technocratic Monti government in 2011, Silvia Merler (2019) performed a natural experiment to build on the scarce literature on technocracy from an empirical standpoint. Based on questions given to a control group and a test group both in the days before the implementation of the Monti government and the days after this extraordinary event had reached the news, Merler tested the hypotheses of whether *"the appointment of an unelected technocratic government may increase citizens' satisfaction with the functioning of democracy*", or whether the "*appointment of an unelected technocratic government is associated with worsened assessment of perceived input participation*" or if the

"*appointment of a technocratic government is associated with improved expectations of crisis resolution*" (*Merler, 2019, p. 303-304*). Her findings show, somewhat counterintuitive, an increase rather than a decrease in people's satisfaction with the functioning of Italian democracy.

The researchers admit to this being a puzzling result but explain the results by taking into account a trade-off between 'perceived input and output legitimacy', one which characterizes the technocratic form of government (*Merler, 2019*). Even though the technocratic government is unelected by the people, the insertion of the government has a strong signaling effect of that on resolving the crisis effectively. In this way, it seems like the technocratic government will have a better output result even though the level of participation and input from the people is practically non-existent, this does not lower the state of democratic legitimacy as of the powerful promise that the technocratic government is solely inserted to solve a problem. The research shows that citizens' attitudes toward technocracy are more complex than we often assume (*Merler, 2019*).

Smart cities can be linked to a high level of technocracy because of their need for experts, managers, or gatekeepers in a specialized field. In that way, there is a rise of technocracy in modern urban development, particularly in smarter cities. Authors Mike Raco and Federico Savini (2019) are dealing with how new forms of technocracy are shaping contemporary cities in their book, a collection of articles dealing with different international perspectives on the sources of conflict and cooperation on planning and governance in sustainable urban development. They note a shift in power relations between expert and local cultures and how this has blurred traditional boundaries between public and private sectors. The shift to a new technocracy, they argue, depoliticizes planning and urban governance by replacing "input-centered forms of deliberation, placemaking and social justice" with "output-centered agendas premised on expedited development and growth" (*Raco & Savini, 2019, p. 3*).

Such a framing of an output-centered agenda highlights a lot of the issues of contemporary urban planning, as being heavily affected by numbers, fast results, and appearances. As for the smart city discussion, I would say that an output-centered agenda is what the smart city has been mostly criticized for in the early stages and still lays as a challenging underlying aspect and basis for the whole construction and idea behind the development of a smart city. In other words, could the focus brought on by modern development in the light of neoliberalism, fast growth, and a global competitive mindset have implemented such a deep basis and agenda that even the way whole cities are planned for the future has taken such a drastic turn?

Rebranding the city

The efforts of turning a city into a smart city are multifaceted. A crucial part of the process is the branding of the city as a modern and sought-after place to be. To live, to do business, or to tour the city as a tourist. An attractive site for all. The smart city concept promotes an output-centered agenda that fetishizes form over content, a part of fashioning the city. The branding and identity of a city are in many ways the same as the fashion industry would do to market its products as vogue and modern. The importance of associations of a certain brand identity, such as Milan has made for itself in many ways through the label 'Made in Italy' or 'Made in Milan'. The competition between global cities rests upon differentiation, which is created through the production of immaterial value and knowledge (*Jansson & Power, 2010*). For the smart city, both place-based associations, images, and brands of a real market value play a crucial role in the making of an attractive discourse. In the end, *smartness* becomes identified as more than just a technologically advanced structure in the urban sphere, but as a high-end and very vogue value.

The representation of Milan as a smart city has a dual impact. On the one side, they contribute to and create a discourse of the smart city as an ideal place to live. On the other side, the aim is to attract actors that share the same social ideals and way of life as the city's planners and administrators. For the development of the new smart district *Milano 4 You* that I mentioned above, a visit to the website offers quite an interesting experience. Upon entering the site I was met with big, colorful words shooting rapidly through my screen;

> "*Un novo modello abitativo sta nascendo a Segrate. Uno smart disctrict. Dimentica quello che conosci. Immagina un progetto che integra diverse discipline per una migliore qualità della VITA. Architetture e technologia al servizio persone*" (*Milano4You, n.d.*)

This translates to:

> "*A new housing model is being born in Segrate. A smart district. Forget what you know. Imagine a project that integrates several disciplines for a better quality of LIFE. Architecture and technology at the service of people.*"

The background is filled with joyous pictures of happy people, flowers, and children laughing. In a short moment, I felt like I had been inserted into a scene from the movie *A Clockwork Orange*, put in front of a screen, and forced to view the message until it became implanted into my mind. The rebranding of smart cities is all about the implementation of technology as a part of urban life. For whatever challenge, technology is increasingly being positioned as the optimum means to resolve that challenge. Events such as the Expo-15 are

as well a part of the process of rebranding. The process of smarting the city out means filtering out the urban problems, a process of whitewashing. Smart cities are the dream scenario for techno-feudalists such as billionaires and entrepreneurs Elon Musk and Jeff Bezos. It means the control of a few powerful individuals or firms that blurs the boundaries between corporate power and political power. Moving quickly into a technologically driven globalized technocracy.

It is time to ask whether such a technologically driven direction is the right way to go, as far as sustainability is concerned. As the concept of smart cities has been in the works for only two decades, there are two aspects to take into consideration at this point.

First, most of the smart city technology is not yet mature and suitable for mainstreaming. Most smart cities still have the status as being experimental, 'living labs', or 'testbed' urbanism (*Kitchin et al., 2019, p. 208*). This means that the technologies being put to use are not always functional and market-ready. There exists no general agreement on the form and shape of the technical solutions provided, nor is there any consensus on what role the citizen is to have in the process of shaping how issues are tackled (*Townsend, 2013*). In other words, the perfect playground for tech firms to implement and develop their products with real-life sensors and data. As can be visible in the 'first wave' of smart city products, that left local municipalities in unfavorable contracts with technical solutions that did not deliver on what they were supposed to. As for the cost of the implementation of smart infrastructure, a point of concern relates to "financing and the amount of perceived value for money spent and the return on investment" (*Kitchin et al., 2019, p. 208*).

Second, the market for smart technologies is still rather small with only a few main companies producing technology that can be used. Such as the economic structure of the market of ICTs consists of a horizontal concentration of market power and vertical integration. In other words, few companies have control over the whole production line and are able to increase the value of their products accordingly. A small market establishes market power by a few, leading to monopolies, incompatible technologies, and increased prices. This affects global value chains and increases global division, provides asymmetrical power relations, and demands highly specialized jobs that again affect the value of labor.

Having highlighted how a smarter Milan is positioned and shaped by values of the highly globalized technocracy we find ourselves in today, in what ways do the people of Milan become more connected to or disconnected from their city?

(Dis)connecting Milan(ese)

Some years ago, a review from OECD, The Organization of Economic Co-operation and Development, showed that the attractiveness of Milan had suffered from a striking deterioration of liveability in the recent years (*OECD, 2006)*. In the review, they describe how Milan used to be known as a lively and sparkling place, going by the motto *Milano da*

bere, translated to 'Milan to drink'. The slogan was meant to illustrate Milan as a city of extravagance and glamor of fashion, luxury goods, media, and new entrepreneurs. But in the ranking of OECD metropolitan regions in terms of quality of life and investors' locational preferences, Milan was at the bottom. Even though the city that they refer to as having a soaring economy, Milan has had to pay a significant price in the quality of its urban environment. The OECD identified three weaknesses they meant could hamper the city's liveability and competitiveness: "(i) weak regional transportation infrastructure; (ii) housing shortage and social segregation; and (iii) underexploited amenities" (*OECD, 2006, p. 74*). What was the challenge to raising the urban liveability in Milan?

According to sociologist Sara Gonzáles, the Milanese are becoming disconnected from their city, as she describes in her article *(Dis)connecting Milan(ese)* (2009). Debating from the viewpoint of a relational conceptualization of space, Gonzáles focuses on policymakers and a fragmented governance structure in Milan. And as she notes, when relationality to the urban space becomes exaggerated, it can take hold in disempowering ways and lose sight of the particularities and uniqueness of a place. Gonzáles conducted six-month-long fieldwork in Milan between October 2004 and April 2005, including a documentary study of literature on planning and urban development in Milan as well as semi-structured interviews (*González, 2009*). The article demonstrates how processes of disempowerment are visible in Milan by looking at it through a relational discourse. Gonzáles does this by "deconstructing the discourse of Milan as a globally connected city used by local elites and assesses its influence over actually existing regeneration projects" (*González, 2009, p. 5*).

In the field of geography, relational conceptualizations of space are the fluid and ever-changing space that is socially made and remade over time. For the city makers and planners, this means asking in what ways the current urban structure can change to better suit their visions and priorities for an improved and growing city. This could be to reassess whole urban areas such as creating a financial district that could improve business structures. In Milan, such an area that clearly stands out is the *Porta Nuova* district that I mentioned above. An even more evident example of such a process and its social consequences took place in the smart city I used for my Bachelor thesis and mentioned at the beginning of this thesis, Songdo in South Korea.

As a smart city built from scratch, there was a clear separation of areas intended for housing, culture, and business. It was clear from the time even before the city was at full capacity of inhabitants that these areas contributed to increased segregation between people. Two consequences that I can mention were how the urban space become inclusive of a certain type of people that possessed the right kind of values, such as education and money, and thus excluded those who did not. As for the aspect of city life, culture, and community, it is something that will not grow where you tell it to grow, but rather happen in spontaneous

and fluid ways throughout the urban space. In that way, a city planned from a top-down perspective might find it challenging to fill the city with life.

As for Milan, the struggle of the urban project was captured in this passage from a local newspaper: "The city is reduced to a 'planning free for all', sold to the highest bid… The ongoing mega-projects will worsen the traffic, the pollution and the urban landscape", according to the Committee of Milanese neighborhoods, and the planning Chief Councillor continues: "Milan is going through a true Renaissance… The regeneration is the fate of a city with international vocation" (*González, 2009, p. 2*). Gonzáles highlights the growing divide between the local elite's project to "insert Milan into the spaces of global capital flows" and the unheard demands and needs of the people (*González, 2009, p. 3*). This means that the local Municipality of Milan is reimagining the city as a global hub, in an attempt to recover the international leadership the city held as an industrial Fordist city.

Milan was known as the 'moral capital' of Italy after the city's first economic miracle happened during the 1950s and 1960s. In a country often regarded as corrupt and economically backward, Milan became known as an industrious, effective, and business-oriented city. This is much because of industrial entrepreneurs such as Agnelli and Moratti behind two of the largest firms at that time, respectively with the automobile manufacturer Fiat and with petroleum. After the tumultuous and scandalous years of political and financial issues of corruption hit Italy in the 1990s, most widely known as the *tangentopoli* scandal, it meant the end of Milan's image as the moral capital of the country (*Foot, 2001*). On that note, the city of Milan has not become a political and economic transnational project with the entrance of the smart city project, but it has been going through the same type of process for decades. The smart city project is another way of establishing a landscape of innovation for entrepreneurs within the knowledge economy.

Milan is at the forefront of change, and becoming a smart city plays an important role in the way to becoming an internationally connected and cosmopolitan hub. The OECD rapport sums up Milan's ambition to become a South European and Mediterranean regional capital based on its historical skills endowment and advantageous location, which could supply advanced services and new technologies while still standing as an international capital of fashion and design (*OECD, 2006*).

González includes some quotes from other researchers to sum up the current state of the city; "it lacks narratives that cement its identity and its sense of collective action", "it has an impoverished public realm", and "comprehensive regional or metropolitan frames of reference have disappeared" (*González, 2009, p. 3*). It can be called an 'identity crisis', a transition explained as going from "a glorious industrial city challenged to switch into an international creative service hub" (*OECD, 2006, p. 11*). This transition from having had an 'outstanding industrial past' to the implementation of a new type of knowledge economy has forced society to make alterations on every level. Its infrastructure and vision have gone through a visible transformation. By implementing famous architectural sites and design

value to the city, major events such as the Expo2015, and investments in flagship developments, Milan is promoting itself as a global hub.

However, in the midst of the modern Renaissance of transforming Milan, the city's socio-cultural infrastructures and quality of life have suffered. According to González, this is caused by "congested transport, pollution, unaffordable housing, social segregation and lack of green spaces" (*González, 2009, p. 4*). Thinking about the building *bosco verticale* mentioned above as a green oasis in the city might work as an intriguing attraction for tourists, but understandably does not provide that solution for the city's inhabitants. In a way, buildings and attractions such as the *bosco verticale* can be referred to as fetishized spectacles more than being able to increase the city's liveability.

Italian newspaper *The Local,* directed toward English-speaking foreigners interested in what happens in Italy, refers to an ex-pat city ranking as they deliver the news that Milan ranked "among the worst cities in the world" by foreign residents (*The Local, 2020*). The article quotes a Canadian residing in Milan as how he does "not like the work-life balance and may have to consider moving away from Italy for work … On top of this, the weak economy makes career advancements difficult" (*The Local, 2020*). Some of the worst aspects of the city for international residents are career prospects, income, work-life balance, and public transport according to the ranking. On the other hand, the city was praised for having an "exciting international community, mixed with joyful Italian people" by a Croatian resident in Milan (*The Local, 2020*). In other words, Milan is turning into a globalized city.

Globalized cities

What does it really mean to be a globalized city? In its most basic form, globalization can translate to "the intensification of global interconnectedness" (*Inda & Rosaldo, 2008, p. 7*). Every corner of the world is now connected, sharing fast flows of capital, people, goods, images, and ideologies in short, across the face of the globe. But globalization goes deeper than just making the world a more interconnected space. It becomes a "fundamental reordering of time and space" (*Inda & Rosaldo, 2008, p. 8*). Perhaps it is difficult for younger generations to imagine a world where it is not possible to find information online with just a click. Or to call the other side of the planet, definitely not video chatting with strangers. To control the temperature of your home before you arrive, or now to steer your car with an app. Things that are just so comfortable that we can easily get used to them.

Globalization is this. It is making the distances across the planet exceptionally smaller and making our idea of time much shorter. The time it takes to do just about anything is incredibly short. No wonder we live on an accelerated planet. Globalization has completely changed the nature of our life, in so many ways. One of those ways is the smart lifestyle promoted by smart cities. Smart cities are both a product of globalization and a cause for more globalization. New smart cities built from scratch, such as Songdo, are

planned and built in close proximity to an airport with the intention of becoming an international hub. Cities like that have also received the nickname of being 'airport cities'.

With the core intention of being an attractive hub for the modern and international businessperson, life within the airport city becomes a sort of gated community or an enclave for a certain type of citizen. Here giving extra attention to the keyword 'citizen', as access to the community would require the right type of passport. It becomes a gated community because of its inclusion of an elite, meaning citizens with a high level of "qualification of human and social capital, flexibility, creativity, tolerance, cosmopolitanism and participation in public life" (V*anolo, 2014, p. 887*). Based on this, the social inclusion of an 'airport city' is highly affected by certain values ameliorated through its location, infrastructure, and accessibility.

The smart city shares the core intention of becoming an attractive, globally competitive, and cosmopolitan hub for the smart worker. For the city of Milan, it has become clear throughout this thesis how the use of 'smart' aims to dehistoricize and whitewash the city. Taking the step to achieve international recognition for being a smart city is an important direction for the political project of the local municipality. For the entire nation for that matter.

Modernity, the second modernity, late modernity, late capitalism, the Anthropocene, or whatever name you wish to give the current era we find ourselves in, is explained best through levels of globalization and acceleration. As a 'fundamental reordering of time and space', the acceleration of all parts of society started speeding up at the beginning of our modernity but has now reached a speed that is *too high*. There are still only 24 hours in a day, but the current globalized structures of our lives have filled these hours with deadlines, effectivization, and multitasking.

German sociologist Hartmut Rosa explains in an interview with Norwegian newspaper Morgenbladet how the faster we live our lives, the shorter we experience the time that we have (*Morgenbladet, n.d.*). Reading this article over my morning coffee as I am about to write the concluding remarks and hand in this thesis, I could not avoid including some final philosophical thoughts on time. The article reflects some of the current temporal ideals in our globalized society, an ideal I believe everyone has felt on their skin. The stress and pressure that comes from the acceleration of time. Through his work on abstract theories on time, Rosa is not opposed to the acceleration of modernity, but rather the alienation that can come with it. Rosa wonders, as do I, what is it really, that makes us live our lives based on deadlines instead of our deepest values?

The pause that came for some of us from the current Covid-19 crisis has not made us take a step back and reflect on alternative ways of structuring our time, as many had hoped for, including Rosa. The global crisis rather made us find new ways to increase the levels of our effectiveness, now connected across the globe through apps such as Zoom and Skype. Removing every excuse to disconnect. In the article, Rosa underlies how the cultural motor

of modernity drives people to control, exploit, and subjugate the world (*Morgenbladet, n.d.*). Behind this drive is the idea that such transcendence and expansion will lead us to find places, people, and landscapes with which we can achieve resonance. This internal drive is easy to exploit by industries, in a way to market their products as the solution for an easier and better life, in a way to expand ourselves as individuals as well.

The concept of the smart city plays on all the right chords in its way of promoting the enticing ideal of a good life. As we have evolved, faster and faster, into the world that we have today, the structures laid by the development of modernity have become so embedded into our lifestyles that they are near impossible to break out of. This means that the acceleration that controls our lives at this point will continue to play a crucial role in global structures. Maybe it is up to the individual to break free from the pace of the world and find alternatives to increasing quality of life without the neoliberal ideals of continuing growth and effectivization.

How is the experience of time and space in a city like Milan, that is becoming increasingly connected to global flows? Ilenya Camozzi (2013) investigates how young people experience the time-space experience in Milan, by using creativity to tackle contemporary processes of acceleration and compression. Her article is based on qualitative research conducted on young cosmopolitans, such as Ph.D. students, artists, and designers, who are all temporarily living in Milan to finish their studies. The students participating in this research have all moved to Milan from elsewhere, which makes their meeting point with the time-space settings in this city particularly interesting.

Conducted around ten years ago, the research is not affected by the smart city discourse as the local municipality of Milan initiated this at the same time. Nevertheless, it is of interest to explore how young people on the brink of adulthood experience the pace of a city like Milan. The sense of finding one's purpose in this globalized and fast-moving world can be a challenging task, as I introduced through my own position in the introduction of this thesis. I posed the question of how we can be sustainable in this modern, globalized, and fast-moving world. By this question, I did not only wonder about sustainability in the form of environmentally friendly and long-lasting effects into the future but to find a sense of sustainability within one's life and lifestyle.

Young adults on the way to finding their position in the world are 'bearers of innovation' (*Camozzi, 2013*). Because they in so many ways are navigating around the clearly defined social expectations of society, such as "tackling the transformation of norms, customs and cultural codes, as well as the formation of identity" (*Camozzi, 2013, p. 311*). On the one hand, the clash with adult society can lead these young persons to create alternative outlooks on society, and in that way become 'bearers of innovation'. On the other hand, the clash between innovative and idealist minds, and already set social norms of society, have historically been experienced through social protest movements. Such as the turbulent years

of Milan in the late 1960s where students and workers protested their position in society before *anni di piombo,* which I mentioned before.

Camozzi's account is set out to illustrate the conflictual and hostile nature of time-space structures in Milan and their invasive consequences on the daily practices of the subjects. The students that are finding their way in Milan share a common perception of the city as a "particularly hostile city, more so than others", and a "nasty city" (*Camozzi, 2013, p. 302*). These sentiments are of course colored by the fact that they are foreigners in a new and different country without knowing the language or the people there. But Camozzi notes that this perception is intertwined with a subjective identification that still finds elements of Milan to be a difficult city.

The young adults in the research share that they quickly found that their daily lives were shaped by the hectic pace of the city. They experienced the time as 'slipping away' without managing to separate time between the work necessary to survive in the expensive city, and the time for creative passions and interests. One of the research participants share his experience of the time and spaces of his daily life:

> *"What I should be doing or what I actually manage to do? Because they are two different things – what I would like to do and what I actually manage to do"* (*Camozzi, 2013, p. 303*).

This account highlights the effects of time as capitalized, in a way that limits the subject from evolving the creative self. Instead forced to spend the majority of their time working in order to survive. In that way, does not the freedom of spending one's time in a manner more than just to survive become elitist? A freedom that is not obvious at all within the global and neoliberal structures of the world today. The question that remains is whether or not the improvement of urban sites, such as the smart city, can and will create better social and economic infrastructures allowing the subject greater freedom of time.

'Bearers of innovation' use creativity to find alternative ways to free themselves from the capitalization of time. In the words of Camozzi, creativity presents itself as a "reflexive social object, socially and culturally constructed in the experience of subjects" (*Camozzi, 2013, p. 300*). Creativity is both activated and stimulated through social processes with relational, environmental, and interactive aspects on the one hand, and through the flow of daily life and the ordinary on the other hand. Continuing, creativity is because of this dual dimension linked to the structure of time and space, in a way that embraces "the totality of life experience" (*Camozzi, 2013, p. 300*).

In the experience of the subject, creativity thus becomes the action through which existing structures of time and space can be reformulated and interpreted. Camozzi calls this process 'domesticating the temporary', which is a way for the social actors to take control of the time and space they live in (*Camozzi, 2013, p. 304*). The gradual restructuring of a

subject's time-space experience takes place in times of historical and social change. Shown in the article through technological development, through detemporalization and delocalization, as well as the acceleration of social processes on the one hand, and "the increase in cognitive resources connected to the new centrality of the subject" on the other hand (*Camozzi, 2013, p. 301*).

In the area of technological development, there is a clear link to the way Florida (2008) defined the 'creative class' as crucial to technological innovation as well as economic growth. As I mentioned earlier, Florica's 'three T's' of economic growth as *talent, tolerance,* and *technology*, show neoliberal values as embedded into the creative. In this view, the importance of talented, innovative, and creative young adults becomes crucial in the plan of the local municipality in the creation of a smart city. And, the most important point of all in the neoliberal and global context, to spur economic growth. Technology has become a crucial element in the lifestyles of cosmopolitans, as they can maintain a connection while still living in a 'dis-connected' way. These connections are both for long-distance relationships, for example, to stay connected to the 'home' and the family, or new relationships formed in the locations they temporarily reside in.

Today's cosmopolitans, as noted by Camozzi, manage their constant relocations through the "need to enter into the heart of the cultures they encounter during their lives… to feel a little bit 'at home' in their settings" (*Camozzi, 2013, p. 305*). They are the subjects that experience the historic changes in progress first hand, in a way to "actively seek to comprehend and resignify them when they are perceived as distant and hostile" (*Camozzi, 2013, p. 305*). This account of young cosmopolitans in Milan shows new ways to deal with the uncertainty that comes with the structural characteristics of late modern societies. Particularly the trait of time-spaces as compressed and accelerated.

Glocal cities

As globalization has produced a world of 'restless landscapes', more and more places are changing and shaped in similar ways in a manner that makes it difficult to keep a distinctive sense of place (*Mayer & Knox, 2010*). To explain the effects of globalization, the concept of *glocal* has come to explain the relationship between the global and the local. According to Italian sociologist Aldo Bonomi, the glocal is

> "*a process where place - a crossroad between the global and the local - does not become more irrelevant or indistinct; on the contrary, for those who live it, it can remain very significant but it can be influenced by exogenous factors: it cannot be thought of, felt or interpreted as an entity in itself anymore"* (*Bonomi, 1996, as cited in Gonzáles, 2009, p. 17*).

The glocal is not just a combination between the global and the local, but rather a process where local networks are able to add value by opening up to connections with networks in other places (*Gonzáles, 2009*). The concept of the smart city is a process in which the effects of glocalization become visible. Through the transformation into a smart urban site, it is important to look at the balance between how global and accelerated processes affect the local life and the time-spaces in question.

On a smaller scale, an example of glocalization is how larger international companies adjust their brand according to local particularities. In Milan, this process was visible as the first Starbucks opened in 2018. Unlike its standardized look in the stores from its origin country, the US, this particular Starbucks was designed to appeal to Italian's particular taste for quality coffee and design. The unusually large servings of sweet coffee drinks in the US are not likely to gain much popularity in the land of small espressos' on the go.

On a larger scale, glocalization emerges as the rather homogenous aspects of urban regeneration are embedded with local particularities in the smart city. Through the joint project *Sharing Cities*, the three 'sister cities' London, Lisbon, and Milan are all implementing smart infrastructure in a collaborative project across borders. This strengthens the character of the smart city project in a way that it gains access to more people and places to test and develop smart policies and ideas. The question that remains is whether or not the local municipalities and leaders behind the smart city project manage to protect and strengthen local particularities without generating urban homogeneity.

Will all smart cities look the same? Or will the modern smart city be able to encourage its residents to find the time to create a smart lifestyle that promotes the uniqueness and particularities that surround them? In Italy, an example of promoting the particularities of a place took place in 1986, as political activist Carlo Petrini demonstrated against the first fast food chain McDonald's establishing its store in the heart of Rome. This was the beginning of the Slow Food Movement, aiming to "defend regional traditions, good food, gastronomic pleasure and a slow pace of life" (*Slow Food, n.d.*). Although fast food has made its entry into many Italian cities, the Slow Food Movement is continuously uniting people with the love for local products, the sociality in cooking a meal together with close friends and family, and the community of sharing slow, quality food. Today the movement has, according to its own website, "involved millions of people in over 160 countries" (*Slow Food, n.d.*).

The Slow Food Movement stood up against an international multi-million dollar industry by putting the focus on all of the positive effects that come from embracing the slow movement of life. It had hit a nerve with the Italian people who hold their culinary traditions from *la nonna*, the grandmother, close to heart. And as a nation able to grow its own products, there is a greater appreciation for the tastes and quality of local food. The main idea of the Slow Food Movement as offering an alternative way of enjoying another pace of life than what the increasing pace of globalization offered, also translated to other aspects

than food. In 1999, the Cittàslow Movement was established in Italy, *citta* translating to *city,* putting the focus on slow living in cities and villages. As an alternative approach to urban development, Cittàslow focuses on "local resources, economic and cultural strengths, and the unique historical context of a town" (*Mayer & Knox, 2006, p. 321*). The movement has now spread to 282 cities, where the Italian organization offers guidelines for each city to shape its own particularities in a sustainable way (*Cittàslow, n.d.*).

Both of the movements that praise *slowness* as the aim to increase quality of life, offer the strategy to address the interdependencies between goals for economic, environmental, and equitable urban development. Maybe it is time the tables turned and larger metropolitan cities look at smaller villages for inspiration on how to liveability and quality of life? Especially for an alternative approach that does not put economic growth as the main driver behind any kind of positive development into the future. To change to the perspective that something is not necessarily better and more sustainable just because it is faster, or smarter.

In the era of which some refer to as the second modernity, there is placed more emphasis on the individual and of her or his choices, where "the politics of everyday choices become more important and can pose ethical dilemmas" (*Mayer & Knox, 2010, p. 1549*). At the same time, some of these ethical or existential dilemmas in the global everyday can be answered by *slow living*. Slow living can be one answer where "self-actualization and matters of authenticity are posited not as a luxury of an elite but the necessary work of all in the process of identity formation" (*Mayer & Knox, 2010, p. 1549*). So, the individual becomes political, and the individual's lifestyle becomes a monetary project.

5. Conclusion

The utopian promise of the smart city might not look as green as it set out to be. Or, that depends on what side of the grass you are standing on. From the top of the smart garden the grass has never been greener, but from the bottom not so much. This is the moment in the movie where the technology has gotten too advanced and the robots start their rebellion against us. In a smart city, most of the rebels could in this case be the people who cannot afford to live in the city anymore, those without access to a smartphone, or the unofficial people unable to gain citizenship. Is citizenship in a smart city different than that in other cities? A thought that enforces the question of who the smart city is for, and whose right to the city.

I have witnessed fragments of smart infrastructure slowly emerge in my hometown Oslo. Such as the surprising moment on the metro where the workers were removing the machines to buy tickets. Next to it, a note that explained that all tickets from now on must be bought in the app. For the people without a smartphone, I thought, if they cannot afford the phone they likely cannot afford the fine for not having a valid ticket either. I cannot leave my home without my smartphone. It contains my driver's license, the app to see the times for the metro and the only way for me to buy a ticket, all of my music and podcasts, access to my bank accounts, and with the new digital identification the only way to legitimize myself. The smartphone, as the epitome of the smart citizen, has had an unprecedented growth in the few years of its lifetime, but not everyone owns one. In that way, it is both the glue that holds society together and the essence of what separates us.

The smart city can, much like the smartphone, seem like the glue that holds us together towards economic and sustainable growth into the future. But it also risks enforcing class segregation and excluding the type of people that do not fit into the concept of the 'smart citizen'. As I have discussed in this thesis, the smart citizen is envisioned and included based on neoliberal values, such as talent, individualization, self-driven autonomy, and technological skills. In a smart community, the residents become the sensors that are able to measure the quality of the newly imposed technological infrastructure. Whether we like it or not, our ways of living turns into data used to sell us better and more efficient technological devices for an easier life. In the urban sphere, what drives people to take control and become conscious of the surroundings and their effects?

In an attempt to deconstruct the concept of a smart city, I identified the main developmental goal as economic growth and put it in contrast by looking at the opposite end of the scale. In Italy, this is the *CittaSlow* Movement, which focuses on high quality of life by enforcing slow living by avoiding economic growth. A concept that might sound completely insane, but in simplicity only offers an alternative lifestyle without the universal assumption that more money and growth lead to happiness and higher quality of life. A thought-provoking idea against the backdrop of the smart city.

It was my intention when doing fieldwork was still a possibility, to visit the headquarters of the CittaSlow movement, the small town of Orvieto in central Italy. I asked myself if it was a fruitful comparison to put the second biggest Italian city, Milan, up against the charming village of roughly 20,000 inhabitants, Orvieto. But in this case, it was not about the physical attributes and size of the cities as much as the autonomy and sense of freedom for the people living there. By sense of freedom, I mean the feeling of liberation that comes from tearing oneself away from the stresses and must-does of life. I mean the levels of quality of life and the values we bring with us and focus on to increase these levels in all parts of our lives. So why does it seem like the faster we live our lives, the shorter we experience the time that we have?

One of the main points of focus for this thesis has been put on sustainability. Seen in relation to liveability, the meaning behind sustainability can in that way encapsulate the essence of what constitutes a *good life*. From an ontological ideal, how much control or power do we really have over our own life and the time that we have? Is it becoming increasingly more difficult to choose an alternative way of living?

It is within the contemporary globalized and technocratic structures that we can clearly see the double-bind of our time. The contradictory process of trying to make the world more sustainable, but building more technology and producing more garbage in order to do so. The contradiction between improving our cities, but only including a limited number of people from the world in the process. The double-bind of smart cities means that no matter which technological solution we implement to solve a societal problem, the premise of why we do it is built on a false idea of sustainability. In that way, the smart city will never be able to achieve its purpose of being a utopian and sustainable urban site for future generations. The concept of the smart city becomes nothing more than an empty signifier if it is not deconstructed and diversified. To avoid the triumph of form over content, and to be more than a fetishized spectacle.

Are we losing touch with ourselves by becoming increasingly reliant and used to automation and technology to do the job for us? The need to fill our days with easy and time-consuming tasks in an effort to keep the boredom away. To choose a slow way of life might in fact be more difficult than just jumping on the wave of effectivization and a smart and easy life with the aid of new technologies. But, the other side of smart solutions for self-reliance and autonomy is the vulnerable side of dependence.

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