NYC INNOVATION LAB
Center for Technology, Augmented Reality and Digital Experiences

VOUTSA ANASTASIA ELENI
PROJECT ID

Studio: Complex Projects
Studio Topic: Urban change of Midtown New York
Research Topic: What is the future of public space in a global metropolis?
Research Question: What is the future of public space in the new center of the global metropolis of New York?
Thesis Topic: NYC Innovation Lab as the public space of the future Midtown
Location: Transitional Yards (given name), Western Quadrant of Midtown NY

STUDENT

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Project Description

New York is one of the most important Global Metropolises. Due to the increasing urbanization and the congestion of people and businesses, the city’s urban environment and particularly, public space needs to reinvent itself to address the modern challenges and remain an important element of the urban fabric. In other words, both the metropolitan and the global identity of the city generate new urban living dynamics that through their contradiction, are causing an evolution in the organization and the design of the built environment. Which are these contradictions? Firstly, New York has a strong global identity as one of the most economically, culturally, and politically important cities in the world but at the same time, it consists of smaller villages of distinctive character. Secondly, it is one of the most well-connected, both physically and digitally, cities globally but at the same time is one of the world’s loneliest places. Finally, it has a growing number of public spaces that, due to their privatization or their insufficiency, they lose their public identity.

To trace the reasons behind today’s crisis of public space there is a need to research the special context of a global metropolis and its people. People in large cities have to deal with different challenges in their everyday life and have unrelated needs to people living in smaller cities or villages. As a result, the design of public space should aim to facilitate these particular struggles and provide a space for interaction, communication, and creation. At the same time, metropolitan citizens by being exposed to the complex environment of a big city and more technological and digital innovations have acquired different leisure and entertainment desires and are attracted to new ways of socializing and entertainment that should be taken into account when it comes to the design of public space. Along these lines, my research question is: What is the future of Public Space in Transitional Yards, the new center of the Global Metropolis of New York?

The research of the new living trends in a global metropolis is gonna follow the study of the new socializing and entertainment trends in New York. In the end, by investigating different typologies of public spaces in New York, I aspire to end up in some conclusions for the identity of a successful public space for the future Transitional Yards. My ambition is to create a
genuinely public space, that is going to address these contradictions to connect the global with the local identity of the city and to offer something to all the different social groups. The way I am gonna do this is through the use of technology. Whereas the majority of people blame technology for the isolation of people and the decrease of public interaction, the truth is that isolation in public space is an old phenomenon. It started already since the invention of typography and generally the invention of personal ways for one to be entertained and educated by himself in public without the need to physically interact with another.

In reality, technology is the primary means of socializing and communication when it is being used appropriately and is already incorporated in all aspects of everyday life. According to studies, social media is the primary socializing way while the online time spent on them continues to increase. Also, tech-related events and high tech spaces are among the most popular leisure choices because people nowadays are addicted to constant change and they want to constantly be surprised. Besides, New York is the world’s biggest tech hub for 2019 and Transitional Yards is its new base, consisting of an environment where technology can flourish. Hence, my final design proposal includes the creation of an Innovation Lab as the future public space of Transitional Yards.

The proposed project is a building complex of the total 69.000 m2, comprised of an office tower (52.750 m2), a public expo building (15.652 m2), and a connecting large multi-form and multi-purpose venue (600 m2). The final volumetric composition resides in the city’s identity where the different urban elements ex. the tower, the New York townhouse, and the monuments are all placed irregularly next to one another, forming a playful skyline. The idea for the building identity is the creation of a space where people will be allowed to educate themselves over the new technologies, while it will provide the ground for applying the new technologies in the physical sphere, enhancing public space and making it more appealing to all the social groups. The more private functions are located in the tower (private offices), while in the lower volumes and hence closer to the human scale the public functions are being placed. The materials chosen for this project are playing with transparency and translucency, aiming to create an atmospheric and pleasant environment where innovation and creation can flourish.
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Above: Programmatic diagram

Above: Axo Urban Implementation
The Relation between Research and Design

Research is a really important tool in the design process. That is why, even if general rules exist, every design proposal is a unique case defined by its geographical, climatic, economic, and social framework. The architect needs to dive in this particular context to discover where opportunities and weaknesses lie to create more suitable strategic guidelines for the design. It is proven in the common practice that a research-based design approach results usually in more successful solutions, since it addresses the special characteristics and context of each case study. I strongly feel that architecture should respond every time to the specific needs and not be an empty shell of shallow architectural ambitions.

Besides, the research of previous design methods and solutions to similar problems is also of great importance. By researching what other people proposed when facing similar design challenges can lead to a better understanding of all the aspects of a problem and can provide a solid base in which new design solutions can drive creativity and design innovation. This is what a heuristic approach is all about; learn from the previous examples to propose a design that may be closer to an even more optimal solution. In other words, it is a tool with what designers can analyze and decompose information, regarding all the different aspects of a project, building the general framework that will drive the new design.

The relationship between graduation topic, the studio topic, and the master architecture track

Complex Projects Studio 2019 autumn semester set Midtown New York as the area of intervention. The choice of the site area is not random since during the last years Midtown New York is being through rapid redevelopment. Students were being divided into four groups, each focusing on one quadrant of Midtown. My group was assigned to the western quadrant of New York, the area that triggers this general redevelopment, thus given the name Transitional Yards. More precisely, the opening of The High Line in 2009 injected life in the underdeveloped side of...
area, initiating a series of new urban developments that eventually led in 2019 in the opening of the first phase of Hudson Yards, the most expansive and expensive private development in the USA. The urbanscape of the area is being changed so radical that it forces the built environment to reinvent itself in order to address the new situation and make the transition smoother.

New York is one of the biggest Global Metropolises of the world, so it is normal for its environment to be constantly reshaped. As mentioned in the project description, the current project explores the meaning of public space in the metropolitan context and a way to deal with the public crisis by finding ways to introduce public space again as a vital part of the built environment. The design is based on findings on the characteristics of a global metropolis, what drives its urban evolution, what are the characteristics that make the existing public spaces of the city fail and what people want and are attracted to, currently, but also in the future.

Within the Master of Architecture track, Complex Projects Studio is driving the students through a combination of a speculative way of design through research and a more technical problem-solving approach. The chosen site of the studio is always an urban area that is under an urban redevelopment, providing a fertile ground for students to research and rely on hard data to speculate the evolution of change and propose an appropriate design solution. Throughout this process the students put on many different lenses to evaluate the situation; they become the economist, the sociologist, the environmentalist, the developer, the designer, and the engineer. The design approach as well as the outcome is strongly connected with the practical and technical identity of the university.

**Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work**

My research can be identified as a context led approach. According to many theorists, context is always a good way to start the design process by establishing the physical, social, and hist-
torical framework of the research subject. The context of this thesis that was assigned by the studio, stressed the research in Midtown Manhattan with a special focus in its western quadrant (my group site). The research framework was defined by the group, elaborating on different aspects of the changing area including History, People, New Economies, Public Space, Real Estate, Mobility, and Environment starting from the city of New York and gradually zooming in to the group site. The information acquired led to the understanding of the particular context and put Midtown on a comparable scale with similar urban environments.

As mentioned before, the theoretical study and the relevant literature are setting the base to assumptions of evolution and impact of change in its environment. New York, as an ever-changing and vibrant context provides a fertile ground to new experiments. From the beginning, I was in charge of researching the new economies that drive a change in the metropolitan environment, changing people’s everyday life and needs, and reshaping the physical world. Later, my focus concentrated more on public space, the urban element that brings people and builds the environment together, and possibly the indicator of the city’s prosperity.

Since I had to deal with huge loads of data I had to choose wisely the methodology of research to separate, categorize, and analyze them in a clear, consistent, and comprehensible way. The theoretical research of Global Metropolises in general and New York in particular, through literature like “The Global City: New York, London, Tokyo” by S. Sassen, or “Life and Death in Great American Cities”, by J.Jacobs gave me a first idea of the complex environment of a global metropolis, information that was up to a point presented in graphs and diagrams.

When dealing with new economics, I used mapping to connect the economic elements to geographical context to extract urban patterns, as well as diagrams to predict the evolution of the economic patterns in the future. New economies are mostly invisible forces, like digital technology and its innovations, which affect people, and then they affect their environment or vise versa. That realization, lead to a need for studying further both the new character of the people as well as the development of the physical world.
As a result, I used diagrams and charts to identify metropolitan people’s preferences when it comes to leisure, entertainment, education, work, and living. In this way, I attempted to understand what people in this complex context currently need to define a program that will act as a public attractor and will regenerate public life. Furthermore, I have conducted a typological study of public spaces in New York to spot weaknesses and opportunities in existing public spaces, to trace the root of metropolitan public space crisis. The measure to compare the different spaces was set based on the theory of public space as well as everyday observation and experience.

The trip to New York and the in-person exploration of the area provided a better understanding of the hard data, while it allowed us to contact people that live, work or visit the area making us “feel” the city and get its vibe. Overall, the general perspective of the research is both etic and emic; etic because of all the maps, drawings, diagrams and literature study and emic because of the field trip, the face-to-face interviews that together form a really strong and holistic approach, combining objective findings with personal experience, observation, and sensitive interpretation.

**Elaboration on the relationship between the graduation project and the wider social, professional, and scientific framework, touching upon the transferability of the project results.**

As time passes more and more people are gathering to the cities. Apart from people, there are also businesses, cultural institutions, and various major organizations that are being concentrated in the biggest and most important urban centers, enforcing, even more, their global identity. The increasing urbanization and high congestion are threatening the quality of urban life. To deal with this problem, many big cities, like New York, are taking advantage of the technological impetus and they are applying smart technology in the design, the organization, and the governance of public space. The so-called Smart cities create a whole new urban experience with the implementation of sensors where all the city’s infrastructure is connected to the Internet Of Things. This plan includes smart implementations, like smart city bikes or digital screens, digital
education programs for citizens, smart design in buildings, and enhancement of wifi networks. The physical and the digital is strongly interconnected transforming the cities of bits into cities of data.

Apart from the city’s built environment, with the widespread use of mobile phones and social media, people are also interconnected with this digital city network and they have the opportunity to be more involved in the governance of the public realm. Towards this direction, within the “smart city plan,” there are programs to familiarize the citizens with the new technologies while there are more and more online platforms and applications where the citizens can give feedback regarding their urban experience. On top of all that, the shift from an industry-based economy to an information-based economy, new economic motives emerged like this of Sharing Economy pushing people even more in the digital world. What kind of society is being created?

Modern metropolitan citizens can realize most of their daily interactions and transactions through online platforms, like Uber or Airbnb. In other words, a big part of everyday life is being transferred online, including socializing and entertainment. People, and especially young people, are using social media as their primary socializing means since after the widespread of personal computers and smartphones, people can access the web at any time and any place. This resulted in the transfer of the center of social life from physical space to the digital sphere, creating a society with different needs and different interests; the Generation of Elsewhere; loners that have difficulty to engage in real-time and real space. This is mainly because technology evolves faster than the built environment and therefore public urban environment fails to follow the needs of the era. Public Space in the context of the Global Metropolis faces a crisis.

**Ethical Issues and Dilemmas**

The main ethical issue in this project is that public space that from ancient times was the center of social life, interaction, public discourse, innovation, and creativity nowadays seems by many theorists and designers to have lost its value. Is public space essential in the urban context or not; It is an ongoing debate within the intelligence community, with many theorists supporting
that Public Space is coming to an end. For instance, Rem Koolhaas claimed that public space is no longer needed for anything apart from shopping while Jürgen Habermas in his work “The Structural Transformation of the Public Sphere” is talking about a decrease in the importance of public space for the city. It looks like the internet separated public life into smaller subgroups with common interests, retouching people form the whole. However, the need for people to go outside and participate in the public realm it gets even bigger.

The problem is that the public realm fails to engage people in the physical space because truly public spaces in New York are a rare phenomenon. Instead, most of the time there are the dis-connected leftover spaces between the new centers of activity, like the recent development of Hudson Yards and the Midtown, which keep popping up throughout the city. Furthermore, most of those spaces are not used by a large majority of New Yorkers while there are secluded and they don’t address the needs and preferences of the modern citizen. On top of that, when most public spaces are privatized, their design and organization focus to serve the needs of the market instead of those of the user. Nonetheless, the technologically rich environment of New York offers partially the solution to this crisis.

According to McLuhan and Mitchell, with the rise of digital technologies public spaces increased their importance for people to experience the city in contrast with what most people think. Now that everybody can have access to the internet through his smartphone, the urban public life and the cities themselves are being radically changed. Technology is transforming public spaces, by enhancing the experience and by letting the users add value to them, making them unique. The more technology is being appropriately used to enhance and support urban experience the more public spaces will continue to surprise. In any case, public space will forever be vital since humans are physical beings that need to experience space and people through their senses.

After all, for public space to continue as a vital urban element in the future, technology should be incorporated properly, for example, with the provision of smart technologies. Secondly, the design of public spaces should attract users through its comfort, quantity, accessibility, ar-
Arrangement, and aesthetics. Therefore, space should protect from natural forces and human activity and it should be taking care of regularly. Additionally, its design and organization should aim to host different kinds of activities and to be open to all people, from different social groups. Aside from the physical infrastructure, for the city to evolve, citizens should be allowed to engage in the public realm and to be trained to do so.

The main challenge for urban planners and designers when it comes to the design of public spaces is the incorporation of smart technology in such a way in the urban fabric that urban life will not be distracted. They should take into consideration what is the potential of technology for enhancing the physical world and its experience by the users creating safe, attractive, livable, healthy, and sustainable public spaces that addressing the needs of the society of the current era. The involvement of users in this process will accelerate the evolution of Smart Cities and will contribute to the re-democratization of Public Space since, as Jane Jacobs claimed; *Cities have the capability of providing something for everybody, only because and only when they are created by everybody* (Jane Jacobs, 1993).