The Telepolis as a Tool for Citizen Inclusion in Identity Construction

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ARTICLE INFO	ABSTRACT
	Cities, as physical points on the space-time continuum, are defined by their diversity, the variations within this plane, and the responses to these variations. The unpredictable nature of urbanity in the contemporary era is being redefined by technology, altering the traditional sense of urban life. For the first time in history, it is no longer necessary to physically inhabit a city to participate in urban life. This has led to a greater range of variations across different realities, creating a multiplicity of socially distant realities with increasingly divergent interests that complicate social cohesion. This study aims to understand unpredictability and how identities and perceptions of the environment are formed and evolve around it. Through an interdisciplinary approach that combines scientific and psychological principles, it seeks to establish a framework for understanding and addressing these variations, using technology and Urban Proximity as facilitators to enhance social connections.

1. Introduction

Nature is an infinite sphere of which the center is everywhere and the circumference nowhere.
- Blaise Pascal

Since the beginning of time, humanity has navigated the dimensions of time and space. The establishment of our cities and societies is a manifestation of how the human mind responds to conditions defined by these two variables, subject to a factor of uncertainty inherent in human behavior. The rich cultural and identity heritage, known today as architectural heritage, reflects and attests to events that occurred in specific places and moments in history. The inhabitants of these inherited spaces, which continue to evolve today, are constantly subject to emotional and cognitive burdens (Sennett, 2017). Thus, subjectivity and the human mind are the main factors responsible for constructing identity.

In this context, the field of mathematics offers an understanding of nature as an unexplored territory, which assigns importance to space-time. This approach is based on the mind's abstract understanding of situating reality at a specific point.

Following the analogy proposed by Pascal, human nature, meaning the mind, is described as omnipresent, without a defined focal point, and capable of being everywhere. Furthermore, it lacks

clear boundaries, implying its capacity to reinterpret both the imaginary and the tangible. This is where uncertainty becomes relevant. Since the diversity of the human mind is infinite, so are the possibilities for response to conditions at a point in space-time, such as technology, society, and climate.

In a past scheme, until the 20th century, the limitations of distance and time confined the human mind within a reduced scenario. Consequently, local abstractions were reinforced, solidifying notions of tradition, culture, and nationality.

However, in the past 20 years, the scenario encompasses both the physical, familial, and inherited realm as well as the virtual domain on a global scale (Telepolis), breaking any possible limit. In this scheme, the more the information load, the more the number of possible scenarios as in Figure 1. A virtual megalopolis, which coexists and intertwines with the traditional physical space and is updated in real-time, can reconfigure the urban experience and transcend the limitations of space-time by allowing access from anywhere in the world at any time through the palm of one's hand (Echeverría, 2021). In this contemporary context, the boundaries between the real and the virtual blur. For example, one can participate in a concert on the other side of the world in real-time without leaving one's room. Consequently, the digital revolution demands a reevaluation of urban reasoning.
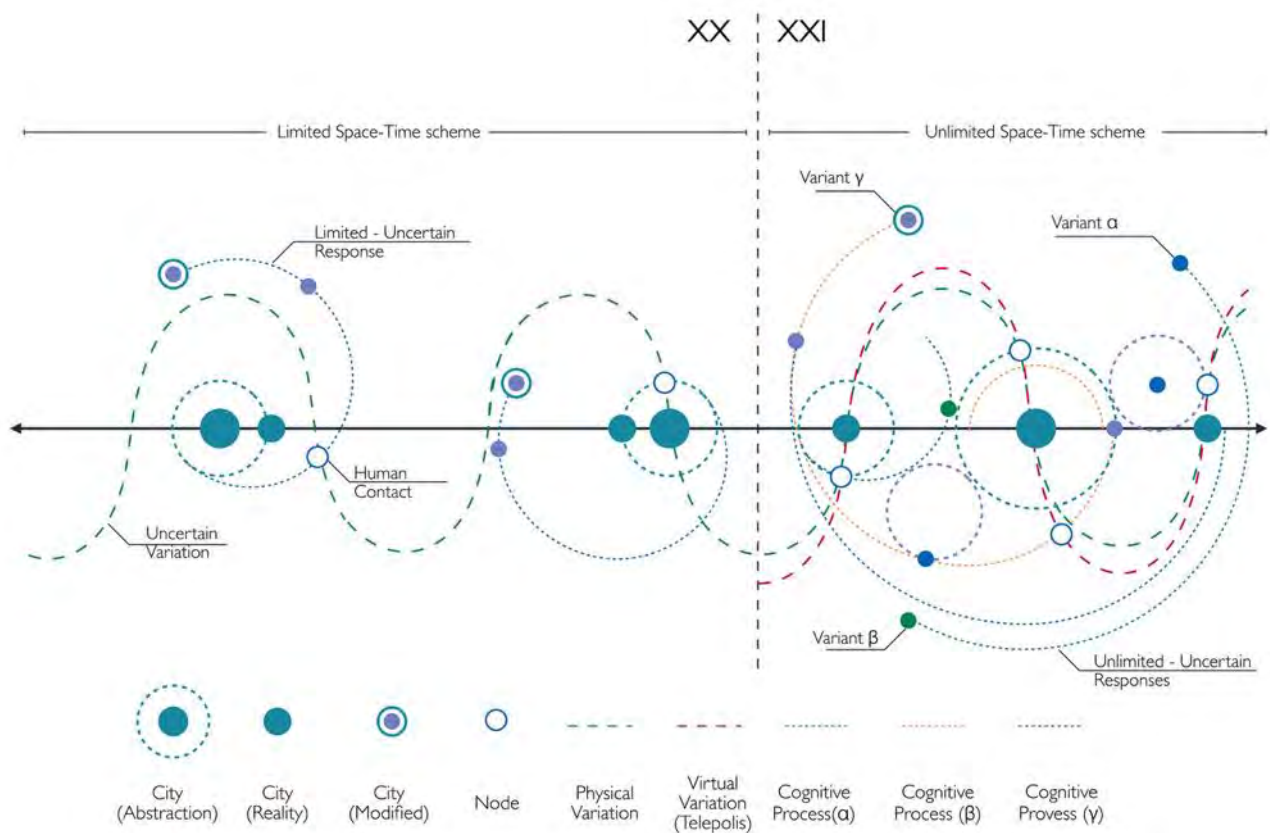

Fig. 1. Scheme of human response to variations in space-time
Source: The Author

As a result, the mind is fully capable of infinitely expanding and providing more complex and diverse responses to the individual's natural environment. It is at this juncture that variables such as scale also begin to blur, shifting from a concrete identity core to a global city. Ultimately, cognitive and emotional responses are complemented by the information load, as shown in Figure 2.

This framework clarifies the contemporary paradigm shift and presents the 21st-century paradox concerning cities and their inhabitants. The contemporary world actively employs virtuality as a platform for the human mind. However, it is unpredictable and fast, resulting in an exponential increase in human thought in a shorter time. If an urban event could be known in days before, today, a viral

event on the internet can trigger a worldwide response in minutes. This results in a greater informational load on the physical city. Consequently, the behavior of its inhabitants will be more unpredictable and dispersed, generating social problems such as emotional detachment, urban fragmentation, and increasing polarization. However, responses to these problems are often based on preconceived policies designed for the previous scheme.

Therefore, it is imperative to question the true essence of variations in the degree of uncertainty of the human condition and their consequences on societies, considering the scientific and psychological aspects within the information load.
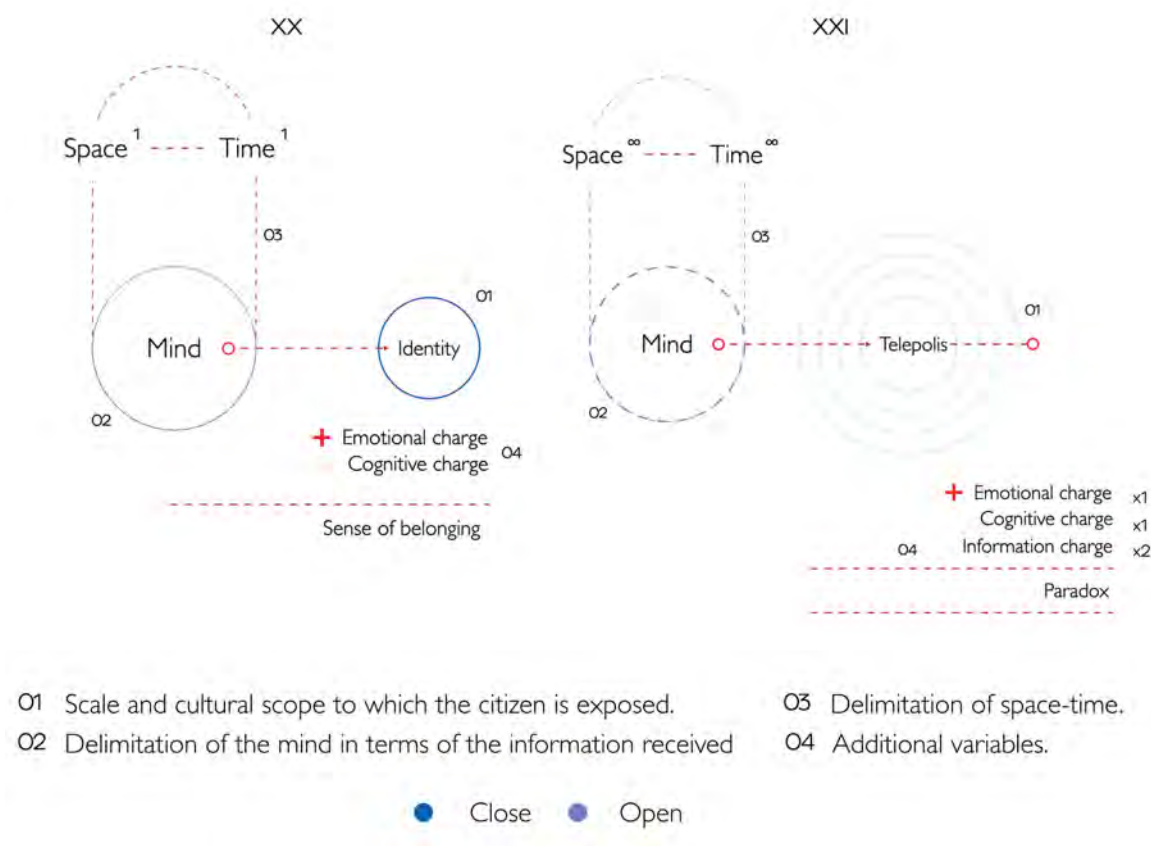

Fig. 2. Paradigm shift of the mind regarding the perception of space-time
Source: The Author

2. The birth of cities: Recognition and ways of living through time

Aristotle once mentioned that the soul never thinks without an image. In other words, human thought requires a material image, a link that can connect abstract and imaginative thinking with reality. Evidence of this is the extensive catalog of symbols and elements, including numbers and letters, created by humans to comprehend their subjective logical development. Based on this, it can be deduced that imagination is the bridge between perception and understanding. There is a space in the human mind where the image is conceived. Continuing with the previous example, numbers and letters are representations created solely to be perceived in the real world and to understand their implicit nature. They are abstract symbols that have no inherent meaning in real life, yet their essence is implicitly tied to it.

Imagination differs from other mental processes, such as perception or memory, as the latter require a real, tangible element that can be assimilated without an image-creation process. For

memories to be generated in the human mind, an existing element in the real world is necessary: an event, a person, an object, or a place. In contrast, imagination does not require such an element, as it creates its own images. These do not exist until imagination produces them, thus being the materialization of a thought.

According to Silva (2008), the city is born with writing and the representations made of it. He asserts that it has been interpreted by its own inhabitants, who, after a period of performing certain activities related to urbanity, beyond the physical, construct urban sketches of the experiences in which they participate. In the face of the immense number of representations made by different inhabitants in various fields such as art and literature, this is how a collective imaginary construction was constituted, and where the city transforms into a legitimate urban event. For example, despite having been destroyed for centuries, it remains part of global culture. Because of it's representations, it can exists in the mind today.

Fig. 3. Drawing of the Lighthouse of Alexandria.
Source: © Wiki Commons

Castells (2000) states that the 'urban society' is defined as a culture based on a system of values, norms, and temporal and spatial social relations. Similarly, Lefevre (2017) argues that the interest of the 'urban fabric' is not limited to its morphology but lies in phenomena of another order, transcending the physical ones. These can occur in the form of social and 'cultural' life, being understood as a characteristic of urbanity, which adopts certain trends temporarily, subsequently conceived as 'popular culture'. These very aspects reinvent current forms of inhabitation, which the professional must learn to observe. What appears to be insignificant is the foundation of perceived familiarity (Jacoby, 1971), whose simplicity and current symbolism make it a candidate for generating new analytical categories.

In his work "The Social Life of Small Urban Spaces" (Whyte, 2015), the value of these characteristics was underscored. The methodology based on active participant observation bestows upon it greater merit, as it not only exposes but also delimits the categories through which observation can result in an imaginary sketch aiding in understanding the dynamics of the place without fully defining a Genius Loci.

From the 1980s onwards, the city paradigm would change, with the arrival of technology. According to Ramírez (2009), this would occur due to economic and social changes in the world. Privatization and the reopening of economies to a global market would weaken the national dimension of cities, adding a global scale to planning. In this same article, the emergence of the informational society and the scientific-technological conditions would be cited. That is, new forms of social organization and development based on global circuits. In this context, the importance of knowledge

societies and the new deterritorialized economy would be emphasized, variables recognized by Manuel Castells that would allow cities to gain importance for their establishment.

(Sassen, 2012) would also recognize the new variables to which the city is subjected. The most important would be the emergence of a new urban system, capable of functioning at both regional and global levels. Within this, certain cities would acquire greater importance as strategic locations for international coordination in the provision of economies. Likewise, she would also warn that this condition could lead to a quantitative increase in levels of inequality, now on a global scale. That is, contrary to strategic cities, others could emerge that are marginalized globally and are on the periphery of technological and economic development.

Regarding this point, according to Horkheimer and Adorno (2002) and in the words of Alain de Benoist cited in Krause (2013): Modern freedom is a 'negative freedom', where in today's world there is a tendency to suppress the concept of community, people, nation, and culture, adopting it to a general one that goes directly to humanity.

In the face of a new scheme, a new paradigm must establish the scope of the global scale to work with it as a conditioning factor, avoiding its negative influence on the physical plane. As shown in Figure 4, three scenarios are observed. (A) Demonstrates a behavior prior to the Global City, where communities went through intermediaries before being part of the world. This configured a sense of territory. (B) Shows the current change, where communities absorb information from the world, being absorbed and made invisible by those of the first class. (C) Demonstrates a virtuous circle, where the Global City is fed back by events present in communities, and these, in turn, configure new territorialities.
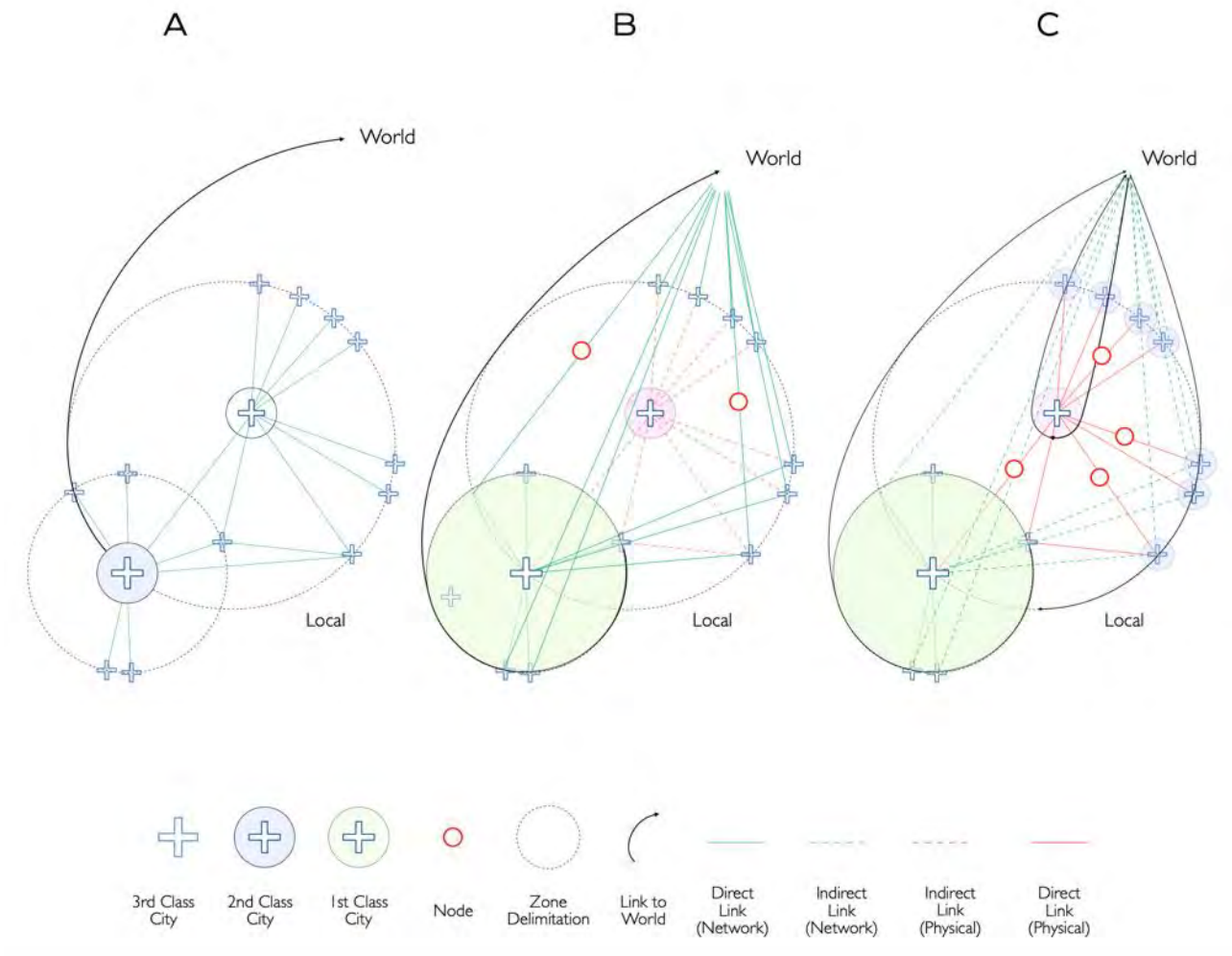
Fig. 4. Territorial dynamics and their direct influence based on the global scale, on the physical environment, are schematized.
 Source: The Author

4. Methodological procedure

4.1 Field of Study

The urbanism domain encompasses various dimensions. It serves as a theoretical framework aiming to comprehend and manage the implications of the global scale and psychological interpretations within a spatial and temporal context. To delineate this field effectively, it is essential to consider fundamental concepts:

These encompass space-time dynamics as primary realms of operation. They are influenced by variables such as scale, virtuality, and cognitive processes. All of these are within the concept of identity construction, with the latter being the theoretical field of the work.

4.2 Research Approach

This research project addresses social issues by understanding the role that technology and the Internet play within the previously described urban framework. The objective is to comprehend the relationship between these technologies and human behavior within the dynamic urban system and its variability, taking into account the unpredictability of nature. This aims to formulate new ways of conceptualizing cities by understanding and addressing the human psyche in the urban environment to promote citizen inclusion.

The methodology for establishing such an approach must, therefore, consider a qualitative analysis of the background and scope of unpredictability within its nature and based on the changes with which people have responded to variations such as technology over time. A scientific approach is proposed through the analysis of the universal principles of matter, from which we are not exempt. On the other hand, a psychological approach, analyzing the scope of the human condition and decision-making based on various conditions, which also cannot be foreseen, through bibliographic references.

This article argues that through the knowledge of certain natural constants, such as unpredictability, and the pattern with which the human mind adopts certain attitudes toward them, it would be possible to accept uncertainty as a constant in all planning across space-time. Through this, the range of possibilities could be oriented (but not delimited) towards sustainable and inclusive development, taking the city and technology as facilitators.

This approach could benefit from considering concrete examples of cases where uncertainty and spontaneity have used technology to enhance urban resilience, the livability of the specific urban event, and consolidate a sense of identity at a point in space-time.

This approach, in turn, reinforces postulates such as the concept of Proximity (Moreno, 2023), which advocates for cities that promote accessibility and social interaction at the local level. In turn, aims to enhance city development through a proposal for Sustainable Development.
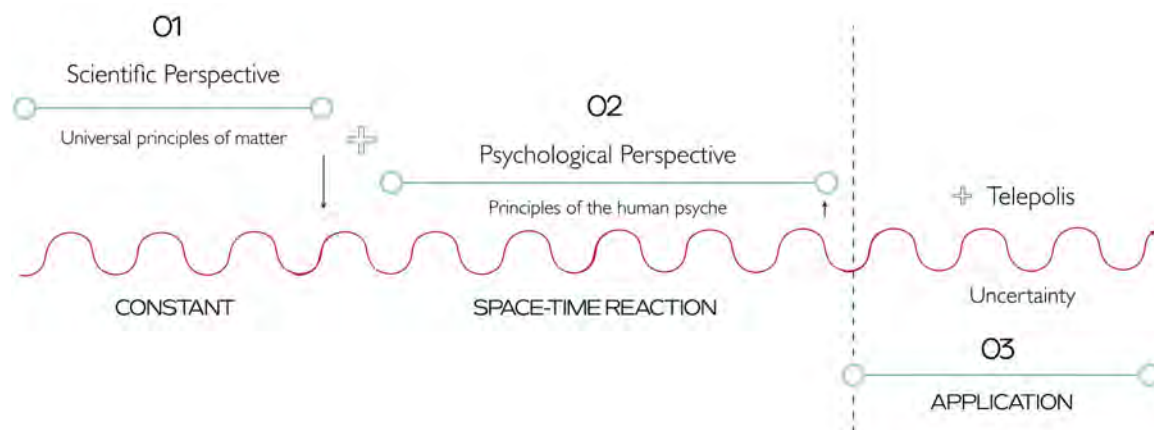

Fig. 5. Methodology applied based on the theoretical analysis of scientific and psychological aspects
Source: The Author

4.3 Scientific Approach

As beings made of matter, we are subject to universal principles that are intangible and to which nothing and no one is exempt, such as gravity. Among these principles is the uncertain nature of the quantum world, which can be illustrated by Heisenberg's uncertainty principle, W. (1927). This

principle states that it is impossible to simultaneously determine with precision the position and momentum of a subatomic particle. The more precisely one of these variables is measured, the more uncertain the other becomes. This fundamental limitation has profound implications, not only in physics but also in our understanding of reality.

This notion of uncertainty is not limited to quantum physics alone but can also be extrapolated to other fields of human knowledge, such as urbanism and urban planning. By applying this principle to urban reality, it can be argued that cities are complex systems where multiple variables interact unpredictably. These variables include, but are not limited to, mobility, economic development, social interaction, cultural diversity, and sustainability. Each of these factors coexists and influences the others in intricate ways, creating a dynamic urban environment whose interactions are difficult to predict accurately. In this sense, just as atoms have positions and moments that are difficult to pinpoint simultaneously, individuals in a city have behaviors and movement patterns that are inherently unpredictable. This duality reflects the essence of Heisenberg's principle, where an increase in control over one variable results in a corresponding increase in uncertainty in another.

As greater control and predictability over the structure and functioning of the city are sought (through regulations, strict zoning, detailed planning), the ability to predict how people actually inhabit those spaces becomes more uncertain. Conversely, when attention is focused on understanding and predicting how individuals and communities choose to inhabit spaces, the ability to control or strictly plan the city may become more uncertain.

Highly planned cities may not adapt well to emerging forms of life and use developed by the inhabitants. Urban dynamics, therefore, cannot be completely controlled or predicted, and a range of variation must be found where both management and modes of habitation can be oriented toward improving living conditions. This requires a delicate balance, where planners embrace uncertainty as a constant and work within its bounds to foster creativity, resilience, and sustainability.

To find this point of equilibrium, it will be necessary to establish a limit between variables. Heisenberg's uncertainty principle establishes that there is a fundamental limit to the precision with which certain properties of a particle can be known simultaneously, known as Planck's constant (h). In an urban context, the limit can be given by the flexibility that can be allowed in a space without losing its management. This would provide a framework for managing uncertainty and change without imposing rigid restrictions that would stifle urban dynamism and creativity. Such an approach would encourage cities to evolve naturally, responding to the needs and aspirations of their inhabitants while maintaining a coherent and functional structure.

Recognizing the uncertainty and constant flexibility of cities helps the concept of a city adapt to challenges over time and space, adapting to variable and equally unpredictable circumstances. By embracing the principles of adaptability and resilience, cities can better navigate the complexities of the modern world, fostering inclusive communities that thrive in the face of change.
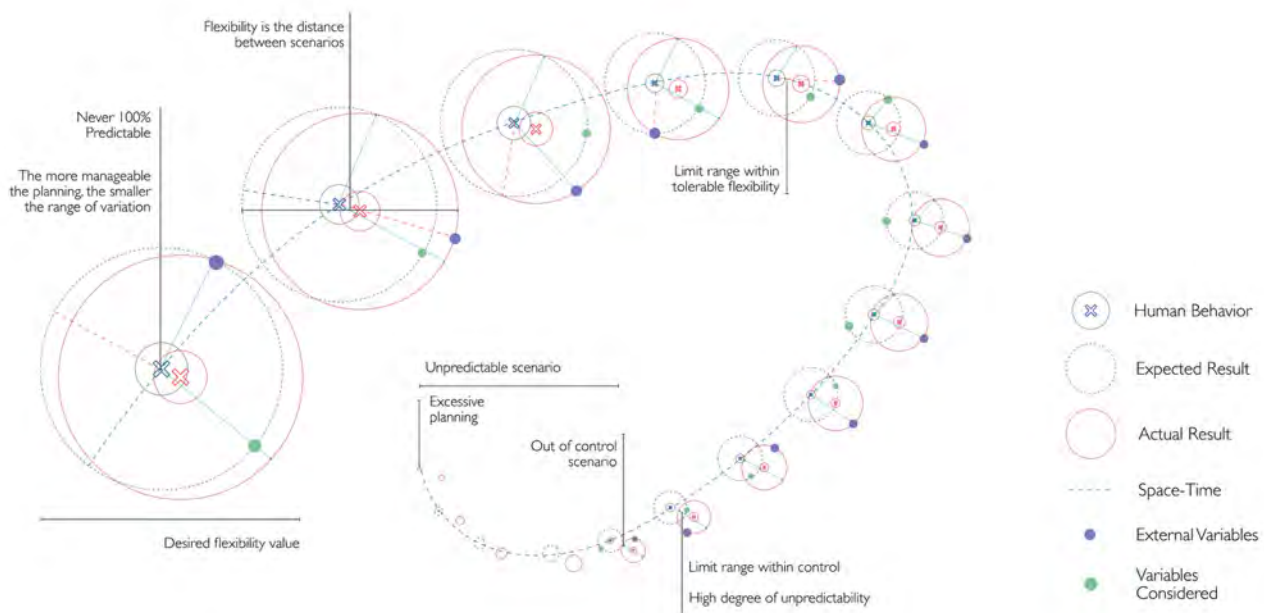
Fig. 6. Scheme for managing degrees of uncertainty. As in physics, the more difficult to observe and manage, the more uncertain the human response in an urban environment.
 Source: The Author

To address flexibility as a constant, it must be tested across different scenarios and scales. To this end, the concepts of Brian Greene and Roger Penrose have been considered: Greene (2010) proposes the theory of Additional Dimensions, suggesting that our universe may possess more dimensions than those we typically perceive. According to this theory, in addition to the three spatial dimensions experienced in our daily lives, there could exist additional dimensions compacted at different scales. These additional dimensions might be invisible to us due to their size. This aligns with the theoretical framework presented, where a New Dimension has been created within urban life. The Telopolis is dynamic, operating on a scale that transcends reality itself and, in turn, modifies the physical reality of everyday life.

Similarly, in the context of urban environments, the Technological Dimension transcends the physical reality of the city. In this dimension, we find the digital world, augmented reality, the Internet of Things, and other emerging technologies that are increasingly integrated into our urban experience. Just as additional dimensions in physical theory expand our understanding of the universe, these technological dimensions can expand our understanding and experience of the city, offering new ways to interact with the urban environment and with each other.

Building upon this conceptual foundation, we can delve into the theory of parallel universes (Greene, 2011), which suggests that our universe might be just one among many. According to this theory, multiple universes could exist, each with its own physical laws and initial conditions, coexisting within what is known as the multiverse.

In the context urban experience, just as the multiverse postulates the coexistence of multiple physical realities, in the urban context, we can consider the coexistence of multiple social, cultural, and economic realities within the same city. Each with unique variations according to its space-time (including the degree of technology adoption), influenced by the uncertainty of human behavior.

In this same scenario, flexibility becomes a constant, encompassing the boundaries between urban development and the ways in which citizens inhabit their cities. Each neighborhood, community, and individual may experience the city uniquely, with their own perspectives, values, and needs, subject to a range of unpredictability.

Additionally, just as in parallel universes, where separate worlds can influence each other in various ways, in the city, we observe how different communities interact, influence each other, and intertwine through social, economic, and cultural networks. Much like in the multiverse, where physical laws may vary from one universe to another, in the city, we find variations in social norms, cultural practices, and economic structures across different neighborhoods and communities.

Urban Multiverses, therefore, interact through digital connectivity and can share aspects with each other via this medium. Consequently, parallel urban realities can interact with the world independently of their scale. This provides a clear response to the phenomenon of centralization and allows Penrose's postulate to be regularly applied across different world realities.
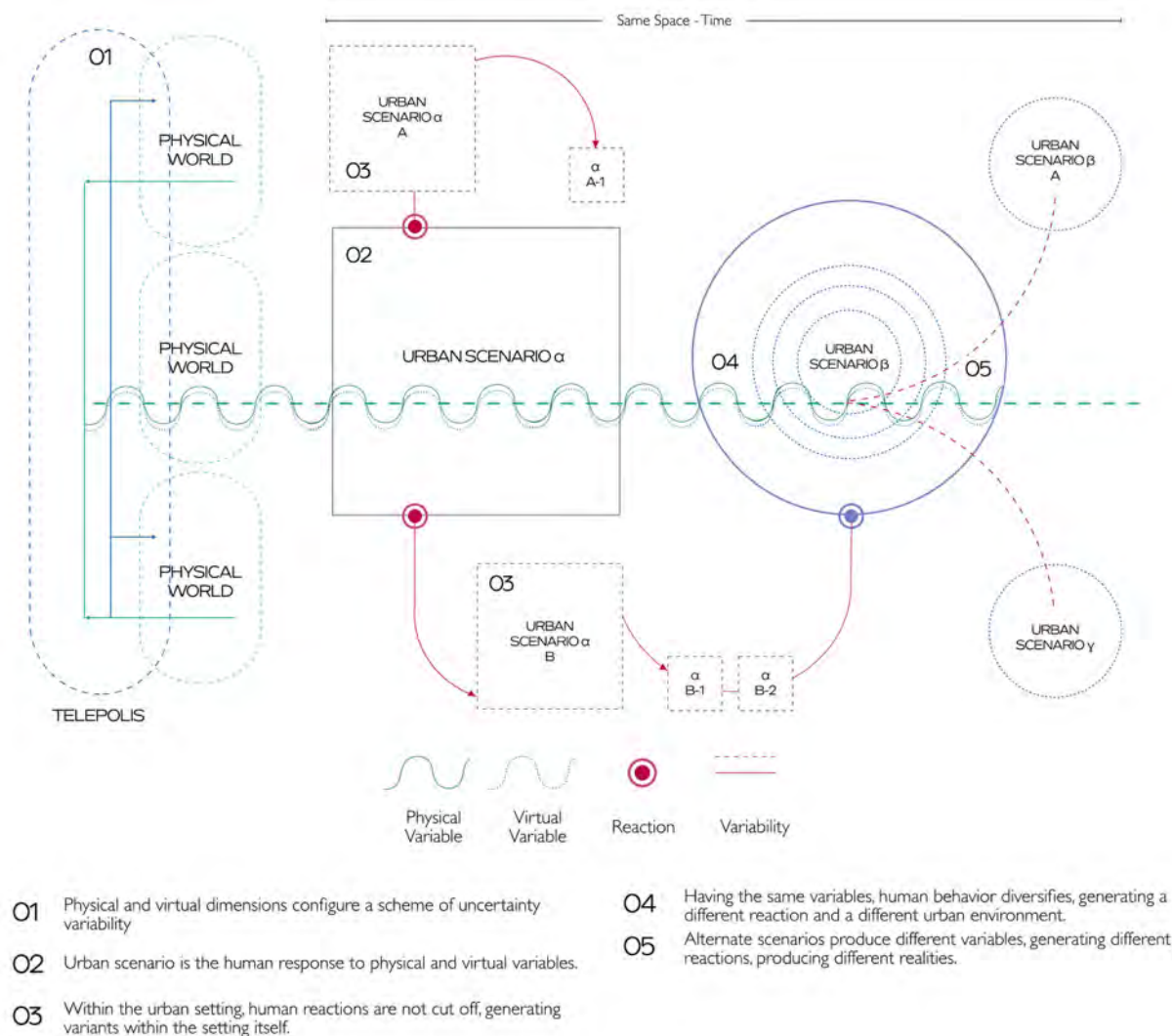

Fig. 7. Scheme of the urban multiverse. Despite sharing physical and virtual variables, such as climate, topography or general culture, human response varies. This gives rise to small variants within a universe or a totally different universe
 Source: The Author

The principle of uncertainty in human behavior, being subject to variations, must address the underlying physical interplay between consciousness and spatial environment. Penrose (1996) proposes a connection between human consciousness and the spatial environment. He posits that consciousness might emerge from quantum phenomena in the brain, suggesting that these phenomena could play a crucial role in the generation of consciousness.

Through this perspective, it becomes possible to explore the concept of consciousness in relation to issues such as the perception of the urban environment and the subjective urban experience. Just as human consciousness is considered an emergent phenomenon arising from complex processes in the brain, urban experience can be understood as the result of multifaceted interactions between individuals, communities, and urban environments. Social, economic, and cultural networks intertwine urban inhabitants in a complex manner, creating a web of influences and connections that shape life in the city. This information load may then resemble the quantum processes in the brain, based on a cause-and-effect relationship. This suggests that by analyzing these connections, it might be possible to understand human behavior in cities.

In this context, this implies that conscious observation can influence the manifestation of certain events or phenomena. Additionally, consciousness can play a role in decision-making and shaping our subjective experiences.

The conscious perception of variables such as safety, accessibility, and quality of life in a given area can influence the use of public spaces. If residents perceive an area as unsafe or unattractive, they are likely to avoid those places, which can lead to abandonment and urban decay. Similarly, many places tend to be better recognized globally and can be tracked, as illustrated in Figure 8.
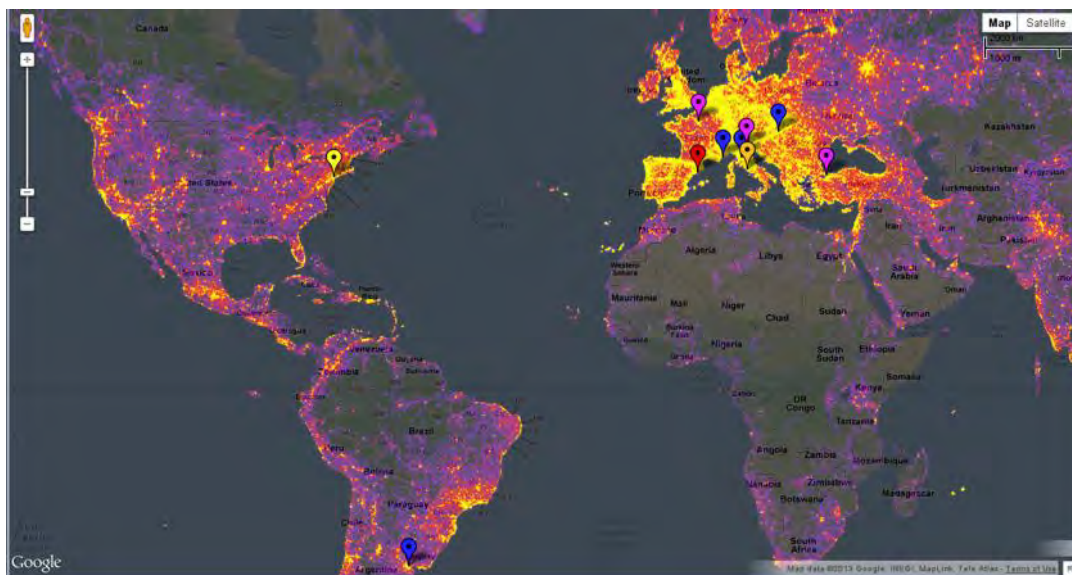

Fig. 8. The information load enables the identification of the hottest spots in terms of various aspects. For example, in this map, one can appreciate the most photographed places in the world
Source: Sightsmaps

4.4 Psychological Approach

The development of the modern world, as Berlin (1969) suggests, has advanced unrestrained, driven by globalization. This has led to complex urban schemes with a multitude of responses to environmental, social, and climatic conditions. While globalization has enabled greater efficiency and pragmatism in urban design, it has also sacrificed local values and fundamental aspects of individual quality of life. This often results in cities becoming "non-places," as Augé (1992) defines them: transient spaces that offer temporary, pragmatic experiences, lacking roots for their inhabitants. Though often devoid of identity and connection to the environment, have become integral to contemporary social experience, as described by Fabián (1998).

There arises a need for a more intimate approach to human psychology, one that Lynch (2008) defined as the "sense of belonging," where the "social approach" (Ziccardi, 2009) alone is insufficient to provide a real and sustainable vision and solution. Human behavior, subject to constant uncertainty,

varies with space and time, influencing future outcomes. The diversity of urban realities and their potential futures largely depends on how individuals respond to their environment. This decision-making process can be seen as the human capacity to project and plan for the future, a focus of the present research.

Kahneman (2011) explores two systems of thought that guide human decisions: System 1 and System 2. System 1 operates quickly, automatically, and emotionally, driven by intuition and cognitive biases. This mode of thinking allows for rapid decision-making but often relies on mental shortcuts that can lead to systematic errors. For instance, perceptions of urban environments can be influenced by biases like the availability heuristic, where recent or memorable experiences are overemphasized, affecting how "non-places" are experienced and used. This idea is supported by Penrose's perspective on the hierarchy of places based on their online presence.

In contrast, System 2 is slower, analytical, and logical, activating when deeper, more conscious processing is required. This system evaluates options and considers long-term consequences, making it more accurate but also more cognitively demanding, limiting its use in daily decision-making.

When applying Kahneman's concept to urban decision-making, it is important to consider how different societies might apply System 1 or System 2. In highly urbanized and globalized societies, where "non-places" are prevalent, System 1 dominates due to the need for quick responses in constantly changing environments. These spaces, designed for mobility and efficiency, encourage a more automatic and less reflective mode of thinking, leading to decisions that prioritize short-term gains. Moreno (2023) refers to this as the "Fast City."

Conversely, in societies where urbanization is more rooted in sustainability and local identity, System 2 may be more prominent, as urban decisions require more analysis and consideration of long-term implications. This could lead to the creation of spaces that resist becoming "non-places" and maintain a stronger sense of community and rootedness. Moreno refers to this as the "Happy City."

The concept of Urban Multiverses connects here, suggesting that while some cities transform into "non-places" dominated by System 1, others may evolve into more organic and reflective environments guided by System 2.
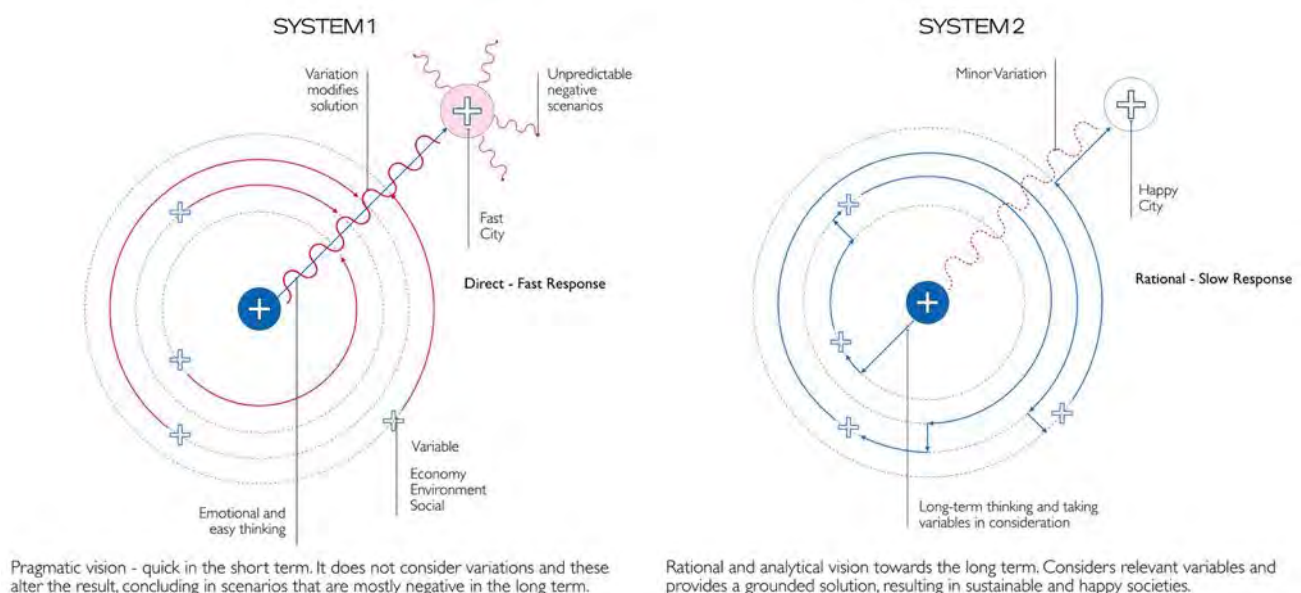

Fig. 9. Scheme of Kahneman Systems
Source: The Author

The distinction between Kahneman's systems is exemplified in urban policies. Le Corbusier's Plan Voisin, focused on the concept of the "machine for living," overlooked the urban complexity of Paris. As a "fast city," Paris would have faced an overwhelming array of possibilities, making it unmanageable and leading to an uncertain future. Many of these possibilities would likely have resulted in negative outcomes or a lower quality of life, as seen in comparisons between Brasília and Rio de Janeiro. In contrast, the Happy Proximity vision considers, accepts, and reconfigures the current social variables to enhance human conditions. While there is significant uncertainty regarding its impact on urban life, its scientific approach reduces the range of possibilities, making urban improvement more manageable.

Fig. 10. Plan Voisin by Le Corbusier (1922)
Source: Business Insider

Fig. 11. Place de Catalogne intervention, Paris (2024)
Source: Ville de Paris

Zimbardo (2017), in his theory on temporal perspective, posits that the way individuals perceive and utilize time profoundly influences their decisions and behaviors. Through different temporal orientations—past, present, and future—decision-making patterns are established that are intrinsically linked to the individual's relationship with their spatial-temporal environment. This dynamic, in turn, can be extrapolated to how various societies adopt attitudes and approaches in response to temporal variations. These perspectives are developed towards different temporal orientations: past, present, and future.

In relation to the past, two subcategories are distinguished. The first is the Positive Past Perspective, characterized by a nostalgic and traditional view. The second is the Negative Past Perspective, which approaches time from a traumatic and painful standpoint. In both cases, decision-making is strongly influenced by historical precedents, which can lead to considerable resistance to urban transformations.

In the perspective oriented towards the present, individuals tend to prioritize immediate gratification and short-term experiences. One subcategory is the Hedonistic Present, with a short-term and pragmatic view. Within this category, Kahneman's System 1 can be placed. On the other hand, the Fatalistic Present is mentioned, which describes scenarios where there is a pessimistic view of reality and where this often establishes higher levels of unpredictability. Consequently, societies perceive that there is no control over their future. This can be seen as the scenario where the unpredictability of urban reality surpasses control, leading to cities with deep social issues and limited civic action.

Finally, the future-oriented perspective is associated with a tendency towards planning and consideration of long-term consequences. This perspective fosters scenarios aligned with Kahneman's

System 2, promoting the creation of sustainable cities through urban planning that considers long-term environmental, social, and economic impacts.
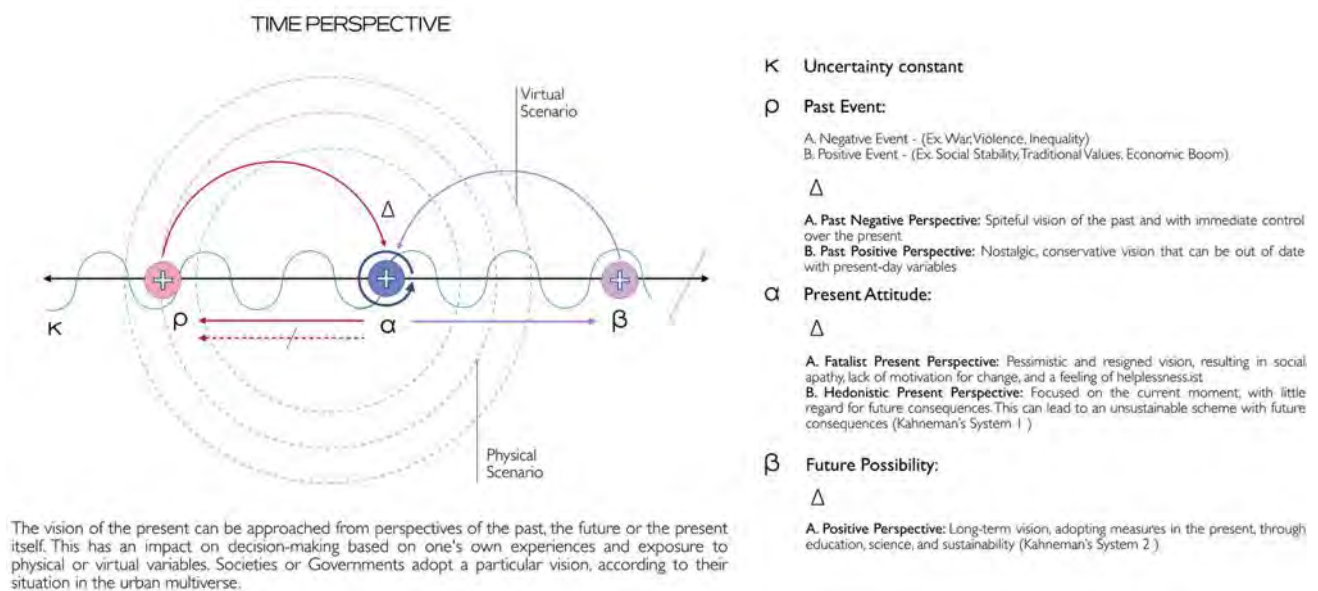

Fig. 12. Scheme of the variables within the Time Perspective, according to Zimbardo
Source: The Author

4. Toward new ways of thinking

A paradigm shift can be established based on the changes in modes of inhabitation observed over the past century, as illustrated in Figure 13.

The breaking of the boundaries of the human mind through the advent of the global city has altered the urban paradigm. Uncertainty as a constant throughout space-time, coupled with human behavioral responses, has led to the adoption of technology and its impact on the lives of citizens. The approach to its use has also evolved, depending on the temporal perspective of the society in question, ranging from being considered an end in itself to being viewed as a tool. Thus, these two axes delineate four quadrants.

In the first quadrant, which extends up to the 20th century, there is a focus on the uncertainty of human behavior. This approach is primarily centered on Positive Past perspectives, deeply rooted in society, where traditional values, culture, and the interpretation of the city through familiar elements play a fundamental role. In this context, the importance of local identity is highlighted, consolidated through the knowledge and recognition of citizens with their urban environment.

In the second quadrant, still within the 20th century but with a more utilitarian focus, the urban proposals of the modernist movement stand out. Figures such as Le Corbusier or Robert Moses placed greater emphasis on the efficiency and functionality of the city, leading to perspectives aligned with the Hedonistic Present or Kahneman's System 1. In this context, the city is promoted as a habitable machine, emphasizing urban intervention patterns that have influenced the development of numerous cities worldwide to this day. Urban speed, zoning, and the concept of proximity oriented towards the automobile shape urban planning based on quantitative metrics. However, this approach can also result in citizens being perceived merely as numbers rather than individuals with emotional connections to their urban environment. Additionally, the fast-city scheme tends to prioritize larger cities and promote unsustainable centralized growth, with higher energy and land consumption, also leading to the neglect of peripheries.

In the third quadrant, corresponding to the 21st century, a Future or System 2 perspective emerges, which considers the long-term consequences of Telepolis, resulting in its adoption as a fundamental tool for revitalizing the emotional and cognitive aspects of cities without falling into emotional dependence on it. It proposes adopting new approaches that prioritize improving the quality of life of citizens, addressing challenges such as centralism, car dependency, and segregation due to a lack of services.

In this context, Kahneman's Systems can be differentiated within the urban multiverse in planning. Moreno would differentiate this vision by describing it as the "happy city," in contrast to the "fast city" concept. Here, the central role of Proximity is emphasized, seeking to promote social cohesion and community interaction by maximizing citizens' accessibility and options to pursue their life projects. Considering the importance of urban experience in the construction of identity, the Happy Proximity model emerges as a promising option for promoting citizen inclusion.

In the final quadrant, the persistence of System 1 and its repercussions in the 21st century is observed. Moreover, contemporary dilemmas related to Telepolis arise, such as the trivialization of urban events, the radicalization of thought, collective paranoia, and the manipulation of information. In this quadrant, the urban reality of the 21st century is diagnosed as still clinging to modernist principles, failing to guarantee an adequate quality of life for its inhabitants, and unable to achieve true Sustainable Development.

The concept, therefore, focuses on the transition from quadrant 2 to quadrant 3. A well-structured city provides a foundation for generating meanings and associations, as well as for the development of urban identity. Whitehand (1989) reinforces this argument by noting that these experiences originate in the historical character of the urban landscape.
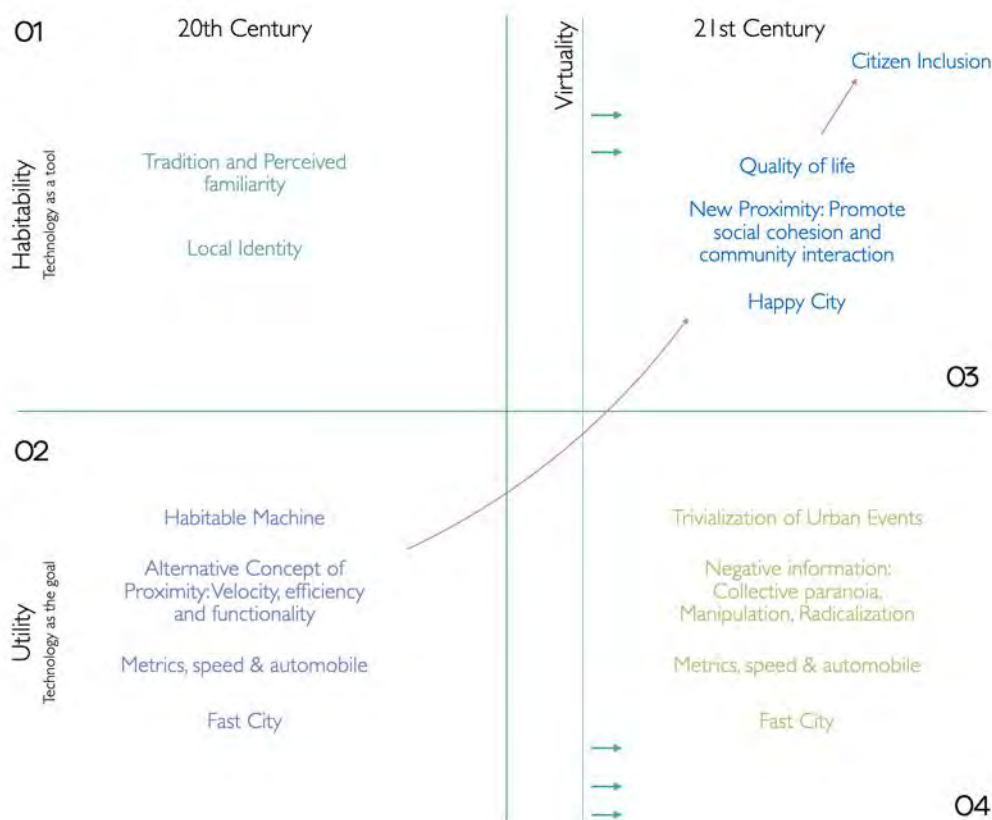

Fig. 13. Territorial dynamics and their direct influence based on the global scale, on the physical environment, are schematized.
Source: The Author

To achieve the proposed scheme, it is essential to harness the effects of Telepolis in the construction of popular culture (Torres-Madroñero, 2020), which recognizes the role of the Internet in shaping collective memory, emphasizing its measurability through digital tools, in line with Penrose's assertions. This is evident in a study (Yeung, 2011) that demonstrated that certain events from the recent past are remembered more vividly in the present. Furthermore, these studies can be complemented by analyzing the information corpus referenced by microbloggers or content creators, who are considered close sources despite their age.

The article details a study conducted on the analysis of collective memory in Wikipedia, examining page traffic data over a specific period. User behavior demonstrated that the highest response rate was recorded for breaking news.

The positive impact of Telepolis on the physical world was corroborated by the unexpected intervention of the Ecce Homo in Borja, Spain: a church with no significant global value boosted its economic activity, becoming a popular icon and challenging the status quo. Randomness contributed more to urban development than a restored building under strict studies. This postulate can provide a direct response to contemporary society and the effects of Telepolis, where citizens, more spectators than inhabitants, prioritize urban events with a certain relevance and controversy. The success of the Ecce Homo does not lie in its aesthetics but in its impact, as shown in Figures 14 and 15.

Fig. 14. Newspaper stating that the Eccehomo continues receiving 2000 visits per month

Fig. 15. The Presence of Ecce Homo in Popular Culture, as Represented by the Artist Banksy

On the other hand, the appropriation of public space and the generation of new identities derived from popular culture are also evident. As seen in Figure 8, there are multiple cases where global culture has revitalized spaces and consolidated them on a global scale. Values such as transience, temporality,

Fig. 16. Spaces revitalized by popular culture

Fig. 17. The Arc de Triomphe (Paris) intervened by Christo. Here, an exact temporality is appreciated, representing a spontaneous event that, for that very reason, became a Trend for its own citizens.

and virtuality can also be leveraged to reinvent the meaning of overlooked places in daily life, as seen in Figure 9.

5. Results

1.1. The goal is to develop a scenario where the likelihood of public response is maximized through interventions that resonate with human psychology, thereby increasing the probability of engagement (Penrose) while avoiding 'non-places' (Augé). In the context of identity formation, the concept of Proximity can address and enhance quality of life by revitalizing urban environments. This approach fosters experiences that elevate citizens' quality of life and future outlook, steering clear of Hedonistic or Fatalistic Present scenarios.

1.2. The city itself must serve as a facilitator for the adoption of urban spaces that aim to improve the living conditions and mental outlook of its inhabitants. Moreno (2020) argues that proximity manifests across multiple scales and should be applicable within a diverse array of contexts. This notion, in turn, implies a response to the space-time continuum. This is based on the recognition of the uncertainty of the human condition and the variables that shape responses as a constant throughout the urban multiverse. Additionally, it measures society's current perspective on time itself.

1.3. Proximity necessitates psychological elements capable of generating the necessary attraction to trigger an immediate response in human consciousness. The aim is to enhance its reach in popular culture and facilitate its presence in the global city. According to Greene's proposition, the Invisible - Virtual Dimension can disseminate it through popular culture, thereby improving citizens' perceptions of their surroundings. This approach would foster urban dynamism, managing ranges of uncertainty and control, ensuring the adoption of cities, and allowing for a degree of flexibility that contrasts with the functional values of the "machine for living." Therefore, achieving the "Happy City - System 2" becomes possible.

1.4. Urban parallel universes are digitally connected. In this context, it is possible to assert that all communities, with their unique characteristics, actively build their identity within the Telepolis based on what they learn from other realities. The management of Popular Culture, through the lens of time

perspective, offers a framework to establish the flexibility ranges and scope of any planning efforts aimed at enhancing this identity.

1.5. According to Penrose's proposition, the perception of space-time is intimately linked to consciousness and the creation of the urban image in the human mind. This suggests that the sense of belonging can be reconfigured through small urban life experiences. Therefore, the practical application of a sustainable vision of System 2 (Kahneman) would be oriented in relation to this and the local factors influencing time perception. Values such as accessibility, which can affect people's mobility and their choice of transportation modes, play a role in this. Similarly, the design and use of public spaces can influence how time is experienced, whether as a place for socialization and gathering or as a space for anonymous, fast-paced transit.

6. Conclusions

The global city is a reality, and it has challenged traditional approaches to urban development. The degrees of uncertainty and human responsiveness have opened up an infinite array of possibilities in city development, leading to issues such as segregation, emotional detachment, and urban polarization.

These challenges can be addressed through the psychological aspects of individuals, considering that the mind's response to space-time is continuous, fleeting, and powerful. For this reason, it is the very virtuality that allows a community to reconfigure itself based on values already present in popular culture. This reconfiguration could help bridge gaps in identity and belonging.

The acceptance of uncertainty variables, in turn, allows for the establishment of the scope that urban interventions should have. This approach enables the management of flexibility ranges, guiding response possibilities towards more sustainable scenarios and maximizing the spectrum of identity through the spontaneous (unplanned) adoption of local icons.

Proximity emerges as an approach capable of generating the emotional and cognitive experiences necessary to foster a sense of belonging. This can be further enhanced by implementing strategies based on the citizens' Time Perspective and directing the range of flexibility towards more sustainable scenarios.

Despite certain limitations in measuring the range of flexibility, it is important to note that human nature is unpredictable, and therefore, so are cities. Rather than defining an exact range of possibilities, it is about the ability to manage and guide these possibilities, maximizing the likelihood of a positive response. Thus, it is recommended to analyze the Time Perspective of society and how it has shaped Popular Culture and its image in the Global City.

References

Books
[1] Sennett, R. (2017). *The Fall of Public Man*. W.W. Norton & Company.
[2] Echeverría, J. (2021). *Telépolis*. Destino Ediciones
[3] Moreno, C. (2023). La Revolución de la Proximidad. Alianza Editorial.
[4] Silva, A. (2008). *Los Imaginarios Nos Habitan*. Quito, Ecuador: Textos Urbanos.
[5] Castells, M. (2000). *La Era de la Información*. Madrid, Spain: Alianza Editorial.
[6] Lefebvre, H. (2017). El Derecho a la Ciudad: Sobre las Aproximaciones a la Urbanidad (pp. 26-27). Madrid, Spain: Capitán Swing.
[7] Ramírez, P. (2009). La Ciudad y los Nuevos Procesos Urbanos: Sociología Urbana. Ciudad de México, Mexico: UNAM
[8] Sassen, S. (2012). *Cities in a World Economy* (4th ed.). London, UK: SAGE Publications.

[9] Horkheimer, M., & Adorno, T. W. (2002). *Dialectic of Enlightenment* (Trans. Edmund Jephcott). Stanford, CA: Stanford University Press.

[10] Whyte, W. H. (2015). La Sociedad de la Esquina: La Estructura Social de un Barrio Bajo Italiano. Madrid, Spain: Centro de Investigaciones Sociológicas.

[11] Lynch, K. (2008). *La Imagen de la Ciudad*. Barcelona, Spain: Gustavo Gili.

[12] Ziccardi, A. (2009). *Las Ciudades y la Cuestión Social*. Quito, Ecuador: FLACSO-OLACCHI-INNOVAR.

[13] Greene, B. (2010). *The Elegant Universe*. New York, NY: W. W. Norton & Company.

[14] Greene, B. (2011). The Hidden Reality: Parallel Universes and the Deep Laws of the Cosmos. New York, NY: W. W. Norton & Company.

[15] Penrose, R. (1996). Shadows of the Mind: A Search for the Missing Science of Consciousness. Oxford, UK: Oxford University Press.

[16] Zimbardo, P. (2017). Time Perspective: Theory and Practice.

[17] Kahneman, D. (2011). *Thinking, Fast and Slow*. New York, NY: Farrar, Straus and Giroux.

Journal Articles

[18] Heisenberg, W. (1927). Über den anschaulichen Inhalt der quantentheoretischen Kinematik und Mechanik. *Zeitschrift für Physik*, 43(3–4), 172–198. https://doi.org/10.1007/BF01397280

[19] Berlin, I. (1969). *Two Concepts of Liberty*. In *Four Essays on Liberty* (pp. 118-172). Oxford, England: Oxford University Press.

[20] Jacoby, J. (1971). A model of multi-brand loyalty. *Journal of Advertising Research*, 11(3), 25-31.

Online Sources

[21] Augé, M. (July 2021). *Los No-Lugares: El Debate Contemporáneo Sobre lo que Es o No un Espacio Público*. Retrieved from https://web.archive.org/web/20211023115116/https://la.network/los-no-lugares-el-debate-contemporaneo-sobre-lo-que-es-o-no-un-espacio-publico/

[22] Krause, P. (2013). *Sobre Racismo y Antirracismo. Elementos Magazine*, 47, 11. Retrieved from https://www.calameo.com/books/0001271723d3593606613

[23] Whitehand, J. (1989). *Jeremy W.R. Geography in Catalonia*. Retrieved from https://www.ub.edu/geocrit/b3w-453.htm

[24] Torres-Madroñero, M. C., & Torres-Madroñero, E. M. (2020). PazRed: Una Propuesta de Educación Virtual para la Formación de Estudiantes Universitarios en Competencias para las Ciencias Sociales. *Trilogía Ciencia Tecnología Sociedad*, 12(23), 37-59. https://doi.org/10.22430/21457778.1715

[25] Vidmar, R. J. (August 1992). On the Use of Atmospheric Plasmas as Electromagnetic Reflectors. *IEEE Transactions on Plasma Science*, 21(3), 876-880. Retrieved from http://www.halcyon.com/pub/journals/21ps03-vidmar

Conference Papers

[26] Yeung, A., & Jatowt, A. (2011). Studying how the Past is Remembered: Towards Computational History through Large Scale Text Mining. In *Proceedings of the 20th ACM International Conference on Information and Knowledge Management* (pp. 1231-1240).