



Source: cover image adapted from the Uuurble platform (uuurble.de)

städtebau workflow Uuurble

Platform for Virtual City Exploration

02 | 2026

Workflow Urban Design

„Workflow Urban Design“ is a series of publications by the Chair and Institute of Urban Design at RWTH Aachen University. The series documents findings from teaching and research projects, as well as various events, to promote discussion of current issues in urban design and urban planning. The series is intended for scholars and interested professionals.

The Chair and the Institute of Urban Design address complex urban structures, from regional and citywide contexts to neighbourhoods and individual buildings. Building on historical developments, the focus is on designing, further developing, and transforming sustainable cities and neighbourhoods while considering technical, ecological, economic and socio-cultural conditions. Technological innovations, digitalisation, and globalisation are transforming how we live and work, as well as how urban spaces are used. Urban planning is responsible for designing and creating the best possible environment for everyone, while considering the spatial implications of these changes.

Table of Contents

Foreword RWTH Aachen Uurble	5
Christa Reicher	
Foreword Leibniz University Hannover	6
Tim Rieniets	
Uurble- Platform for Virtual City Exploration	10
Ines Dobosic, Alkistis Thomidou	
Transforming City Regions Research Module	12
Fabio Bayro Kaiser, Liliana Iuga, Verônica Garcia Donoso, Caner Telli	
Insight Into the Contents	14
RWTH Aachen Students	
Student Projects from the M.Sc. Transforming City Regions Program	16
RWTH Aachen Students	
Reflection	50
Fabio Bayro Kaiser, Liliana Iuga, Verônica Garcia Donoso, Caner Telli	



© Michael Kitenge

Dear readers,

In a world shaped by complex and interconnected challenges—ranging from climate change and rapid urbanisation to social fragmentation and digital transformation—urban planning must evolve beyond disciplinary boundaries. The Chair and Institute for Urban Design and European Urbanism and the UNESCO Chair for Cultural Heritage and Urbanism at RWTH Aachen University are dedicated to developing innovative solutions to these pressing challenges. Through international collaboration, applied research, and strong integration of education and practice, we aim to provide future urban thinkers with the necessary tools and perspectives to create fairer, more adaptable, and resilient environments. We believe that urban design education today must not only respond to transformation, but also actively anticipate and shape it.

In response to this broader mission, RWTH Aachen University and Leibniz University Hannover initiated a collaboration to create a framework for addressing global challenges through interdisciplinary and cross-cultural academic exchange. This collaboration is based on the Uurbble internet platform, which was originally developed by Leibniz University and TU Braunschweig during the restrictions imposed by the COVID-19 pandemic, when innovative, digital forms of teaching, research, and collaboration were needed. RWTH Aachen University and Leibniz University Hannover are now using Uurbble – a platform for virtual city exploration – to overcome geographical and institutional boundaries in teaching by utilising this digital tool for in-depth spatial research. Against this backdrop, a research module for students from architecture, landscape architecture, urban planning, geography, and other disciplines was developed within our international Master’s programme, Transforming City Regions (TCR). With a thematic focus on urban resilience, the course was designed to integrate empirical fieldwork, critical academic reflection, and spatial analysis across disciplines and regions. It offered students the opportunity to become co-researchers and explore new approaches to resilient urban development.

Throughout this initiative, a deeper, more comprehensive understanding of resilience and transformation emerged, transcending disciplines, methods, and geographic contexts. Resilience was not just seen as a technical attribute, but also as an approach to uncertainty, complexity, and change. It became evident that meaningful urban transformation hinges on sensitivity to context, openness to collaboration, and willingness to engage with diverse forms of knowledge. The course challenged students to move beyond established perspectives and connect abstract ideas with lived realities, approaching spatial questions with analytical clarity and creative empathy. In this process, learning was not confined to predefined outcomes; it was sparked by interaction, grounded in reflection, and driven by curiosity. These insights offer more than a summary of what was learnt; they point towards a new culture of enquiry that views urban transformation as a shared, evolving endeavour.

This publication serves as both a record and an invitation. It showcases the dedication, creativity, and curiosity of a new generation of urban thinkers and designers. We hope that you will gain insight into the presented methods and findings, and feel inspired to engage further—to ask new questions, to view familiar contexts afresh, and to bring this spirit of experimentation and cooperation into your urban practice.

Christa Reicher, September 2025

A Digital Grand Tour

Tim Rieniets

Cities as educational destinations

For the longest time in history, travelling to foreign cities was an arduous, time-consuming and dangerous venture that was generally only undertaken by those who had the means and the mandate to do so. Until the Middle Ages, only merchants, scholars or envoys had the opportunity to travel the arduous distances between the few and far-flung cities of the time. As a result, the common people knew little about foreign cities. Legends and myths grew around important places such as imperial Rome or the holy city of Jerusalem. Even the cartographers of the pre-modern era, whose job it was to depict foreign countries and cities, could rarely draw on their own experience. It was part of their job to fill maps with the help of their own imagination when reliable information was lacking. Thus, medieval maps were often decorated with warriors, fantastic plants and mythical creatures.

It was not until the 17th century that travelling to foreign cities became popular in other circles and became an integral part of the educational canon of an increasingly enlighten society. Initially, it was only the offspring of the European nobility who were required to travel to foreign countries and cities in order to improve their general education and courtly virtues. Favored destinations were those countries where the origins of Western Christian culture were to be found, such as Greece, Italy and France, sometimes even Jerusalem. Later, the sons of the upper middle classes were also able to enjoy extended educational journeys, (only very rarely did the daughters of these people get to enjoy such journeys). These educative journeys of the 17th and 18th century - the so-called Grand Tour - were considered a central event in the educational biography of young aristocrats and bourgeois sons.

The program of these trips included visits to important cities and the study of monuments from antiquity, the Middle Ages and the Renaissance. Poets, artists and architects were also drawn to the ancient and medieval roots of European culture. One of the most famous among them was Johann Wolfgang von Goethe, who - to recover

from a creative crisis - travelled to Italy for a few weeks and ended up spending two years there (1786 - 1788). His journey took him to Verona, Vicenza and Venice, Florence, Rome and Naples. Numerous architects also sought inspiration in the south, including Karl Friedrich Schinkel (1803), Charles Garnier (1848), also modern architects such as Le Corbusier (1911), Louis Kahn, Alvar Aalto and many others.

Maps, Books and Guides

The basic equipment of a classic Grand Tour included a travelling companion: a person who possessed organizational talent, education and extensive language skills, but above all the prudence and maturity to protect his young charges from physical danger and social escapades. In addition to these people who were hired to accompany the young adults, another profession developed, albeit at the increasingly popular destinations: The tourist guide. These are person with local knowledge about cities and their heritage who amazed their paying audience not only with historical facts, but also with legends and local anecdotes. To this day, the services are popular among tourists who hope to gain insightful knowledge about their destination from a walk or a bus tour through, without having to undertake time-consuming self-studies.

Another prerequisite for the Grand Tour was the acquisition of suitable maps and literature about the foreign countries and cities and their cultural heritage. Such material was of considerable value in those days and not exactly the handiest luggage to take on a long journey. Moreover, travelers could never be sure that this material was accurate and up to date. At the beginning of the 19th century, inventive publishers made a virtue of this problem and created their own literary genre: the travel guide. A compact book, filled with historical facts, drawings and maps and all kinds of other useful travel information. The best-known work of this type in the German-speaking world was the Baedeker, named after the publisher Karl Baedeker. His first travel guide was published in 1832 with the title Rheinreise (Rhine journey). This was follo-

wed by further volumes on the Moselle and the neighboring countries of Switzerland, Holland and Belgium. Finally, in 1855, the first city guide to Paris and the surrounding area was published.

The publishing house continued to bring out new travel guides and was imitated by a number of competitors. Baedeker guide books belonged in the luggage of every educational traveler - and on the bookshelf of every educated middle-class household. With the rise of mass tourism, however, the educational claim of these guide book became less important. Instead, the focus was increasingly on relaxation, entertainment and lifestyle, or - as in the Lonely Planet - on alternative destinations off the beaten track of mass tourism. With the spread of the internet and social media, the great age of the travel guide was finally over. Instead of having to look things up in books, individualized travel information was now available on the internet - for free with just a few clicks, including flight and hotel bookings. And after almost 200 years the Baedekers guide was stopped in 2010.

The classic Grand Tour disappeared long before the travel guide. One reason for this was the disappearance of the traditional target groups for this type of educational travel. Firstly, the aristocratic offspring became insignificant in the course of the social and political changes of the 19th century. Later, with the rise of an increasingly affluent middle class, the upper middle classes also lost their exclusive position as long-distance travelers. In addition, the introduction of compulsory education in European countries and the rise of mass tourism at the end of the 19th century contributed to the Grand Tour losing its aura as an exclusive educational program for the children of the rich and powerful.

However, the essence of the Grand Tour lives on to this day, albeit in a completely different form. For many young people, it is still a milestone in their educational career to take a longer trip after leaving school, for example as Interrail travelers or as part of a voluntary year abroad. And those who

then decide to study can once again enjoy educational and research trips to foreign cities, dedicated to the study of foreign ways of life, architecture and cultural treasures - like the Grand Tour in the past, but much shorter. Architecture is one of the university subjects in which these remnants of the Grand Tour are still an integral part of the curriculum and one of the highlights of the study.

Around the World in eighty clicks?

At first glance, it seems that city travels have never been easier than they are today. Every city in the world can be reached by car, bus, train or plane. Information on every city is available on the Internet. Not to mention the cartographic services, which surpass everything that was available to city travelers in the past. The entire globe can be viewed either in cartographic representations or in the form of high-resolution satellite images published by Google and other providers on the World Wide Web. Since 2007, the market leader Google Maps, has been offering an additional service: 360-degree photos from a street perspective called Google Street View. Since then, millions of kilometers of road have been documented in this way. All you need is an internet-enabled device and internet reception to view the streets, squares and buildings from an everyday perspective - not only in cities that are considered to be of tourist value, but of almost all cities, regardless of how old they are or what significance is attributed to them.

Of course, 360-degree photos on a computer screen will never offer the same overwhelming experience that one may have on a busy street in a large metropolis. The voices and foreign languages, the exotic smells and colors, the light and temperature of distant latitudes, the look of streets and buildings. You are also never confronted with the social and cultural curiosities that you can experience in foreign cities, where you encounter people and situations that surpass anything you could have imagined before (although one can also find curiosities on Google Street View from time to time). Google Street View is therefore only a very poor substitute for what you can really see and experience in a city. And yet: Google Maps and Google Street View (and all the competing map providers) have democratized the idea of city breaks, as you no longer need to have money to visit a fa-

raway place or buy maps and guides.

Times have never been better for city travelers, it seems, both virtually and in real life. Between 2007 and 2018, international city trips tripled in volume, growing faster than any other type of holiday trip. The fact that city trips have become a product of mass tourism has even given the good old guide book a new lease of life. The Baedeker was relaunched in 2013 and competes today with comparable products for a broad tourist audience. With 180 volumes, the Baedeker now covers the entire globe. However, anyone looking for details about architecture or urbanism in these books will be disappointed. And that is precisely the problem: it has never been easier to visit foreign cities than it is today - if necessary with the help of digital map services instead of making a real journey. But if you want to find out about the architecture and urban design of these cities, about their historic growth and their current development, it is not easier than it used to be. Google Maps doesn't help either, because what use are the sharpest satellite images and 360-degree photos if you don't understand what you see on them?

To make matters worse, the number and scale of cities has changed dramatically since the time of the Grand Tour. Around the time Goethe set off on his trip to Italy, only around 20 per cent of the German people lived in cities (which equated to around one million people). Weimar, Goethes home town, had just 6,000 inhabitants at the time and London was considered the largest city in the world with one million inhabitants. Today, three quarters of people in Germany live in cities, and worldwide 57 per cent are residing in cities and urban areas (2003). Weimar has increased its population more than tenfold and has become itself a popular tourist destination (not least because of its most famous resident, Goethe). Over 14 million people now live in the London metropolitan region, but it has long since ceased to be the largest city in the world. The largest cities are now to be found in Asia, Africa and South America. This is also where most of the 450 cities with over one million inhabitants are located, although it is impossible to say exactly how many cities of this size really exist today. So where should you start if you are interested in global contemporary urbanization?

The ancient and medieval cities of Europe have certainly lost none of their historical significance they had already at the times of the Grand Tour. And even those who are interested in contemporary European cities cannot avoid looking at their ancient and medieval roots. However, anyone interested in global urbanization must (also) turn their attention elsewhere: To the metropolises of Asia, or the fast-growing cities of Africa, to the informal settlements in South America, India or Africa, or to the high-tech cities such as Silicon Valley, or to the spectacular urban developments at the Persian Gulf, Saudi Arabia or China.

A Digital Grand Tour?

In view of the rapid urbanization processes that have changed our planet over the past 150 years and will continue to fundamentally alter many regions of the world in the coming decades. The aim of the classical Grand Tour of providing a comprehensive picture of the most important cities and their cultural and architectural achievements can hardly be fulfilled today. Cities today are too numerous and too diverse to be able to get anything like a complete picture. This is especially true for architecture students, as they have too little time and usually too little money to go on many excursions during their studies. This is why the Uuurble web project was invented. It is designed to give students and other interested parties the opportunity to virtually explore cities all over the world - including cities and places that cannot be booked through a travel agency and are not described in any travel guide.

Uuurble offers its users similar equipment to what an educational traveler used to need on the Grand Tour - only digital. The right-hand side of the traveler's computer screen shows the city, which can be explored with the help of Google Maps images. On selected satellite photos and Street View images, the traveler sees everything that is worth seeing: special places and monuments, typical architecture and everyday scenes. The left-hand side of the screen acts as the travel guide. He explains to the traveler what he or she sees on the right-hand side. Depending on which images are viewed there, the travel guide shows corresponding texts, graphics, images or videos.

However, the city guide in Uuurble is not an authority figure or an expert who is ol-

der and more educated than the travelers, as was the case with the Grand Tour. The texts, drawings and pictures that make up the guide in Uuurble are also created by the students. In seminars, they research information about a selected location or process their own travel experiences. With the support of their teachers, they then translate this information into written and graphic form. In other words: Uuubrl is a project by students for students (and for others). It not only gives students the opportunity to discover foreign cities and their architectural and urban planning features, it also gives them the chance to practice scientific research, writing and drawing.

To place Uuurble in the long history of city travel, as has been done in this text, or even to compare it with the Grand Tour, on which many of the young travelers probably had some of the most important experiences of their lives, can of course only be done with a wink. Uuurble can never compensate for what a traveler can see and experience in a real city. Nor can Uuurble immerse a traveler in a foreign culture as deeply as Goethe did on his trip to Italy, nor provide him with such intense architectural experiences as Le Corbusier had on his Voyage d’Orient. In one respect, however, Uuurble may reach the standards of the classic Grand Tour - in some respects perhaps even better than is possible on real trips today: Uuurble enables its digital travelers to acquire a broad knowledge of architecture, culture and urbanism by engaging with distant cities.

Uuurble – Platform for virtual city exploration

Ines Dobosic, Alkistis Thomidou

The Platform

Uuurble is an Internet-based collaborative platform dedicated to the study and description of cities and urban areas that enables virtual exploration. Developed as a collaboration between the Institute of Urban Design and Planning at Leibniz University Hannover and the Institute for History and Theory of Architecture and City at TU Braunschweig, this platform offers new ways to make urban studies more accessible and comprehensive.

At its core, Uuurble integrates multiple dimensions of urban analysis and examines the social, geographical, historical, ecological, and urban planning aspects of cities. It also considers political, economic, and cultural structures, thereby creating a holistic approach to urban research. By linking these diverse perspectives with three-dimensional imagery of Google Maps, Uuurble provides an enhanced view of urban structures and their contemporary challenges.

The platform addresses a diverse range of audiences and serves multiple purposes. In the context of academia, it functions as a research tool and knowledge repository. Educators at both the school and university levels can utilize it as a learning resource, while urban enthusiasts can explore it as an ever-growing collection of extraordinary places. Lecturers, students, and researchers across the globe can contribute their own content to the platform. This continuous contribution model ensures that Uuurble grows organically, collecting interesting locations and urban phenomena from around the world

Multimedial Storytelling

Everything begins with the selection of a location: the location can be large or small, near or far, known, or unknown. It can be described as a whole, or just focus on a thematic aspect of that place. In addition to textual descriptions, Uuurble allows for the depiction of various facets of cities using drawings, maps, photos, author-generated original sounds and videos, and primary and secondary sources. Drawings serve as an analytical tool, while images, video, and audio contribute to audiovisual story-

telling. Text is used as a tool to gather and reflect on the findings. The graphic language is kept simple with line drawings and diagrams to maintain a uniform appearance and facilitate pedagogical comparisons. The linking of text to Google Maps views or Google Street View is a key function of Uuurble. This makes it possible to combine textual and graphic information (on the left side of the website) with visual impressions (on the right side of the website), representing the location in a multilayered manner and mimicking an educational and visual walk around the city.

Knowledge accessibility

One of Uuurble's primary goals is to democratize (urban) education by making it more accessible. The platform is built on the principle of Open Educational Resources (OER), which means that all teaching materials are publicly available and can be used, processed, and shared without costs or legal limitations. However, we acknowledge that the requirement of an Internet-capable device to access the platform is a limitation, as not everyone may have access to such devices. Despite this constraint, Uuurble strives to promote knowledge sharing and facilitate collaborative exchange among those who can access the platform. Uuurble aims to broaden the scope of urban research and create opportunities for innovative, cross-disciplinary and cross-university insights.

Examining exemplary buildings or urban areas is an important component of academic education in spatial disciplines. However, traveling to these places is not always possible or ecologically responsible. At the same time relevant literature is not always available. Therefore, virtual urban exploration offers a viable alternative, enabling students and researchers to access and analyze urban spaces from anywhere in the world.

As Uuurble expands to include more themes, locations, and cities, it affirms the importance of cities as sites of active learning. Urban spaces that can join Uuurble remain open. Both lecturers and students are wel-

come to contribute to and actively co-design Uuurble.

Collaboration

Since its implementation, Uuurble has expanded beyond its original institutional boundaries and has been adopted as a learning format at various universities, including RWTH Aachen University. This inter-university collaboration has enriched the platform in unexpected ways, bringing about diverse perspectives and methodological approaches to urban analysis. Each participating institution has its own academic focus and regional expertise, contributing to a more comprehensive understanding of urban phenomena worldwide. The platform's implementation in different learning settings revealed both challenges and opportunities. Working across different universities has necessitated adaptable formats and flexible methodological frameworks to accommodate different educational approaches and cultural contexts.

These collaborative experiences have led to innovative learning practices. For instance, some universities have developed specialized seminars focusing on comparative urban analysis, while others have integrated Uuurble into existing urban studies curricula. The platform has facilitated virtual exchanges between students from different institutions, enabling them to share insights and perspectives on urban development across geographical boundaries.

The growing network of participating universities has enhanced the platform's capacity to address global urban challenges. By connecting diverse academic communities, Uuurble has become a vehicle for international dialogue on urban issues, fostering cross-cultural understanding and knowledge exchange. This international dimension has proven particularly valuable for examining how different cities address similar urban challenges in their unique cultural and geographical contexts.

Editorial Challenges

Uurrble tries to balance creative freedom with editorial structure, which can be gre-

at for ensuring high-quality contributions, while still allowing authors to explore topics they are passionate about. The support system, which includes editing assistance and university workshops, secures both accessibility and academic standards.

While each author is free to choose a location of interest and explore personally compelling topics, Uuurble operates as a community project with specific guidelines. To ensure editorial consistency and efficiency, these guidelines have been compiled into a Handbook. Adhering to these rules not only strengthens the overall quality of the platform but also facilitates the seamless integration of contributions while supporting independent article creation.

Active support and guidance are provided throughout the editorial process. The submitted contributions undergo review and editing before being finalized in collaboration with the author. Once completed, they are integrated into the Uuurble platform by the editorial team. Additionally, introductory workshops are offered to external universities both domestically and internationally.

Transforming City Regions Reseach Module

Fabio Bayro Kaiser, Liliana Iuga; Verônica Garcia Donoso, Caner Telli

Transforming City Regions

The European Master of Science programme Transforming City Regions (TCR) addresses pressing challenges in European territorial development. Launched in 2019 at RWTH Aachen University, the programme equips professionals with the skills to tackle the complex environmental, social, technological and economic issues that shape cities and regions. TCR promotes interdisciplinary thinking and practical problem-solving by combining project- and design-oriented training with a solid theoretical foundation. Over four semesters, students engage in a wide range of courses, positioning them as innovators in urban development while fostering critical research skills essential for navigating the evolving urban landscape.

The programme also emphasises the importance of methodological competence, individual responsibility and teamwork through the TCR research module, for instance. In this module, students undertake authentic research tasks that combine theoretical learning with practical application. By exploring case studies, students sharpen their ability to analyse, interpret and communicate findings effectively, equipping them with the tools to address the dynamic challenges of urban transformation. This blend of practical engagement and theoretical study provides a well-rounded education that prepares graduates for leadership roles in urban planning, design and policy making.

Responding to global challenges with digital tools

The COVID-19 pandemic reshaped education worldwide, accelerating the adoption of digital tools and exposing the limitations of traditional research methods. Platforms such as Uuurble emerged as transformative open education resources, enabling students and educators to bridge gaps in accessibility and explore urban spaces remotely while maintaining depth and engagement. This shift was not just an adaptation, but a reimagining of how academic research can work in a digitally connected world.

Uuurble provides an immersive, interactive

experience by integrating and dynamically visualising diverse spatial data. These capabilities enhance traditional learning approaches by encouraging new perspectives and sustained interaction with urban phenomena. The platform's ability to simulate the depth of field exploration through innovative digital tools allows users to explore nuanced aspects of urban complexity in ways that were previously unimaginable.

Integrating Uuurble into academic frameworks complements theoretical teaching with practical, real-world applications. This integration equips students with adaptable skills that respond to the evolving demands of education and urban studies. By fusing traditional methods with cutting-edge digital tools, Uuurble promotes resilient, inclusive and accessible learning environments. It paves the way for a generation of urban thinkers capable of addressing the multifaceted challenges of contemporary cities, and ensures that research remains relevant in a rapidly changing global landscape.

Enhancing traditional on-site research

Central to the TCR curriculum is the field trip module. As part of this module, in the summer semester of 2023, students explored the Quartieri Spagnoli in Naples. Students delved into the dynamic interplay between heritage conservation and rapid urban change within a UNESCO World Heritage Site. This on-site engagement provided invaluable insights into the district's cultural identity, spatial organisation and evolving social interactions, making it a central component of the programme's educational framework.

Direct interaction with local residents allowed students to appreciate how grassroots perspectives intersect with broader urban policies. These interactions revealed the nuanced relationships between historic preservation efforts and the pressures of urban modernisation, and highlighted the challenges of maintaining cultural integrity in a rapidly changing environment.

While the field trip provided an unparalleled depth of understanding, it also revealed the limitations of physical exploration. Ex-

panding access to urban research through tools such as Uuurble can complement such on-the-ground investigations by providing a broader perspective and ongoing engagement with diverse urban environments. By combining physical observation with digital innovation, Uuurble enables learners to transcend geographical boundaries, creating a more comprehensive and accessible approach to the study of urban phenomena.

The Uuurble research module

Against this background, the Uuurble Research Module complements traditional research methods with digital innovation. Over two semesters, the module produced various case studies, from which five were selected: Münster in Germany and Naples in Italy in summer term 2023 and Medellín in Colombia, Izmir in Turkey and Hyderabad in India in winter term 2023/24. Each study offers unique perspectives on the challenges and opportunities of urban transformation in different contexts. Together, these case studies form a tapestry of geographic and thematic diversity, reflecting the interconnected nature of global urban challenges.

In Münster, the Hansa Quarter illustrates the transformation of a post-industrial port into a creative hub. This revitalisation integrates modern infrastructure with a preserved industrial heritage, but raises concerns about rising rents and gentrification that threaten the area's inclusivity. The study highlights the importance of balancing economic regeneration with social equity in order to maintain the character of the neighbourhood and accessibility for diverse populations.

Similarly, the study of the Quartieri Spagnoli in Naples examines the double-edged nature of tourism. While the area's vibrant street life and dense urban fabric attract visitors, uncontrolled tourism risks undermining its cultural authenticity. The research highlights the need for policies that balance economic benefits with the preservation of local identity, ensuring that tourism supports rather than displaces the community.

In the winter term, the geographical scope of the module was expanded. In Medellín, urban acupuncture projects such as the Metro Cable and Library Parks demonstrate how strategic interventions can foster resilience and inclusion in the face of inequality. These efforts illustrate the transformative power of targeted projects to catalyse broader societal change, and offer lessons in how urban design can become a tool for social justice.

The Alsancak and Kordon areas of Izmir present a nuanced exploration of heritage conservation in the midst of modernisation. The study examines how regulatory frameworks can support the coexistence of heritage conservation and urban growth, highlighting the role of governance in sustainable development. The case provides a roadmap for balancing the demands of economic expansion with the imperative of preserving cultural and architectural heritage.

Finally, Hyderabad's juxtaposition of the Qutb Shahi Tombs and Film Nagar highlights the tensions between heritage and innovation. Thoughtful planning that balances conservation with urban development goals emerges as a critical factor in ensuring that these contrasting identities can coexist harmoniously. This case illustrates the importance of integrating heritage into the broader narrative of urban modernisation to create cities that are both dynamic and rooted in their history.

Taken together, these case studies demonstrate the thematic and geographical scope of the Uuurble research module. By addressing urban resilience, equity, heritage and innovation, among others, the module provides valuable insights into the diverse ways in which cities are managing transformation. This scope reflects the interconnected challenges faced by urban areas worldwide and provides a foundation for informed, sustainable strategies that consider both local and global perspectives.

Outlook

The Uuurble research module serves as a critical link between local knowledge and global urban discourse, fostering a vibrant digital knowledge community that embraces diverse perspectives. Through carefully documented case studies, the module fa-

cilitates comparative analysis and collaborative learning, significantly enhancing our understanding of contemporary urban challenges. It also builds bridges between disciplines, encouraging holistic approaches to solving complex urban problems.

Each contribution highlights the intricate interplay between heritage conservation, social equity and sustainable innovation, and offers practical insights for addressing issues such as gentrification, tourism and socio-economic inequalities. By weaving these themes into a cohesive framework, the module equips students and researchers with a nuanced perspective on how cities reconcile tradition and modernity. These insights are not only academic, but have practical implications for policy makers, urban planners and community leaders.

The module also highlights the transformative potential of digital platforms such as Uuurble. These tools democratise access to urban research, enabling interdisciplinary collaboration and bridging the gap between theoretical learning and applied research. By increasing the accessibility and scalability of urban studies, Uuurble empowers a wider audience to engage with and contribute to the field, fostering a more inclusive and participatory approach to urban research.

Lastly, the Uuurble research module enriches our understanding of urban complexity while inspiring bold, forward-looking strategies to address future challenges. It highlights the importance of embedding local narratives within global frameworks and offers a blueprint for sustainable and inclusive urban environments. By fostering dialogue across time and space, this module sets a benchmark for collaborative, innovative urban research. It demonstrates how digital tools and thoughtful methodologies can be combined to address the pressing urban challenges of the 21st century, while inspiring the next generation of urban thinkers to reimagine the cities of tomorrow.

Insight Into the Contents

Münster: Hansaviertel – Industry-lover at second sight

Yasmin Makki, Esther Padberg, Tabea Rückle

The redevelopment of Hansaviertel is considered as a prime case of successful urban transformation in Münster. Formerly an industrial harbor, today the Hansaviertel is a meeting point for a drink or cycle by the water. The area also established itself as an attractive creative center. However, transformation processes have downfalls parallel to their upsides; How do they manifest in the Hansaviertel?



©Rückle, Tabea. Münster: 06.06.2023

Napoli: Quarteri Spagnoli – A Case of Touristification: What Does the Future Hold for the Spanish Quarters?

Ezgi Ismar, Raveena Gadkar, Selcen Fidan

Once an enclave of organized crime, the Spanish Quarter is now shedding its past and opening up to the world through a trend of touristification. The heightened interest in the Spanish Quarter primarily stems from the area's distinctive atmosphere, unique architectural style, and the unconventional experience it offers in terms of public spaces. This combination of factors differentiates the Spanish Quarter from other urban areas, making it a subject of particular intrigue and study. While touristification brings higher incomes for residents and improves the feeling of safety, it might cause an identity shift in the area, which has initially been the main reason for its attractiveness.



©Ismar, Ezgi; Gadkar, Raveena; Fidan, Selcen

Medellín: A Tale of Resilience and Transformation – Urban Acupuncture as Tool for Transformation

Ana Paulina Cabello Ocampo, Janet Ivonne Preciado Otero

In the early 90's, Medellin, the second-largest city in Colombia, gained global notoriety under the label: "Most violent city in the world". Lately, Medellin has regained global interest, but now as a symbol of change and resilience. This is more than a story about a strategy aimed at regenerating a city. It is a journey through community empowerment, involving architecture, urbanism, and social policies; leading to transformation.



©Ibarra, Christian

Izmir: Alsancak, Kordon – Tracing Locality in Modernity

İrem Bozdagli, Cemre Bingöl

Izmir is one of the important port cities of Turkey with almost five million inhabitants. Throughout history, Izmir's silhouette has been highly affected by political changes, architectural trends, and historical incidents. As seen in the Alsancak area of the city, the contiguous modernist apartment blocks along a promenade called the Kordon not only form a wall covering the complex fabric of the city, but also hide the local streets.



©Kanbur, Oktay



©Kanuri, K. (2019)

Hyderabad Unveiled: A Tale of Two Worlds

Nitisha Srikurmam, Liyuan Ma

Explore the dynamic cityscape of Hyderabad, where history intertwines with modernity. Journey through the contrasting neighborhoods of the ancient Qutb Shahi Tombs and the lively Film Nagar. Discover the harmonious blend of tradition and innovation as we unravel the captivating tale of these two worlds coming together.

Münster: Hansaviertel

Industry- lover at second sight

Yasmin Makki, Esther Padberg, Tabea Rückle



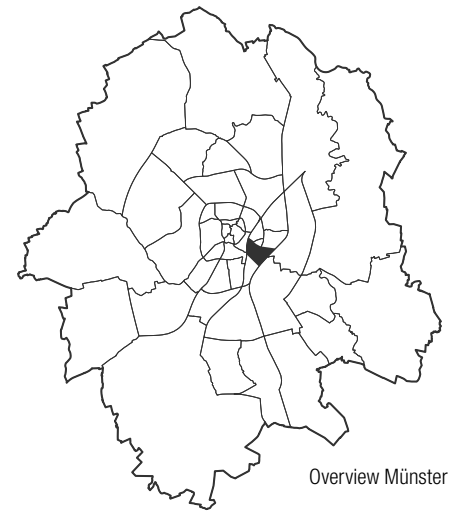
Rückle, Tabea. Münster: 06.06.2023

The redevelopment of Hansaviertel is considered as a prime case of successful urban transformation in Münster. Formerly an industrial harbor, today the Hansaviertel is a meeting point for a drink or cycle by the water. The area also established itself as an attractive creative center. However, transformation processes have downfalls parallel to their upsides; How do they manifest in the Hansaviertel?

Transformation of Hansaviertel

The Hansaviertel is located in Münster, a city in the west of Germany with a population of over 318.000 as of 2023 (1). In the following text, various layers in the development of Hansaviertel are analyzed. including a comprehension of the Spatial Program of the area which gives an understanding of the physical layout, features and functions. This is followed by mapping the transportation system in the city and the quarter. Additionally, an overview of the Public Space seeks to demonstrate the harbor's identity as a hub for public activities such as markets and festivals. The Hansaviertel was reshaped through a Participatory process that aimed to bring together residents, decision makers and urban planners. However, downfalls are bound to appear in processes of transformation. For instance, when neighborhoods undergo image upgrades, developers increase their investments, which leads to higher rents. Consequently, some residents can no longer afford to live in the newly developed areas. This is called Gentrification and it is a possible critical outcome of the transformation process of the Hansaviertel. While it is difficult to tell what extent it will reach, it is worthy

to discuss the issue. However, before delving into the Hansaviertel, it is worthwhile to explore the city and harbor's history.



History

The city of Münster is best known for its status as a cathedral and university city. After being recognized as a city in 793, Münster became a cathedral city 12 years later, in 805 (2). From then on, the city represented a Christian, commercial and political center in Westphalia. The city experienced a further upswing in history in 1773, with the foun-

ding of the University of Münster. In 1816, Münster was then named the capital of the new province of Westphalia in Prussia.

With the establishment of the port in 1898, the city of Münster developed an important economic sector (3). In 1901, the first power plant in Münster was built in the port, which was able to supply the new railroad with electricity (4). These investments ensured that the port of Münster became an important location for transshipment trade in Westphalia. However, this boom decreased due to the First World War. In 1923, the port was able to recover from the downturn as it benefited from the occupation of the Ruhr region. As a result, goods could be delivered to Münster by ship and then transported onward to the Ruhr region by rail. The port experienced a further upswing in 1926, as it opened to tourism. Two cruise ships were stationed in the harbor basin. (3)



1903



2001



2023



During World War II, 63% of Münster's urban area was destroyed and the city embarked on a major reconstruction effort (5). In March 1946, the port was able to reopen. In 1953, Stadtwerke Münster was entrusted with port management, which ensured that the port reached its economic peak in the 1960s. In this period, up to 4,300 ships entered and left the port annually. (6)

In the course of the 1970s, two competing company harbors settled around Münster, causing an economic downturn of the city harbor. In 1977, Stadtwerke Münster responded by building a coal-fired power plant, which was ultimately the only one to generate an economic plus (6). As a result, the city administration began to consider redesigning the port area in 1996 (7). It was a period when several other major projects were implemented, such as the City Library (1993), the Diocesan Library (2005), and the Stubengasse Shopping Center (awarded the German Urban Development Prize in 2010 and the State Prize for Integrated Urban Development in 2012) (2). The industrial activity in the harbor sharply declined in 2005, when the power plant was converted to gas and the main customer for port goods disappeared. In 2012, a cargo ship docked at the port for the last time (5). The neighborhood entered a process of revitalization during which the harbor acquired a new character. Relics that still remind us of the port's industrial era are **the listed Flechtheimspeicher** from 1900, and **the old industrial crane** from 1962 (8). Once an administrative and industrial city, Münster is now considered a hub for business, science and services (2).

Spatial program

The boundaries of the Hansa district are clearly defined in spatial terms. The

northern boundary is formed by **Wollbeckerstrasse**. To the east, **the Dortmund-Ems Canal** is a difficult border to cross, while to the south, the wide and busy **Albersloher Weg** is a considerable barrier. To the west, Hansaviertel is constrained by the railroad tracks and **the main station**.

The spatial fabric within Hansaviertel reflects three main functions: Residential, entertainment-oriented commercial and industrial (9). Along Wollbeckerstrasse in the north, are restaurants and a variety of service businesses. South of Wollbeckerstrasse are predominantly apartment blocks with three- to four-story apartment buildings, which occasionally include cafés and bars on the first floor. The first-floor zones of the **Hansaring** are used by gastronomy. **The harbor basin** forms the border between industrial and residential zones. Along the northern promenade of the harbor basin, gastronomy and other commercial uses extend over almost all floors of the up to 22m high buildings. The facades of these contemporary buildings are vibrant and diverse. The southern promenade of the harbor basin stands out in comparison to the northern side because the high industrial buildings are partly combined with entertainment-oriented commercial facilities. The industrial area extends from the harbor basin to Albersloherweg in the south. With the exception of the buildings on the harbor basin, the industrial buildings are rarely used for public purposes.

This was not always the case in the Hansaviertel; after turnover in the port had declined sharply since the 1970s, the share of industry decreased steadily. Starting in the 1980s, Münster's 'creative scene' discovered the area for itself, and artists' studios, architecture and design offices settled there (10) (7). The location was still in demand due to

good accessibility and its central position in the city. The municipality began developing the area in 1996, after the expiration of ground leases. In 1997, the decision was made to create the 'Kreativkai' model for the transformation of the area (10). Under the name 'Renewal Focus Southeast', the port area, which covers a total of 75 hectares, was to be transformed into a mixed-use area (7). This concept was updated several times over the years. In 2004, the 'Integrated Action Concept for Münster City Harbors' was created, which was further developed in 2012 as the „Münster City Harbor Master Plan“. As a result of the revitalization of the area, 220 companies (as of 2017) are located there, most of them from the creative sector (7). Furthermore, retail, gastronomy, trade as well as companies from the financial sector can be found on site. These new settlements shaped the mixed-use concept in the neighborhood today (7).

Mobility and Infrastructure

In terms of mobility, Münster has established itself as a leading example of a cycling prioritizing city. It has even been voted as 'Germany's most bicycle friendly city' by the German Cyclists' Federation. This is possible due to the infrastructure that accommodates cyclers; the Münsterland cycling network covers 4,500 kilometers (11). According to a mobility survey conducted by the city, bicycle transportation was reported to take 47% of the traffic share, while car traffic counted for only 29% decreasing from 34% in 2019 (12).

Building on this carbon-emission free mode of transportation, the city is developing the Mobility Master Plan Münster 2035+ with the aim of climate neutral transportation. Participation plays an important role in this case as labs and public discussions were encouraged to involve the residents (13).



Residential



Commercial



Industrial

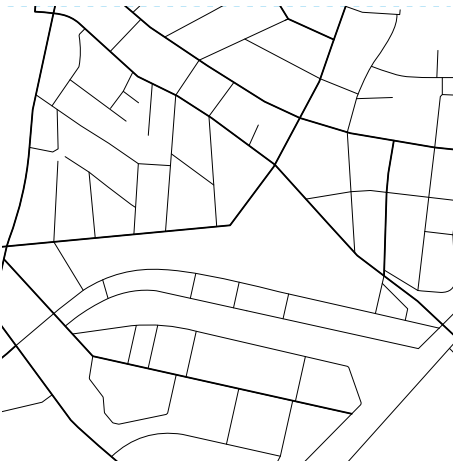
Public Space

The entire area has undergone a remarkable transformation, evolving from its industrial roots into a vibrant public open space. **The harbor square**, established in 1997 (10), marks the gateway to this revitalized zone and hosts city events such as the harbor festival and beach volleyball tournaments (19)(20). In terms of design, the square pays homage to its industrial past through the integration of old rail elements, which not only evoke the area's history but also seamlessly connect the south and north promenades of the harbor basin, creating a cohesive landscape. The northern promenade, known as **„Kreativkai,“** is a vital hub of public life where people of all ages gather, whether by the basin's edge or at one of the many culinary establishments. The southern promenade features an old industrial crane, serving as a poignant reminder of the area's historical industrial use. The southern area adjacent to the harbor remains commercially focused, lacking public spaces or green areas. In contrast, the northern vicinity of the harbor has numerous playgrounds, green spaces, and city squares. **Bremer Platz**, located directly at the back of the main train station, forms the northeastern entrance to the Hansaviertel. In the area's center are the playgrounds **Elisabeth-Kirchplatz** and **Hansaplatz**. The former is mainly used by kindergartens or families with younger children, and is sheltered in the residential area. The latter is more diverse and appeals to different age groups. There is a playground, a large sports field, and a multifunctional area. However, the atmosphere is not as comfortable due to its direct location at the intersection of Hansaring and Wollbeckerstrasse. Additionally, persons experiencing homelessness stay in certain spots of the square. Despite all this, Hansaplatz is known for being used for events such as the neighborhood festival (21). **Hubertiplatz** forms a focal point for residents in the western part of the residential area from a combination of square, playground, and sports field. It is located on side streets and has a rich tree stand, which improves the atmosphere of the square. Both Hansaplatz and Hubertiplatz stand out in the cityscape because of their size. Each forms an entire block in the area. In addition, the Memelufer on the Dortmund-Ems Canal provides a place with a different character. The waterfront area is composed of a large meadow, a playground, and a parkour park. Due to

the diverse and open offer that the waterfront provides, walkers, athletes, and different aged groups share the place. The offer of public open spaces in the northern area is multifaceted. From playgrounds and sports fields to city squares and a green and urban promenade with restaurants, the Hansaviertel has a lot to offer.



Bikes on the sidewalks



Bicycle priority routes



Section Hansaring

Participation

Hansaforum, an initiative that supports the residents in shaping the neighborhood in a democratic manner, contributed majorly to the transformation of Hansaviertel (22). The project was funded by the 'Federal Office for Building and Regional Planning' with 700,000 euro from 2019 to 2021 and has implemented around 80 projects (23). The main component of the democratic process was the initiated Hansa congress. In this forum, randomly selected citizens jointly developed a 'Neighborhood Community Wellbeing Index'. This index deals with all issues that, according to the committee, promote the common good in the neighborhood. It represents an unprecedented development in this area (22). Relevant topics are for example networking or climate positivity. In total, about 400 people participated in the 'Neighborhood Community Wellbeing Index' (22). Based on its topics, all citizens could then propose projects. If the projects

corresponded to the 'Neighborhood Community Wellbeing Index' and were approved by the committee, they received funding from the funding pot. The index was constantly developed further in the course of the funding at the congress (23). For example, a raised flower bed was funded, which is low enough to enable children to garden actively (24). Another integrative example describes the project as 'Listening instead of looking away - Münster's forgotten voices', in which a podcast becomes a platform for homeless people in the neighborhood (25). The offer to submit projects was open to all citizens. Hansaforum tried to reach all people as easily as possible through its website. However, this is unfortunately only available in German, which limits the circle of participants. Many young adults were and are still active in the Hansaforum, but families and older people also participated in the projects. The responsible organization for the Hansaforum project is called

B-Side, which continues to actively work to ensure that citizen engagement has a further democratic impact on the shaping of the neighborhood. Ultimately, the slogan remains: „Make the city instead of letting it be made“ (23).

Gentrification

When talking about urban development processes in the city of Münster, the word 'gentrification' is often mentioned. The Hansaviertel is also mentioned in this regard (28). The change in the population structure was a result of de-industrialization and the development concepts from 1997 to 2012. Because of its proximity to the city center, the municipality encouraged residential construction in the neighborhood and workers from the industry moved out (7). Large-scale projects, which were implemented over the course of this period, are considered to be the catalyst of the gentrification process. In these projects, the creative character of the neighborhood was particularly promoted. As a result, other businesses and especially bars and clubs settled in the Hansaviertel, whose number increased over the years. The residents at the time complained, due to the low participation of the population (7). In the meantime, various statistics show that the resident composition witnessed a drastic change. Overall, more than 50% of the

residents have lived in the Hansaviertel for less than five years in 2020. Compared to the rest of Münster, this proportion of new residents is very high (26)(27). In addition, the participation process in the course of the Hansaforum plays an ambivalent role. On one hand, increased financial resources and greater civic engagement are enriching the neighborhood, suggesting a rationale for rent increases amidst ongoing improvements. Conversely, members of the Hansaforum acknowledge gentrification and endeavor to address it through a vision that aims to preserve inclusivity within the Hansaviertel community (31). The city of Münster has reacted to the gentrification process with a social preservation statute, which was implemented in 2021. The residential area above the harbor basin is to be placed under 'milieu protection'. This means that new construction and visible alteration of the buildings is not allowed without permission. Regulating construction prevents drastic rent increases which in turn protects the composition of the population which may have otherwise not been able to afford new prices. (30) The implementation of the social preservation statute was reviewed in 2022. In the period of one year, only one judicial proceeding was started, in which a resident has not complied with the regulations. The social preservation statute is evaluated every five years and checked

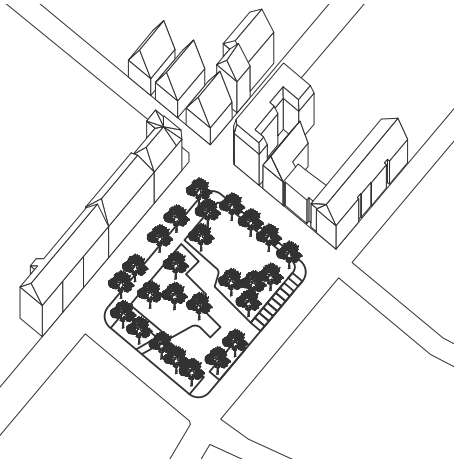
for their suitability (32). Moreover, in a major project on the waterfront, the city specified that 30% of the housing must be used as socially subsidized housing (29). Over time, numerous stakeholders have engaged with the issue of gentrification and are working to mitigate its effects.

The unpredictable future of Hansaviertel

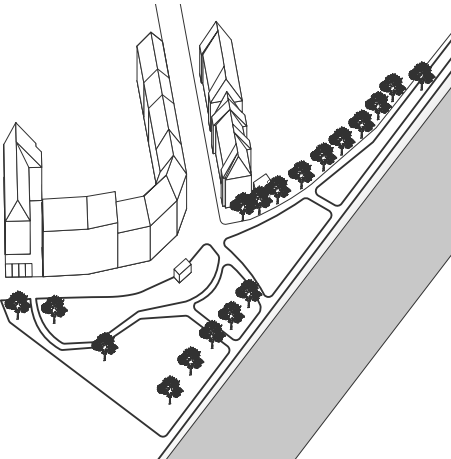
The Hansaviertel transformation takes place in a city with a radiant image of historical importance, advanced mobility practices and renowned high education. While many post industrial landscapes fall into an undefined existence, the harbor was rescued from this fate through a powerful planning strategy that was conscious enough to include the residents and provide them with a platform to voice their opinions. Today, it is a must-see spot for visitors and residents who enjoy spending their leisure time in a trendy yet relaxed environment. Its success at morphing into a space for people after once being a space for machines is undeniable. Overall, urban redevelopment positively impacts public life, the quality of spaces, economy and culture. Yet, its accompanying downfalls -i.e. gentrification- must be also noted in order to figure out an equitable scheme for urban transformation. Can the Hansaviertel become a catalyst for an urban utopia free of gentrification?



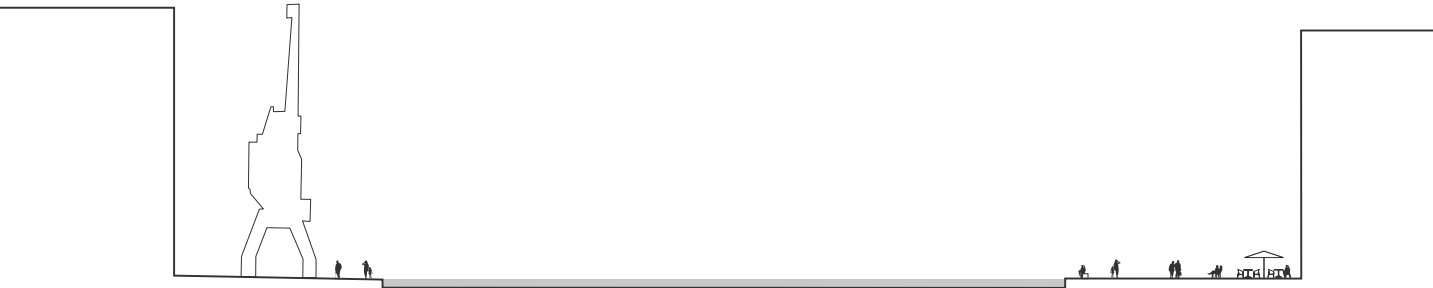
Harbor square

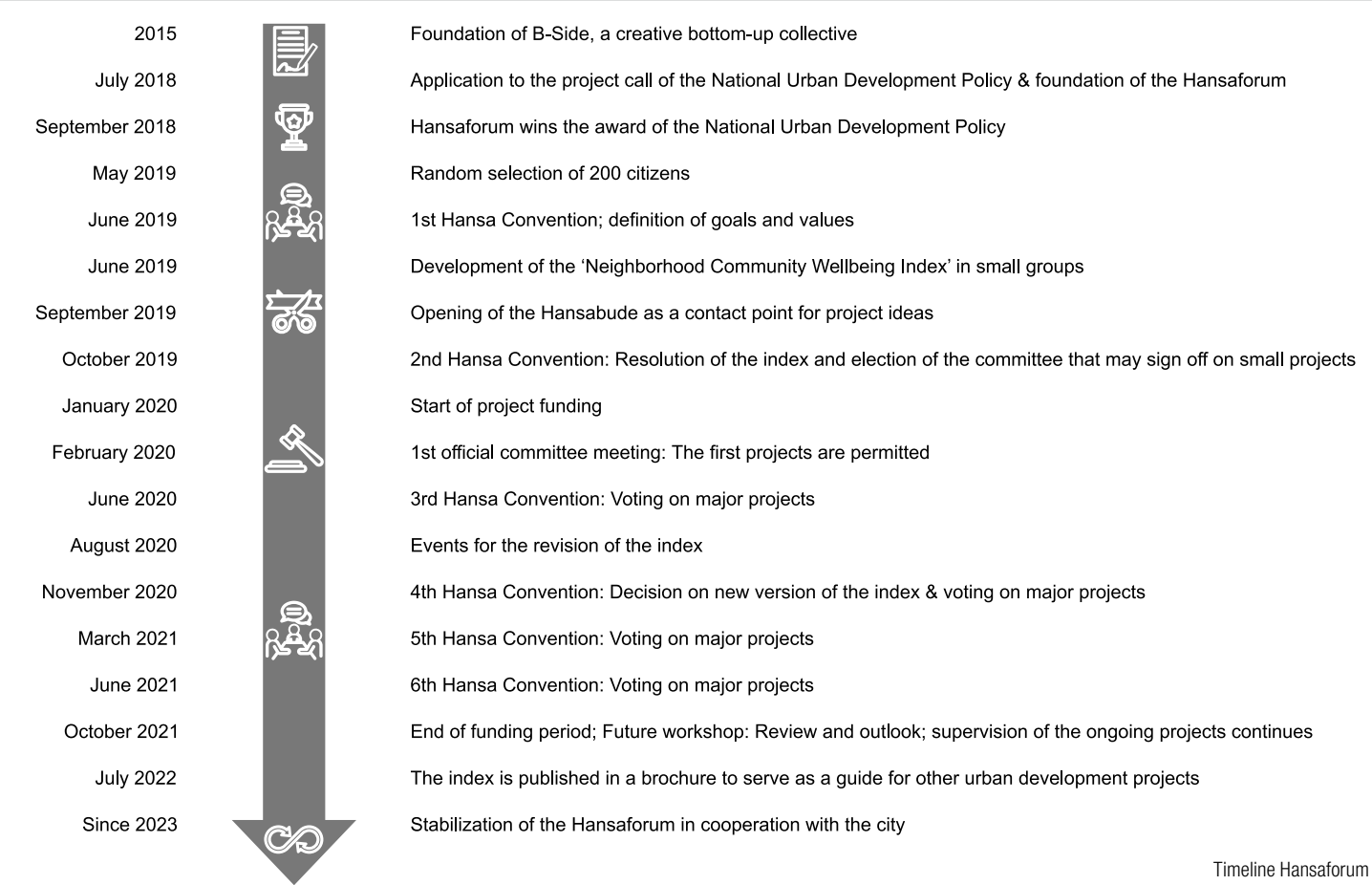


Hubertiplatz



Memelufer





Authors

- Yasmin Makki (RWTH Aachen University, Faculty of Architecture, Summer semester 2023)
- Esther Padberg (RWTH Aachen University, Faculty of Architecture, Summer semester 2023)
- Tabea Rückle (RWTH Aachen University, Faculty of Architecture, Summer semester 2023)

References

(1) Stadt Münster: Stadt Münster. Zahlen, Daten, Fakten für Münster. <https://www.stadt-muenster.de/statistik-stadtforschung/zahlen-daten-fakten>. 30.06.2023.

(2) Stadt Münster: Stadt Münster. Young old city. <https://www.stadt-muenster.de/english/ten-times-muenster-in-brief/young-old-city>. 19.07.2023.

(3) Adler, Florian: Stadtwerke Münster. Hafen-Geschichte: Die Anfänge des Stadthafens. <https://www.stadtwerke-muenster.de/blog/stadtwerke/hafengeschichte-die-anfaenge-des-stadthafens/>. 15.10.2018.

(4) Adler, Florian: Stadtwerke Münster. Wie der Strom nach Münster kam. <https://www.stadtwerke-muenster.de/blog/energie/wie-der-strom-nach-muenster-kam/>. 06.04.2021.

(5) Stadt Münster: Stadt Münster. Town history. <https://www.stadt-muenster.de/en/tourismus/peace-of-westphalia/town-history/1900-to-1945>. 19.07.2023.

(6) Adler, Florian: Stadtwerke Münster. Als der Hafen noch Industriegebiet war. <https://www.stadtwerke-muenster.de/blog/stadtwerke/als-der-hafen-noch-industriegebiet-war/>. 01.08.2018.

(7) Krajewski, Christian: LWL. Waterfront Redevelopment in Münster: Vom Stadthafen zum Kreativkai. https://www.westfalen-regional.de/de/waterfront_redevelopment/. 23.12.2019.

(8) Adler, Florian: Stadtwerke Münster. Diese 7 Hafen-Geheimnisse kanntest du noch nicht. <https://www.stadtwerke-muenster.de/blog/stadtwerke/diese-7-fakten-ueber-den-hafen-kanntest-du-noch-nicht/>. 20.01.2020.

(9) Stadt Münster: Planen und Bauen. Flächennutzungsplan der Stadt Münster. <https://geo.stadt-muenster.de/webgis/application/PlanenUndBauen?visiblelayers=1145/20146,1145/20147.%20Zuletzt%20aufgerufen%20am%2013.06.2023>. 19.07.2023.

(10) Nationale Stadtentwicklungspolitik: Nationale Stadtentwicklungspolitik. Münster-Hafenviertel „Kreativkai“. https://www.nationale-stadtentwicklungspolitik.de/NSP/SharedDocs/Projekte/WSProjekte_DE/Muenster_Hafenviertel_Kreativkai.html. 17.06.2014.

(11) Stadt Münster: Stadt Münster. Germany's cycling capital. <https://www.stadt-muenster.de/english/ten-times-muenster-in-brief/germanys-cycling-capital.html>. 19.07.2023.

(12) Henninger, Kathrin; van Heiss, Niklas; Guérin, Valerie: Mobilitätsbefragung 2022. Zum werktäglichen Verkehrsverhalten der Bevölkerung in Münster. Kurzbericht. Aachen, 17.05.2023. p.26.

(13) Bentler, Andreas; Kraehnke, Lars: Klimadiskurs NRW. Der Masterplan Mobilität Münster 2035+. <https://klimadiskurs-nrw.de/der-masterplan-mobilitaet-muenster-2035/>. 19.07.2023.

(14) Lieven, Ann-Kathrin; Wulf, Julian; Malik, Jan; Merks, Sebastian; Reuter, Christian; Lannefeld, Marvin; Arning, Leonard: Zwischenbericht zum Masterplan Mobilität Münster 2035+. Ergebnisse der Bestandsanalyse. Düsseldorf / Berlin / Karlsruhe, 20. Januar 2022. p.54-63.

(15) Adler, Florian: Stadtwerke Münster. Blick zurück auf die ersten Straßenbahnen: So sah Münsters Nahverkehr vor 120 Jahren aus. <https://www.stadtwerke-muenster.de/blog/verkehr/blick-zurueck-auf-die-ersten-strassenbahnen-so-sah-muensters-nahverkehr-vor-120-jahren-aus/>. 02.04.2020.

(16) Stadt Münster: Stadtmuseum. Münster im Modell. Münster 1934 Detail 1. <https://www.stadt-muenster.de/museum/museum/muenster-im-modell/hafen-1934/hafen-1934-detail-1/wagenhalle-fuer-die-elektrische-strassenbahn>. 23.06.2023.

(17) Wikipedia: Münster-Hansa-viertel. Verkehr. <https://de.wikipedia.org/wiki/M%C3%BCnster-Hansaviertel>. 19.07.2023.

(18) Velo Route: Velo Route. Alle Velorouten im Überblick. Wo und wie verlaufen die Velorouten? <https://www.veloregion.de/routen/>. 19.07.2023.

(19) Verein MS Hafen e.V.: Münster Hafenfest. <https://ms-hafenfest.de/>. 12.07.2023.

(20) Sprenger, Wilfried: Westfälische Nachrichten. Beachvolleyball: German-Beach-Cup. Münster freut sich auf Sandkastenspiele an neuem Standort. <https://www.wn.de/sport/lokalsport/muenster/muenster-beachvolleyball-turnier-german-beach-tour-hafen-2553919?npg=.> 05.04.2022.

(21) Hansaforum: Hansaforum. Nachbarschaftsfest auf dem Hafenplatz. <https://hansaforum-muenster.de/projekte/nachbarschaftsfest-auf-dem-hansaplatz/>. 23.06.2023

(22) Hatesohl, Gesa; Nienhaus, Leonie; Kettner, Le-Lina: Quartier-Gemeinwohl-Index. Wie wir Gemeinwohl gemeinsam bestimmen können. Münster: June 2022. p.1, 29, 54.

(23) Bundesinstitut für Bau-, Stadt- und Raumforschung; Willinger, Stefan; Schopp, Lisa (Publisher): Stadt gemeinsam gestalten! Neue Modelle der Koproduktion im Quartier. Bonn: August 2021. p.148, 151, 169.

(24) Hansaforum: Hansaforum. Grüninsel 4kids. <https://hansaforum-muenster.de/projekte/grueninsel-4kids/>. 19.07.2023.

(25) Hansaforum: Hansaforum. Zuhören statt wegschauen – Münsters vergessene Stimmen. <https://hansaforum-muenster.de/projekte/zuhoren-statt-wegschauen-muensters-vergessene-stimmen/>. 19.07.2023.

(26) Stadt Münster: Stadtteilsteckbrief 2020. 44 Herz-Jesu. Münster: January 2022. p.16.

(27) Stadt Münster: Stadtteilsteckbrief 2020. 24 Hansaplatz. Münster: January 2022. p.16.

(28) Krajewski, Christian: LWL. Gentrification in innenstadtnahen Wohnquartieren: Das Kreuzviertel in Münster. <https://www.westfalen-regional.de/de/gentrification/>. 01.01.2007.

(29) PM: Alles Münster online Magazin. Grünes Licht für Stadtquartier. Verwaltung legt Verhandlungsergebnisse vor / 690 Wohneinheiten entstehen am Stadthafen Nord. <https://www.allesmuenster.de/gruenes-licht-fuer-stadtquartier-im-stadthafen-nord/>. 28.02.2020.

(30) Stadt Münster: Soziale Erhaltungssatzung Hafen-, Hansa- und Herz-Jesu-Viertel. Münster: 2022. p.3-6.

(31) Brand, Oliver: draussen! Münster. Wie das Hansaforum den Wandel im Hansaviertel vorantreibt. <https://strassenmagazin-draussen.de/wie-das-hansaforum-den-wandel-im-hansaviertel-vorantreibt/>. 19.07.2023.

(32) Stadt Münster: V/0801/2022. Öffentliche Berichtsvorlage: Vollzug der Sozialen Erhaltungssatzung Hafen-, Hansa-, Herz-Jesu-Viertel - Erster Sachstandsbericht. Münster: 27.01.2023.

All graphics based on: <https://geo.stadt-muenster.de/webgis/application/PlanenUndBauen?visiblelayers=1145/20146,1145/20147> and <https://opendata.stadt-muenster.de/>.

ensters-nahverkehr-vor-120-jahren-aus/. 02.04.2020.

(16) Stadt Münster: Stadtmuseum. Münster im Modell. Münster 1934 Detail 1. <https://www.stadt-muenster.de/museum/museum/muenster-im-modell/hafen-1934/hafen-1934-detail-1/wagenhalle-fuer-die-elektrische-strassenbahn>. 23.06.2023.

(17) Wikipedia: Münster-Hansa-viertel. Verkehr. <https://de.wikipedia.org/wiki/M%C3%BCnster-Hansaviertel>. 19.07.2023.

(18) Velo Route: Velo Route. Alle Velorouten im Überblick. Wo und wie verlaufen die Velorouten? <https://www.veloregion.de/routen/>. 19.07.2023.

(19) Verein MS Hafen e.V.: Münster Hafenfest. <https://ms-hafenfest.de/>. 12.07.2023.

(20) Sprenger, Wilfried: Westfälische Nachrichten. Beachvolleyball: German-Beach-Cup. Münster freut sich auf Sandkastenspiele an neuem Standort. <https://www.wn.de/sport/lokalsport/muenster/muenster-beachvolleyball-turnier-german-beach-tour-hafen-2553919?npg=.> 05.04.2022.

(21) Hansaforum: Hansaforum. Nachbarschaftsfest auf dem Hafenplatz. <https://hansaforum-muenster.de/projekte/nachbarschaftsfest-auf-dem-hansaplatz/>. 23.06.2023

(22) Hatesohl, Gesa; Nienhaus, Leonie; Kettner, Le-Lina: Quartier-Gemeinwohl-Index. Wie wir Gemeinwohl gemeinsam bestimmen können. Münster: June 2022. p.1, 29, 54.

(23) Bundesinstitut für Bau-, Stadt- und Raumforschung; Willinger, Stefan; Schopp, Lisa (Publisher): Stadt gemeinsam gestalten! Neue Modelle der Koproduktion im Quartier. Bonn: August 2021. p.148, 151, 169.

(24) Hansaforum: Hansaforum. Grüninsel 4kids. <https://hansaforum-muenster.de/projekte/grueninsel-4kids/>. 19.07.2023.

(25) Hansaforum: Hansaforum. Zuhören statt wegschauen – Münsters vergessene Stimmen. <https://hansaforum-muenster.de/projekte/zuhoe-ren-statt-wegschauen-muensters-vergessene-stimmen/>. 19.07.2023.

(26) Stadt Münster: Stadtteilsteckbrief 2020. 44 Herz-Jesu. Münster: January 2022. p.16.

(27) Stadt Münster: Stadtteilsteckbrief 2020. 24 Hansaplatz. Münster: January 2022. p.16.

(28) Krajewski, Christian: LWL. Gentrification in innenstadtnahen Wohnquartieren: Das Kreuzviertel in Münster. <https://www.westfalen-regional.de/de/gentrification/>. 01.01.2007.

(29) PM: Alles Münster online Magazin. Grünes Licht für Stadtquartier. Verwaltung legt Verhandlungsergebnisse vor / 690 Wohneinheiten entstehen am Stadthafen Nord. <https://www.allesmuenster.de/gruenes-licht-fuer-stadtquartier-im-stadthafen-nord/>. 28.02.2020.

(30) Stadt Münster: Soziale Erhaltungssatzung Hafen-, Hansa- und Herz-Jesu-Viertel. Münster: 2022. p.3-6.

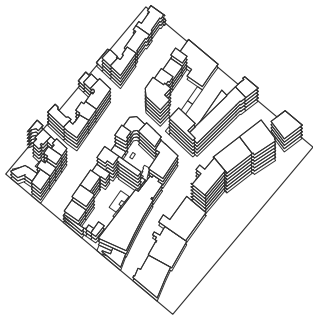
(31) Brand, Oliver: draussen! Münster. Wie das Hansaforum den Wandel im Hansaviertel vorantreibt. <https://strassenmagazin-draussen.de/wie-das-hansafo-rum-den-wandel-im-hansaviertel-voran-treibt/>. 19.07.2023.

(32) Stadt Münster: V/0801/2022. Öffentliche Berichtsvorlage: Vollzug der Sozialen Erhaltungssatzung Hafen-, Hansa-, Herz-Jesu-Viertel - Erster Sachstandsbericht. Münster: 27.01.2023.

All graphics based on: <https://geo.stadt-muenster.de/webgis/application/PlanenUndBauen?visiblelayers=1145/20146,1145/20147> and <https://opendata.stadt-muenster.de/>.

Münster: Hansaviertel

Structural Density
Floor Area Ratio: 2,81



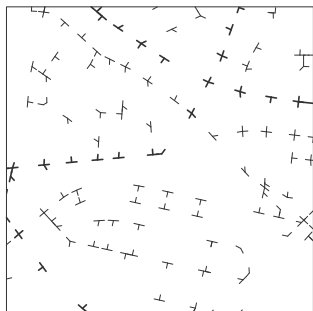
Building Typology
Urban Block
Perimeter block development



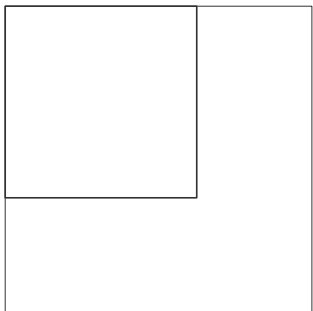
Street Network
Irregular Grid
16323m



Network Configuration
105 Grossroads
23 access ways



Built Area:
15747,7 square meters
39 percent



Open Space:
13 percent



A Case of Touristification: What does the future hold for Spanish Quarter?

Naples, Spanish Quarter

Ezgi Ismar, Raveena Gadkar, Selcen Fidan



©authors

Once an enclave of organized crime, the Spanish Quarter is now shedding its past and opening up to the world through a trend of touristification. The heightened interest in the Spanish Quarter primarily stems from the area's distinctive atmosphere, unique architectural style, and the unconventional experience it offers in terms of public spaces. This combination of factors differentiates the Spanish Quarter from other urban areas, making it a subject of particular intrigue and study. While touristification brings higher incomes for residents and improves the feeling of safety, it might cause an identity shift in the area, which has initially been the main reason for its attractiveness.

Introduction

The old town of Naples is the largest historic center in Europe, and has preserved its original grid patterned street network from around 400 BC. (1) The Spanish Quarter, known as Quartieri Spagnoli, derives its name from the Spanish military garrisons stationed there during the Spanish rule of Naples in the 16th century, reflecting the area's historical and cultural ties to its colonial past. The Spanish Quarter has existed from its inception until recently as an enclave with its own dynamics, disconnected from the urban flow and with a somewhat negative reputation. (2) Recently the area has been re-evaluated and has become one of the main tourist attractions of the city, where we can observe the 'order in chaos' lifestyle of the locals that represent the Neapolitan soul.

The Spanish Quarter is located between Castel Sant'Elmo, a medieval castle, the old town, and the harbor, adjacent to Via Toledo, one of the most important and busy commercial streets of the city, stretching from Piazza Dante to Piazza del Plebiscito. With the crowd of people carried by Via Toledo, it overflows with different densities at different times of the day.

Situated on a slope rising from Via Toledo to Castel Sant'Elmo, the area is composed of streets that are as multi-layered and chaotically diverse when viewed from a human scale, no matter how regular they are in the plan and consist of small blocks of five-six stories with short facades surrounded by narrow streets. The main users of the narrow streets of the Spanish Quarter are

locals, tourists, and scooters. In addition to being an increasingly busy touristic attraction, this dense and complex area contains much of the daily life of the local population. While the streets reaching Via Toledo are an inviting and dense tourist area with the most diverse functions, as you move up the slope, the sense of neighborhood and locality increases and the diversity of functions is sparse. With a twenty percent foreign population, the functions and user profile of the Spanish Quarter are rapidly changing. (3)

The main factor influencing the current transformation of the Spanish Quarter and the evolution of its functions is the shift of the local population towards tourist-oriented activities. The predominantly commercial areas are being filled with functions that attract more people, while in the residential areas, the number of short-term temporary stays is increasing. According to a study on the socio-economic consequences of short-term stays for Naples, before Covid, the city experienced a huge growth in tourist flows. Currently, the rising tourism challenges the daily life of the neighborhood' linked to the tourism model adopted. (4) The situation is raising concerns regarding how the



Napoli Overview



Spanish Quarter Overview

area is coping with the change, and what will be the future of it. Before answering this question, it is essential to understand why the Spanish Quarter is experiencing this new wave of touristification.

History

The Spanish Quarter emerged in the sixteenth century when the Kingdom of Aragon wanted to reclaim its territory and expel the French troops. In order to maintaining a tight control, a garrison of about 5,000 soldiers was placed in the heart of Naples, led by the Grand Captain.

From the beginning, the presence of Spanish troops in this region brought about violence, crime and prostitution. Towards the middle of the sixteenth century, barracks were built in other parts of the city to accommodate the soldiers and space was reallocated for them.

In the following centuries, Spanish governors ruled the city and left an indelible mark on Naples. Important figures such as Gonzalo Fernández de Córdoba (known as the Great Captain) and Pedro Álvarez de Toledo played a key role in the development of these neighborhoods after their arrival in Naples in 1532. Toledo's most important contribution is the street named after him, Via Toledo, that stretches for over a kilometer and serves as a focal point for the labyrinthine Spanish Quarters.

For many years, the Spanish Quarters was perceived as one of the most dangerous areas of Naples, a place to be avoided. Its negative reputation stems from the fact that for many years it remained a residential area detached from the urban context and its name has been associated many times with crime and the Camorra. (5)



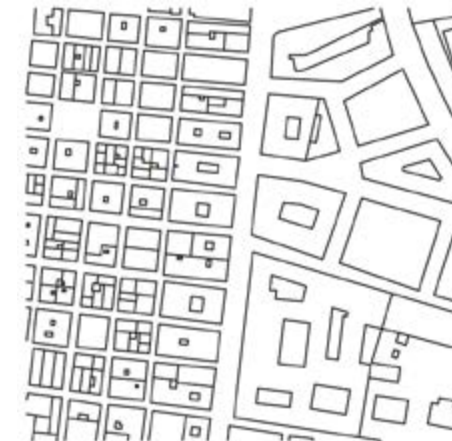
Vomero & Spanish Quarter

In the twentieth century, however, the neighborhood began to become a gateway to Naples for different social categories, including middle-class individuals, immigrants, and even the emerging upper class. With these waves of migration, the demographics of the Spanish Quarters changed and began to include people from different backgrounds. Eventually, the area changed character and became more commercially oriented, with a great interaction with the Via Toledo. (6)

Urban Character

While the eastern and western borders of the Spanish Quarter are clearly defined by Castel Sant'Elmo and Via Toledo, the northern and southern borders are rather vague. The Vomero district, which includes Castel Sant'Elmo, is a spacious, less densely populated area located on a slope. Especially the castle and its garden create the impression of a large urban neighborhood. With the walls of the castle and the Vittorio Emanuele highway running between the castle and the Spanish Quarter, this western side of the Spanish Quarter is physically and perceptually less permeable. As the visitors move up the slope in the Spanish Quarter, block widths increase, and physical permeability decreases with fewer access points from the highway.

On Via Toledo, the blocks are highly permeable compared to the massive blocks across the street. Almost every street in the Spanish Quarter's grid plan extends onto Via Toledo. Most of the movement in and out of the neighborhood is done through this main street. In the area stretching from Via Toledo towards the harbor, the street scale and plan become more spacious, the blocks and streets wider. One street across, and a completely different face of the city



Vomero & Spanish Quarter

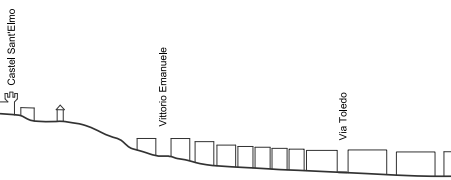


emerges. Although the façade aesthetics of the blocks are not different from the blocks on Via Toledo, there is a more spacious urban impression with the widening streets.

There are tangible and intangible dimensions in the city that define the distinction between different urban textures. These dimensions are also present in the Spanish Quarter. Although there is no hierarchy in terms of street width, there are several areas as landmarks in the Spanish Quarter and they determine the density dynamics of the streets. Although the perception of the neighborhood in the higher areas of the Spanish Quarter as an urban character seems like an abstract boundary, the stair connections that develop with the increase in slope give the impression of a physically different texture. In this area, urban dynamism decreases, and uniformity increases.

Program/ Uses

In the Spanish Quarter, due to the narrow streets, the ground floors are the areas where communication happens mostly on a human scale, while higher floors may require a wider perspective for visual communication. The Spanish Quarter is a mix of residential, commercial and cultural areas. While the ground floors on Via Toledo are inviting and have a wide variety of commercial functions, as you approach the center of the Spanish Quarter, functions are clustered around certain landmarks and as you go higher up, they begin to be used as residential. In light of all this, the line between private and public space on the ground floors is quite blurred. On the same street, there are vespas buzzing, people stopping to chat, people looking outside of their windows and offering coffee to strangers,

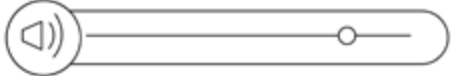


Section from Via Toledo to Caster Sant'Elmo

old people sitting outside their houses and pointing tourists in the right direction, restaurants spilling out onto the streets and drawing crowds, mixed-use squares that simultaneously contain the life of locals and serve tourists.

Taking a closer look at the residential function of the ground floors, which are a big part of street life, there are bassi, an important part of the city image and urban fabric. ‘Bassi’ typically refers to ground floor units or apartments located at street level. Connected to the street by a single opening, these low-ceilinged ground-floor living units sometimes have only a single opening street, serving all the basic functions of entry and exit, letting in light and air. In some, the opening increases to two, and as you enter the more residential area, you can see bassi with ground terraces. (7)

The term „bassi“ is derived from the Italian word „basso“ meaning „low“. These ground floor units were historically used by low-income residents, but today they are becoming an attractive living unit for some individuals, due to their seamless communication with the street. (6) The change in the character of the Spanish Quarter is also due to the people who come to experience these living units. The new tourist user profile does not seem to blend in with the existing residents yet. Streets are partially still resisting to change and continuing their daily order as usual. While on the other streets gentrification wave is rising, it is a developing concern in terms of area's identity. Initial attraction to area has been the life style and spontaneous order of the ground floors. With the changing dynamics future of the area is blurry. It may cause a decline in the attraction since it is not authentic anymore

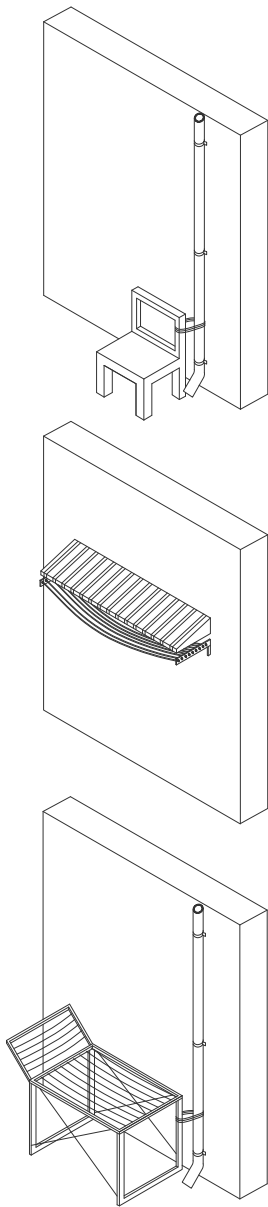


Audio: Street Noises

Another characteristic that bassi add to the streets, because of their lack of space, is some private elements such as clothes drying racks and some individual seating units, which we can call urban furniture. This furniture almost eliminates the line between private and public, making the life of those living in the bassi quite observable for anyone passing by.

Public Spaces

The high density of the Spanish Quarter is also translated in the lack of open space. With so many small blocks built up, what is left of public space is narrow streets and a few public spaces. The streets, however, often serve the flow as well, with many businesses serving different purposes spilling out onto the streets, in addition to the intense flow of people and vehicles. A few public spaces are Maradona Mural area, Piazza Barrache, the square above the Toledo Metro station, and the small mixed-function spaces on Salita Trinita degli Spagnoli and Vico Lungo Trinita degli Spagnoli streets. The public squares in the Spanish Quarter do not have fixed uses, they are spontaneously organized and mixed in function. Piazza Baracche and the Toledo Metro Station square are the ones that can be perceived



Street Furniture

ved the most as public squares due to their size and the crowds they attract, and both are used at different times of the day.



Diego Maradona

The only public space with a defined function is the Maradona Mural area. Diego Maradona is a pivotal figure in the history of Neapolitan football club due to his extraordinary contributions on the field, leading the team to its first-ever Serie A titles in 1987 and 1990. His impact extended beyond sports, fostering a sense of pride and identity among the people of Naples, and cementing his legacy as a cultural icon in the city. You can see the Maradona representations on almost every street, a strong part of the local culture that defines the urban character of the Spanish Quarter and even Naples, and which has been turned into a somewhat commercialized element. However, the square where the Maradona Mural is located is visited with great intensity and the streets with direct access to this mural determine the density of the crowd. Apart from this, murals are an element of local culture along the streets of the Spanish Quarter.

Another tangible trace of culture on the streets is the concave or convex street altars integrated into the walls of buildings. These altars, also called urban shrines, are part of the religious culture and are votive shrines to commemorate the saints that the locals respect and find sacred. The starting point of this culture was to create street shrines illuminated by gas lamps to make the streets safer at night, thus creating places of worship on the streets and preventing petty theft. (8) In urban areas, it is common to find public spaces designed as large squares, which are building-free zones where cars are prohibited. However, the Spanish Quarters

(Quartieri Spagnoli) in Naples do not incorporate this type of public space. Instead, the area features its own unique form of public spaces, distinct from the conventional urban planning model. Unlike the common typology, the streets of the Spanish Quarter are the public space itself. While providing the function of transpassing, most of the streets are in use for the public to interact. The area's specific attraction element comes from this vague situation itself. It is hard to tell where the public space ends and the private space starts. Limitations of the outside boundaries are intuitive rather than physical. There is nothing stopping a tourist to sit down at the narrow street stairs while the window next to it is fully open, screening a family dinner of six. Conversations and the sounds are blending into one another.



Urban Particularity

Throughout the years, the image of the area has constantly changed. Partially it has been achieved by several organizations working on the Quarter, rest is caused by the social shift within the user profile. After pedestrianization of the Via Toledo, each of the street entrances serves a function of show-case to the neighborhood. Main tourist traffic is welcomed from here and continues to spread across the grid. Some of the entrances have denser visitor traffic than others based on the functions it contains. The area hosts approximately 10,000 tourists daily, depending on the season. (9) Because now the tourists have become one of the ‘user’ profiles of the area, there is an unavoidable interaction between locals and visitors.

Unlike conventional public spaces, what makes Spanish Quarter recognizable is that it holds several ground floor functions, almost as if the public spaces merge into the private spaces. While the dominant use is the residential one, it would not be surprising to find a pizza place right next to it with a very big and often noisy crowd. Although this gives the area a unique dynamic, it causes strange interactions in terms of function. What makes the area interesting



in the visitors’ eyes is witnessing the daily life of the place, for example by observing the bassi. Since it is an opportunity for the locals to create income from this tourist flow, it increases service-based businesses in the area. This leads to changes of the ground floor use from residential to commercial, defeating the initial attraction in the first place. For now, this transaction between functions seems to be balanced but it is a developing practice for the area. For this reason, it is hard to overlook the touristification in the area as a potential future urban issue. According to Airbnb, 99.6% of the approximately 755 units in the neighborhood are listed for short-term rentals. (10) This is a threatening rate for the long-term scenario of the Quarter. The number of local residents is decreasing, which might transform the area's identity. With gentrification and touristification, urban character is experiencing an on-going change. If these touristic elements settle homogeneously within the existing assets, there is a chance that they will benefit the area. The current situation has developed from bottom to up, and resisted the top-down approaches that added an authentic depth to the image. Another scenario, however, holds a darker future for the Spanish Quarter, there is a possibility of the failed integration of the new and old. This can be a potential end for the existing assets, creation of something new detached from the identity that the Spanish Quarter holds so far.

Authors

Mebrure Ezgi Ismar (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)
• Raveena Gadkar (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)
• Selcen Fidan (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)

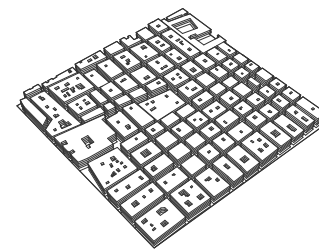
Sources

- 1- Historic Centre of Naples, UNESCO <https://whc.unesco.org/en/list/726>, 07.06.2024
- 2-De Vidovich, Lorenzo (2017), “Social Perspectives of Urban Regeneration on Neighbourhood-scale: the Case of Spanish Quarters in Naples”. S.564, Book of Proceedings, AESOP Annual Congress 2017, 11-14 July, 2017, Lisbon, 561-573, 07.06.2024
- 3-Foundation of Spanish Quarter <https://www.fokusnapoli.it/en/i-quartieri-spagnoli/>, 25.06.2023
- 4-Iovino, Giorgia: “Affitti turistici a breve termine nelle città d’arte. La “airificazione” di Napoli e i suoi impatti” (Short-term rentals in cities of art. The “airification” of Naples and its impacts), Bollettino della associazione italiana di cartografia 2021 (172), 4-19, S.14, 2021
- 5- When the Spaniards shaped the most mythical site of Naples <https://fascinating-spain.com/place-to-visit/places/quartieri-spagnoli-spanish-history-naples/>, 25.06.2023
- 6-Laino, Giovanni, Il cantiere dei Quartieri Spagnoli di Napoli, Territorio, Rivista del DIAP del Politecnico di Milano, N.19, 2001, pp. 25-31, S.25-26-28, 2021.
- 7- I bassi napoletani, l’anima popolare di Napoli <https://www.napoli-turistica.com/bassi-napoletani-anima-popolare-di-napoli/>, 25.06.2023
- 8-The “urban shrines” where Catholics in Naples, Italy, stop to pray <https://aleteia.org/2020/06/12/the-urban-shrines-where-catholics-in-naples-italy-stop-to-pray/>, 25.06.2023
- 9-Naples Travel Guide. <https://www.outlooktravelmag.com/travel-guides/68-naples>, 07.06.2024
- 10- Data derived from publicly available information on the Airbnb site, analysed, cleaned and aggregated to facilitate public debate. <https://insideairbnb.com/naples/> 06.06.2024

Naples, Spanish Quarter



Structural Density
Floor Area Ratio: 4,58



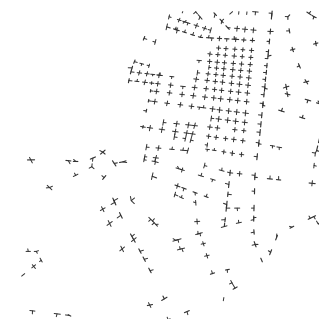
Building Typology
Narrow streets, small blocks, grid plan.



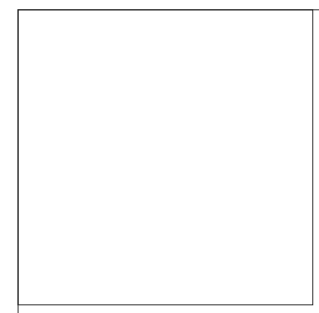
Street Network
Streets within the area in use for mostly pedestrians and vespas.
25856.7m



Network Configuration
Neighborhood has multiple entrances and each has different function than the other.
152 intersections
162 entrances

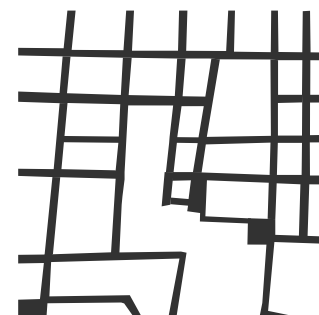


Built Area:
36674,6 square meters
92 percent



Density is one of the important characteristics of the area.

Open Space:
Unlike usual definition, Spanish Quarter's streets are in use as public space of the area.
4.84%



Medellin: A Tale of Resilience and Transformation

Urban Acupuncture as Tool for Transformation

Ana Paulina Cabello Ocampo, Janet Ivonne Preciado Otero



©Ibarra, Christian

In the early nineties, Medellín, the second-largest city in Colombia, gained global notoriety under the label: “Most violent city in the world”. Lately, Medellín has regained global interest, but now as a symbol of change and resilience. This is more than a story about a strategy aimed at regenerating a city. It is a journey through community empowerment, involving architecture, urbanism, and social policies; leading to transformation.

Story Introduction

“The city was not enjoyed, it was endured”
– Sergio Fajardo(1)

Located within the Andes, Medellín, Colombia, emerged as a city with a history marked by challenges. Formed by ten comunas, (Spanish for municipalities), this metropolis has undergone a metamorphosis in recent decades. Years of violence had built up fear, creating invisible yet tangible walls within the comunas, turning them into individual cells, which led to social fragmentation. This fragmentation increased social inequalities and stigma.

Characterized by social conflicts, governmental neglect, and a concerning escalation in drug- trafficking and violence. Medellín needed a deep transformative strategy. In 2004 the first independent mayor was elected, a research mathematician who realized that change could only be possible with a multidimensional strategy. This strategy was continued by the second independent mayor elected after him, Alonso Salazar (2008-2012).

The central idea for this strategy: “Education and culture as the main axis for soci-

al transformation”(2). But how could that be achieved? The toolkit was pragmatic: urban planning, education, culture, social programs, and architecture, all being developed simultaneously.



Although a top-down initiative, Fajardo’s plan encouraged and catalyzed community engagement, transcending the historical shadows of government neglect and criminal influence. Nowadays, the city is witnessing a shift towards a future marked by new opportunities, resilience, innovation, and community empowerment.

Modern History

The city is located in the Aburrá Valley, a central region of the Andes in northwestern South America. The challenging topography played a crucial role in the city’s development, as it is shaped by the topography of the Andes mountain range. Settled in the central region of the country, the city is situated at an elevation of approximately 1,500 meters above sea level. The surrounding landscape is characterized by lush green mountains, providing a picturesque backdrop to the urban area.

The Aburrá Valley’s topography contributes to Medellín’s unique geography, with the city expanding across the valley floor and climbing up the slopes of the surrounding mountains. The climate is generally mild, thanks to its elevation, making Medellín known as the „City of Eternal Spring“.

Indigenous groups including the Tahamíes, Quimbayas and Nutabes inhabited the area of Medellín for centuries before the Spanish colonization in 1616, led by Francisco Herrera Campuzano. The foundation of Medellín marked the establishment of a Spanish settlement in the region. Following Colombia’s independence from Spanish rule in 1810, political changes and shifts in economic structures occurred, but Medellín remained a relatively small town focused on agriculture and mining for several centuries. Its economy was based on gold mining and later textiles.

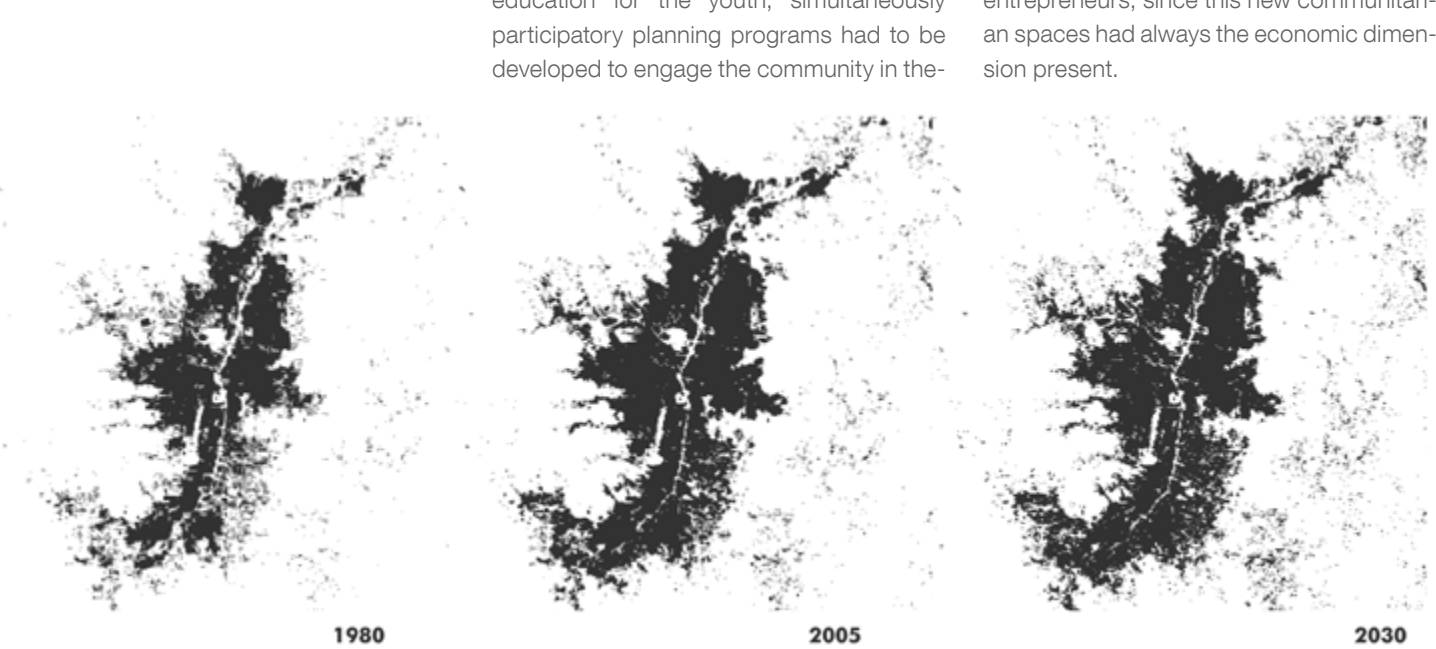
Urbanization followed, and the twentieth century witnessed an economic boom driven by industrialization. The well-located city served as a key transportation and commercial center for coffee production, a hub for the textile industry, and a destination for educational institutions and skilled workforce. As a result, the population has grown almost thirty times in just one hundred years. However, Medellín’s industrialization was not without challenges. Rapid urbanization and population growth contributed to the proliferation of informal settlements, known as „barrios“ or „comunas,“ in the hillsides surrounding the city, resulting in a diverse socio-cultural landscape.

The latter part of the twentieth century Medellín saw the rise of drug cartels, followed by violence and crime and social instability. These cartels played a key role in achieving

social and territorial dominance. They engaged in conflicts with rival cartels and government forces, resulting in bombings, assassinations, and widespread fear among residents. The violence associated with the drug cartels led to mass displacement of residents from certain neighborhoods, as people fled their homes in search of safety. This crisis combined with existing socio-spatial inequalities, transformed the city into a warzone, especially in the most vulnerable areas, such as: informal settlements.

An informal settlement is defined as “housing created in an urban or peri-urban location without official approval.” (3) These settlements often lacked basic infrastructure and services, such as running water, electricity, and proper sanitation, and were characterized by poverty and social marginalization, perpetuating cycles of poverty and exclusion.

The drug cartels, particularly the notorious Medellín cartel, exploited these urban areas with no apparent governance, ideal for crime and violence. This reinforced the negative perception of the comunas, starting an era marked by conflict, violence, and challenges to the city’s integrity. Access to education, healthcare and security became an unreachable privilege for some, contributing then to greater socio-spatial disadvantages within the city. These decades of violence and city segregation left an indelible mark on the city’s history. Guerrilla warfare further compounded security challenges, leaving lasting imprints on the urban fabric.



Urban Character

The Contrast– A fragmented city

Below a comparison between two different neighborhoods is made on the same scale. The neighborhood on the left is considered a “**formal neighborhood**”, it has a reticular grid, similar block sizes, and it is located in the plain valley. Contrasting on the right is an image of what is considered an “**informal neighborhood**”, which grows organically through challenging topography in the hills. The contrast between the formal and the informal can be perceived in the urban form.

Development

Urban Acupuncture as a tool for Social Transformation.

The government developed a complex, multidisciplinary strategy to completely regenerate the city. The main objectives of the strategy were: to give the youth alternatives for a non-violent future and to break the walls previously created by fear and unify the city.

They agreed that urban planning strategies were a valuable tool to implement the strategy on a spatial dimension, since change needed to be visible in a short-term period to develop trust, and hopefully trigger further bottom-up action.

Therefore, architecture and urban design needed to introduce accessibility and trigger attractiveness towards science and education for the youth, simultaneously participatory planning programs had to be developed to engage the community in the-

se transformations. The main question was; How? How to tear the walls down between different comunas and trigger inhabitants’ engagement and multi-level collaboration?

They gave an answer; the redefinition of public space and mobility systems. These new public spaces were designed as social encounter hubs. They were called “Library Parks”, and they were a combination of a green public space, an educational-cultural center and a public library. They were used as catalyzers placed in short proximity with new or existent public schools, often combined with a connection to the new Metrocable. These projects were not really about architecture but about social mobility and the rebranding of the city’s image.

The actors who made this possible were abundant, interlinked during the process. First the politicians were involved in the defining of the budget and selection of the project intention and its supervisors, after that, planners would engage with the community with possible locations and plot availabilities within the comuna, by diverse participatory processes the citizens usually chose the location of the project and a significant part of the building program. When they had all this information, a public contest was launched, and diverse architecture firms joined the competition, the -subjectively- best design was selected.

Simultaneous to this process, sociologists, economists, and business professionals designed social programs ideally aimed at providing training for new start-ups and entrepreneurs, since this new communitarian spaces had always the economic dimension present.



Following the “social encounter hubs”, connectivity was key. Medellín’s “formal” city is built in a valley surrounded by mountains, yet the “informal” city is located on the outskirts, climbing up to hills. Since topography is challenging connectivity with the “formal” city was deficient and unattended. This increased segregation between the “formal” and the “informal”.

Since “traditional” public mobility solutions were not truly convenient –buses were time consuming, and the metro was beyond budget– revolutionary ideas were required. This way Medellín **MetroCable** was conceived. It was a unique -for South America- gondola lift system providing transportation from the informal city to the Metro, this system reduced travel times on average, from one hour to fifteen minutes.

In addition, social programs were implemented in every spatial intervention, such as entrepreneurship programs, childcare for studying/working parents, scholarships, financing of economic endeavors, etc. The existing educational programs were re-evaluated and transformed to fit this re-branding of the new Medellín, shifting the focus on science, an alternative future, and peace.

The timeline, budgets and priorities of the strategy were defined by the evaluation of the human development index and rates of violence. Directing the highest budgets and most ambitious projects to the “worst rated” comunas. “Money where is truly needed” (4)

was the argument against the general initial discomfort. By implementing this action, the hypothesis was that the gap between the wealthy and the disadvantaged would be reduced.

Catalyzers and Redefinition of Public Spaces

The first phase of the plan involved: ten library parks and education facilities, linear parks and pedestrian streets, the MetroCable, social housing development and evaluation of existing risk areas in informal settlements for further housing relocation.

The main catalyzers were the library parks, all located in informal settlements. In this section we delve into two noteworthy examples, both inaugurated sixteen years ago, we will undertake the same methodology of analysis for both library parks. This analysis involves: top-down planning approach, participatory planning processes, architecture, and impact on the community. Nowadays, one of them is labelled as a “white elephant” and the other one is a successful social and educational hub.

Library Parks: Parque Biblioteca España

Top-Down Planning - Located on Medellín’s north-eastern hillside in **Santo Domingo**, an informal settlement with the lowest human development index in the city. A recognized neighborhood due to its violence levels, drug trafficking, gangs, and government absence. This library park was developed on land formerly occupied by informal housing in a high-risk area, which was relocated, and the land transformed into a dense vegetated area behind the library park.



The library park was designed as the focal point of the intervention in **Santo Domingo**; however, it was not the only project. The **MetroCable**, public lighting enhancement, creation of new pedestrian paths, extension of playground areas, a medical center, **sport facilities** were also part of the intervention. Simultaneously, social programs were combined with the intention to use this newly created public space as a field for small new entrepreneurship, adding to its educational- social purpose an economic dimension.

Participatory Planning - Alongside top-down planning, participatory planning programs were developed. On a political level, the constitution was adjusted in terms of budget distribution, priorities were shifted from city level to neighborhood level. Due to this reform, participatory budget was institutionalized and directed to each comuna, afterwards through transparency processes, local citizens were given the right to vote and direct their own local budget to physically enhance their community, setting their own priorities.

Architecture - The building was inaugurated in 2007, it is composed of three volumes sheltering a **library**, classrooms, ludothèque, computer rooms, a public open esplanade, office spaces, exhibition areas, all united by a natural public balcony that overlooks the city. The building was defined as: “space of encounter that serves as urban landmark and gathering spaces for the community” (5)

Impact on the Community - Inaugurated by Spain’s’ royalty, it has become Medellín’s most iconic urban landmark. However, it has been controversial. The project lies in stark contrast with the context, which has led some critics to believe that this (and a great number of interventions) developed within this strategy, were more fitting to a political agenda than a social one. A decade after opening, the library had to close indefinitely for repair due to tiles falling from the façade and water-damaged structures, this led to the locals labelling it as Medellín’s “white elephant” (6)

And although the library fulfilled its first intention and became a symbol of transformation and Medellín’s’ new “era”, its social impact is yet to be questioned. The library is

still **closed** to this day.

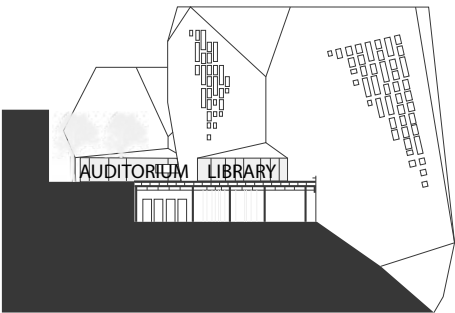
Parque Biblioteca San Javier

Top-Down Planning - Located on Medellín’s west, Comuna 13 is an informal neighborhood with high criminal activity and drug use. In this comuna the program of projects to be implemented was composed of the library park, the **MetroCable** connection, and the **escalators**, which then triggered a comuna-scale **graffiti intervention** made by several actors. Since 2004, forty-seven projects have been implemented in this comuna, from minor ones such as pedestrian paths, to public hospitals.

Participatory Planning - For the selection of the plot the community was deeply involved, the planning dependencies decided to ask two questions to the community regarding empty spaces. The first one: “What does this place reminds you of?” and the second, “What would you like to have in this place?” Most of the answers to the first question were tightly linked to crime, danger and risk. This is the case with the plot selected for this project. It was an empty site between a prison and a graveyard, where in former times it was a hub for drug dealers and drug addicts – according to the community interviewees–, the community chose this “grey zone” / “urban scar” as the ideal plot for the public library. The selection appears to be successful, since its construction the once neglected area is now a hub for the comuna.

Architecture - Stepped in the topography, concrete cubes shelter a cultural center, the project main intention is **public space**. Inside the building there is an auditorium, computer classrooms, library and reading rooms, daycare, exhibition halls and a linear park surrounding the building.

Impact on the Community - This comuna intervention proved to be successful, it triggered social interest which led to bottom-up action, transforming it gradually



through the years, now it is a main tourist attraction for the city. After years the community was aware of the effect and deficiencies of the implemented program, they state that the playgrounds prove to be the least successful of interventions. This was because the plots selected were previously dangerous areas, which involved drug-trafficking, gangs and violence. Playgrounds built in these former areas offered a catalogue of prey for these gangs, since they keep occupying the space simultaneously. It was concluded that unattended public spaces could not transform the grey zone. “Only eyes on the place and institutional presence can change such situation” (7)

The contrast between these two library parks is notable. While library park España is a huge black building built in a former area of the settlement, standing out from its context, library park San Javier is a one-story glass building terraced to fit the topography interlinked with a green open space, and was built in a plot chosen by the community. This comparison can highlight two conclusions; first, that not all projects can trigger the “Bilbao effect” and second, the importance the community has when deciding where and what should be built in their immediate surroundings.

Transport/ Infrastructure Medellín Metrocable

Medellín was the first city in the world to implement a cable car system as a means of full-time public transport. The Medellín Metrocable consists of a cable car network that serves as a link that connects historically marginalized hillside comunas to the city center. The cable car network was established in 2004, it initially consisted of one line (line K) which, located in communes 1 and 2, served the districts of **Andalucía, Popular** and **Santo Domingo Savio**. In contrast to the „official“ city, that developed along the river, these informal neighborhoods are characterized by the invasion of the valley slopes. Because of this topographical characteristic, these neighborhoods in the hills



presented -and still present- a huge challenge of urban mobility (8)

The Metrocable was designed as a solution to overcome this mobility problem and integrate these peripheral communities into the urban fabric, offering practical benefits and scenic **views**. The metrocable system is composed of six operational lines, H, J, K, L, M, and P, which complement and connect with the railway lines A and B. The lines were inaugurated between 2004 and 2021. It has a total of twenty stations and a length of fourteen kilometers. It transports twelve million passengers each year. This success is explained, first, by the operated connection with the metro, which reduces travel time to the city center and the southern part of the city. (9)

Comuna 13 Staircase

An electric outdoor escalator is situated in the hilly terrain of **Comuna 13** San Javier, home to around 140,000 people, with one of the most violent histories in Medellín. Refugees escaping guerrilla violence settled in the elevated hills until the late 1980s. The difficult terrain kept representatives of the state away, creating a power vacuum that made the area an ideal hiding place for urban guerrillas. They controlled the area both socially and economically (10). The state’s complete withdrawal in Comuna 13 led to residents facing violence and control first from militias and then from paramilitaries. Operation Orion achieved a symbolic victory in 2002, however, paramilitaries persisted in retaining power and utilizing oppressive tactics.

The construction of the **electric escalator** in 2011 aimed to break down physical and social barriers, intended to connect areas previously divided by conflict, reducing violence, and contributing to a sense of pride and dignity among the community. The first public electric escalators provide an alternative to climbing 357 stairs, with a structure of 384 meters in length, divided into six sections that wind their way up the slope, covering a total length of ninety-four meters

and bridging an altitude of thirty-eight meters.

Simultaneously public space and other beautification works were built along with social programs that articulated community engagement initiatives, such as educational programs on escalator usage and the revitalization of public spaces.

The escalator attracted over 166,000 visitors in 2018, marking an increase and reflecting Medellín's growing appeal to both local and international tourists. Originally conceived to enhance mobility for approximately 12,000 residents in informal settlements, it has faced criticism for potentially benefiting only residents in proximity and presenting an idealistic yet distorted image of Comuna 13 for tourists and outsiders.

La Francia, Andalucía and Villa del Socorro Pedestrian Bridges

The topography surrounding the Medellín River, in the Northeastern Zone, once separated the neighboring districts of La Francia, Andalucía and Villa del Socorro. The integral plan included the construction of two bridges that connected these neighborhoods to each other and to the surrounding streets, especially to Carrera 48A, making it easier to walk to the Metrocable and thus to the rest of the city. The goal was not only to improve connections between neighborhoods, but also to integrate the community, given the intangible boundaries created by past gang rivalries.

Puente El Mirador is the western linear bridge that connects La Francia and Andalucía and offers a panoramic view to the valley, being an open large space, it increases the feeling of security when walking by. Puente de la Paz is the curvilinear bridge in the East that connects Andalucía and Villa del Socorro, surrounded by trees that rise from the ravine below. The special thing about this bridge is the bench along its railing, that serves as a resting place for casual encounters. The western entrance to the bridge is built around a preserved tree, requested by the neighbors during the participatory design meetings.

Impact on the Community

Although Medellín has rebranded its image worldwide and nation-wide, statistical data tells a different story. The homicide rate, cri-

me, and a high level of conflict is still present in the poorest comunas (11). Some critics state that Medellín's 'social urbanism' policies created 'territories of exception' because only some poor areas were included in the Integrated Urban Projects, whereas other areas were left without intervention (12).

The positive impact of the projects is often limited to the immediate surrounding area and perceptions of inequality have increased from thirty-nine percent in 2013 to forty-seven percent in 2014 (13), although access to public services has improved for many.

The real transformation has been the impact these projects had on the community. Most of the inhabitants of these areas refer to the interventions in a positive manner and perceive a higher sense of safety in their neighborhood. The most praised projects are the MetroCable, shortening travel distances from one hour to fifteen minutes, followed by the library parks, which gave access to internet and knowledge to those systematically isolated from it. Residents also highlight how the streets connecting the MetroCable station with the library parks have flourished with commercial activities, strengthening (creating in some comunas) local economy.

Notably, the opinion of the inhabitants of the comuna varies according to the part of the comuna they live in. Since most of the major interventions were clustered (The MetroCable closely linked with the Library Park, which is next to the Educational Facility) the residents of the deeper areas of the comunas have not been directly affected by these projects, therefore their opinion is of indifference or even of rejection.

In conclusion, although the government received severe criticism stating that this rebranding of the city was more a political strategy than a social one, it can be acknowledged that for the first time in modern history informal settlements in Medellín were a priority. Finally escaping the shadow of neglect triggered community empowerment, comunas like comuna 13 became a tourist hub not because of a top-down plan, but because the inhabitants themselves started creating attractions to capture tourism. Attractions such as graffiti, public per-



20th century modernist apartment building typology

formances, local cuisine, viewing platforms, guided tours, etc. They made the best out of this rebranding and displayed their "informal" neighborhood with pride.

The city is now enjoyed, not endured.

Authors

- Mebrure Ezgi Ismar (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)
- Raveena Gadkar (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)
- Selcen Fidan (RWTH Aachen University, Chair and Institute of Urban Design, Faculty of Architecture, summer semester 2023)

References

1. Fajardo, Sergio (2010). "La cultura como eje de la transformación social de Medellín". III Jornada profesional de la red de bibliotecas del instituto cervantes: "Desarrollo, sostenibilidad y cultura: el papel social de las bibliotecas", "Culture as the axis of social transformation in Medellín". III Professional Conference of the Cervantes Institute Library Network: "Development, sustainability and culture: the social role of libraries". Public conference. Original language: Spanish, translated by authors.

2. Fajardo, Sergio (2010). "La cultura como

eje de la transformación social de Medellín". III Jornada profesional de la red de bibliotecas del instituto cervantes: "Desarrollo, sostenibilidad y cultura: el papel social de las bibliotecas", "Culture as the axis of social transformation in Medellín". III Professional Conference of the Cervantes Institute Library Network: "Development, sustainability and culture: the social role of libraries". Public conference. Original language: Spanish, translated by authors.

3. Department of Human Settlement's NUSP (2015) "NUSP (National Upgrading Support Programme)", Centre for Affordable Housing Finance Africa.

4. Fajardo, Sergio (2010). "La cultura como eje de la transformación social de Medellín". III Jornada profesional de la red de bibliotecas del instituto cervantes: "Desarrollo, sostenibilidad y cultura: el papel social de las bibliotecas", "Culture as the axis of social transformation in Medellín". III Professional Conference of the Cervantes Institute Library Network: "Development, sustainability and culture: the social role of libraries". Public conference. Original language: Spanish, translated by authors.

5. Castro, L.: Echeverri, A. (2011). "Bogotá and Medellín, architecture and politics". Architectural Design, 81(3), pp. 96-103.

6. Harindranath, A. (2018). Medellín's doomed library: The indefinite closure of Biblioteca. The Bogota Post. Retrieved, May 21, 2019

7. Samper, J. (2014). Physical space and its role in the production and reproduction of violence in the "slum wars" in Medellín, Colombia (1970s-2013). [Doctoral dissertation, Massachusetts Institute of Technology].

8. Capillé, C., & Reiss, C. (2019). Formas de mobilidade, visibilidade e poder em Medellín: Metrocable e Parques-Biblioteca. Bitácora Urbano Territorial, 29(3), 79-90. Original language: Portuguese, translated by authors.

9. Capillé, C., & Reiss, C. (2019). Formas de mobilidade, visibilidade e poder em Medellín: Metrocable e Parques-Biblioteca. Bitácora Urbano Territorial, 29(3), 79-90. Original language: Portuguese, translated by authors.

10. Hylton, F. (2007). Medellín's makeover. New Left Review, 44, pp. 71-89.

11. Sotomayor, L. (2015). Planning through Spaces of Exception: Socio-Spatial Inequality, Violence and the Emergence of Social Urbanism in Medellín (2004-2011). [Doctoral

dissertation, University of Toronto].

12. Reimerink, L. (2018). Planners and the pride factor: The case of the electric escalator in Medellín. Bulletin of Latin American Research, 37(2), 191-205.

13. Medellín Cómo Vamos. (2014). Pobreza y desigualdad. Programa Medellín Cómo Vamos: Medellín. <http://www.medellincomovamos.org/download/informe-de-percepcion-ciudadana-2014-pobreza-y-desigualdad>

Deluchi, C. (2020). The politics of social architecture in Medellín: A reading of the Parque Biblioteca España. Political Matters, Interstices.

Heinrichs, D., & Bernet, J. S. (2011-2012). Public transport, informal settlements and accessibility: The case of aerial cable cars in Medellín, Colombia. Trialog, 110, 38-43.

Kapstein, P., & Ramírez, M. J. (2016). Regeneración urbana integrada: Proyectos de acupuntura en Medellín. Revistarquis.

Maclean Kate, (2015). "Medellín: The Most Violent City in the World", Social Urbanism and the politics of violence: The Medellín Miracle. Pp 29-52

Metro de Medellín. (2023). "Memoria de Sostenibilidad 2022": pp 40.

Mihoko M, Okami S., Nakamura F., et. al (2019) "Impact of aerial cable car in low-income area in Medellín, Colombia" Transportation Research Procedia 48 (2020) pp. 3264–3282

Colen Ladeia Torrens J (2019), "The formation of favorable environments for urban experimentation: contextual dynamics and transformative capacities in Bristol and Medellín", [Doctoral dissertation, University of Sheffield].

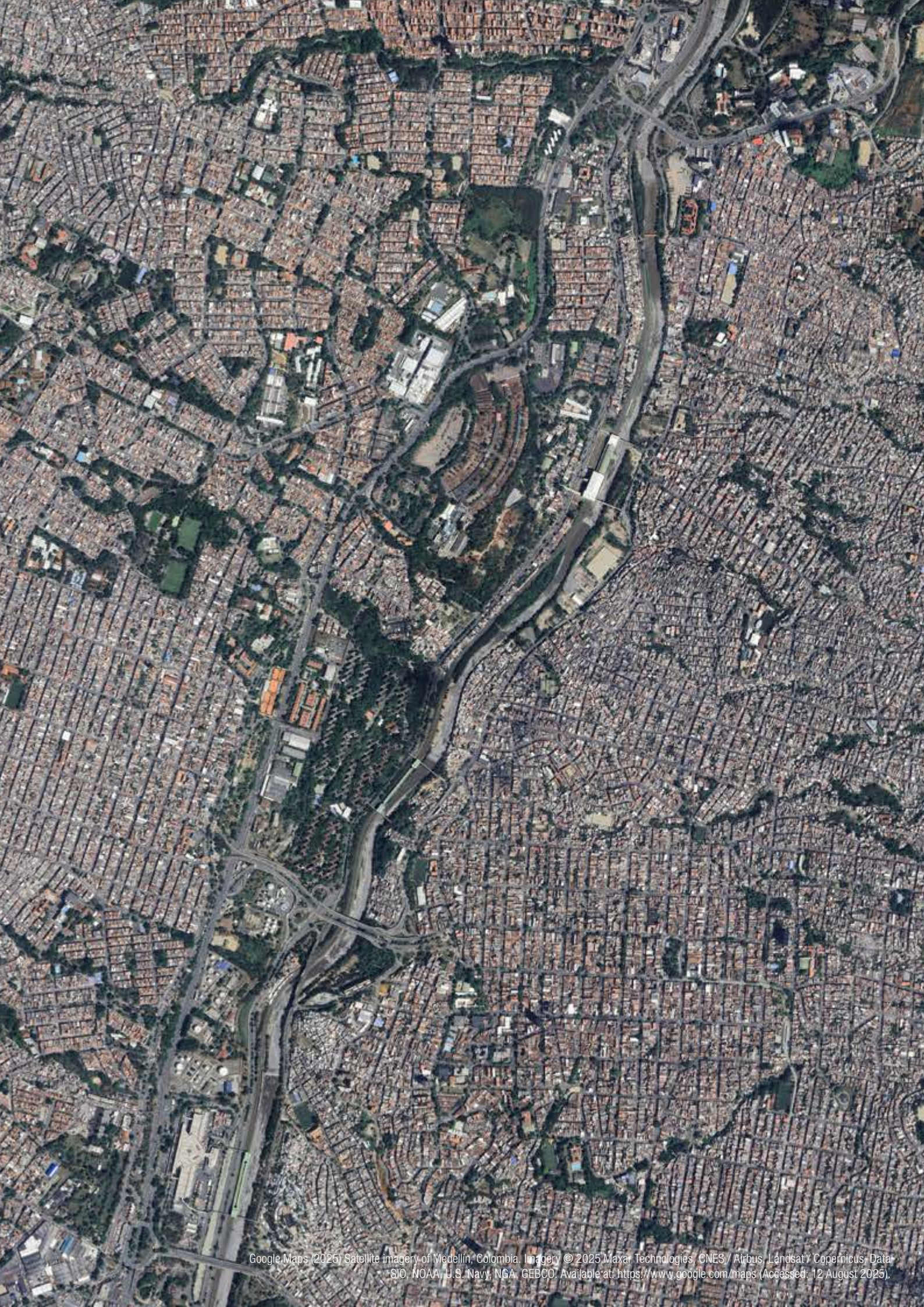
Resources for Drawing Development: The Metabolism of Cities Data Hub. (n.d.). Manzanas que conforman los barrios de Medellín. <https://data.metabolismofcities.org/>

Datos Abiertos Medellín. (n.d.). Datos Abiertos Medellín. Gobierno de Colombia. Retrieved from <https://medata.gov.co/> and <https://www.medellin.gov.co/es/transparencia/medata/>

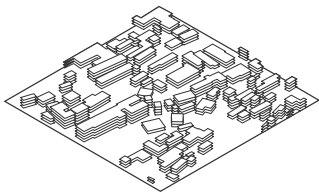
GHSL - Global Human Settlement Layer. (n.d.). Global Human Settlement Layer. European Commission. Retrieved from <https://human-settlement.emergency.copernicus.eu/>

Metro de Medellín. (2023). Metro de Medellín. Retrieved from [grado/ Global IML Building Footprints. Microsoft. Retrieved from <https://github.com/microsoft/GlobalMLBuildingFootprints>](https://www.metrodemedellin.gov.co/usuarios/sistema-inte-</p></div><div data-bbox=)

Medellin



Structural Density



Building Typology



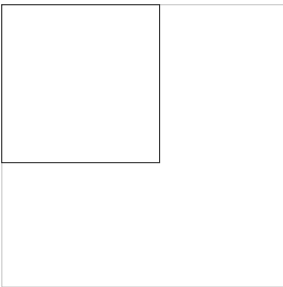
Street Network



Network Configuration



Built Area:
12440,55 square meters
31,1 percent



Open Space:
68,9 percent



Tracing Locality in Modernity

İzmir, Alsancak, Kordon

İrem Bozdaglı, Cemre Bingöl



©Kanbur, Oktay

During the 19th century, İzmir, one of the important port cities of Turkey, hosted Levantines who were foreign merchants. Today, the remaining historic Levantine architecture is in Alsancak area of the city. Throughout history, Alsancak’s promenade called Kordon and its silhouette has been highly affected by political changes, architectural trends, historical incidents and lacking preservation of historical architecture. In the **Alsancak** area, the contiguous modernist apartment blocks along Kordon not only form a wall, but also hide the local streets.

History

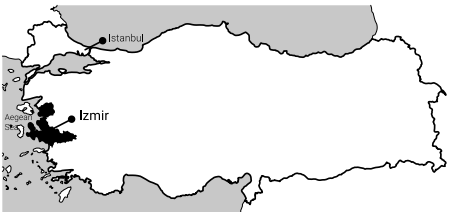
İzmir, formerly known as Smyrna, has a history that dates to ancient times. Due to its attractive location, which provided opportunities for trade via maritime routes, the city was home to many different cultures and communities: including the Hittites, Lydians, Ionians, Ancient Greeks; later, the Roman Empire, the Byzantine Empire and the Ottoman Empire.(9) Especially after the seventeenth century, the city experienced a significant growth and İzmir transformed into a cosmopolitan port and trade city. Trading opportunities attracted foreign merchants and as a result, they began to create a new community in İzmir. Levantines, who originally from Europe, were the

most known among them. With the construction of the quay in 1868, new houses started to be built towards the sea and a **promenade (Kordon)** was constructed.(1) In the late 1890s, Levantines settled in those **neighborhoods** with their families and traded in the nearby port area. Apart from Levantines, there were also Greek, Turkish and Jewish communities.(8) They formed their own neighborhoods as different social groups.

The social diversity led to interaction in the context of architecture as well. Levantines introduced their own culture and housing style to the place where they settled. As a result, a mixed housing typology emer-

ged in İzmir. In literature this style is called **Chios or İzmir style**. It can be described as a combination of Neoclassical style with Italian influence.(1) It was also influenced by the Turkish traditional housing elements like timber cantilever balconies called “**cumba**”. These houses were inhabited mostly by Levantines and Greeks, which usually engaged in trade and socio-economically more powerful than the other social groups. (10) İzmir, like many other cities, was severely affected by the First World War. As a result, houses were destroyed and abandoned. What has survived of these Chios-style houses has been subjected to a transformative process of adaptive re-use.

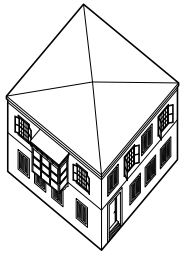
In the post Second World War period, some Levantine Houses are demolished and replaced with **eight to nine story height condominiums** due to deficiencies in urban policies and major political changes.(9) The main motivation for moving to tall buildings was to take advantage of the new development potential. New regulations allowed more height and individual ownership, leading to a rapid increase in the number of multi-story apartment blocks.(5) This transformation did not only take place in Kordon, but also affected the silhouette of the city center.



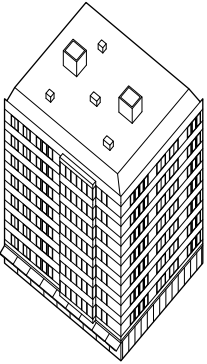
İzmir, Türkiye overview plan



Alsancak, İzmir overview plan



19th century Chios-Izmir style housing typology



20th century modernist apartment building typology

Rules and Regulations

The Saad plan in the year 1876 played a significant role in shaping the new quay, new commercial street and the Levantine houses in the Alsancak region.(12) There weren’t any changes in the city silhouette until the beginning of the twentieth century. The second turning point was the First World War and the establishment of the Republic. The main vision of the Republic was the modernization of all areas of life.(16) This approach had a negative impact on the architectural heritage.

The turning point of the transition from single-family houses to apartment buildings in İzmir was with the Condominium Law(15) of 1965. Before this law, buildings could only have a single owner, but the new legislation allowed individual ownership of each flat. This made it much easier for individuals to own property and led to the growth of high-rise condominiums. Due to the lower costs of owning an apartment, individuals showed high demand to high-rise condo-

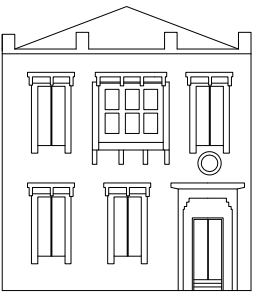


Kordon’s silhouette transformation from 19th century to 21st century

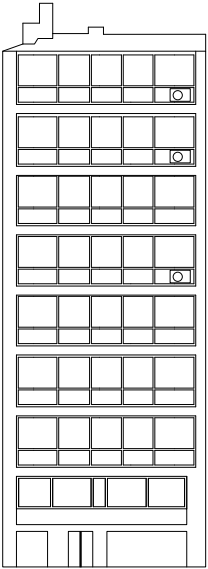
miniums, and it led to the growth of high story buildings. As a result, the buildings of the 1885-1923 period in the Alsancak region suffered intense destruction during the 1960s and disappeared without even being recorded.(1) Identification of buildings that needed to be preserved first began in the late 1970s. Fortunately, the law for the protection of historical heritage was accepted in 1983.(13) This way the protection of Levantine houses became legally compulsory, and it provided the preservation of the architectural heritage of Alsancak.

Development

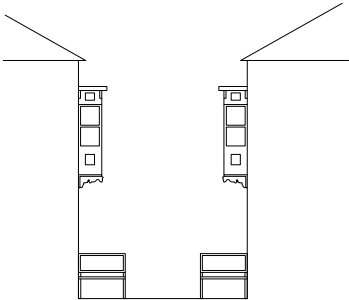
At first, the morphology of the city concentrated on the **coastline**. The social and commercial center gravitated towards the **Frank Street** to the promenade(10). Through the history, the city experienced many transformations due to natural disasters like earthquakes and fires.(14) During 1925-1933, new urban plan was completed, and the city’s image started to change. In 1939, Architect Le Corbusier was invited for creating a new master plan for the city’s future vision. He prepared master plan sketches in 1949 with the concept of green city.(11) Le Corbusier wanted to increase the green areas and presented the idea regarding the silhouette near the promenade. However, his suggestions were rejected(11) and could not play a role in the development of İzmir(2). The new architecture and planning approaches in the city were still highly influenced by the Modernist movement. The **condominiums through the Kordon** also show that influence. Many single-family houses like Chios-Izmir style houses were destroyed and replaced by modernist high-rises. Internal and external migration has also been a driver of this shift. Moreover, it became popular to live in an apartment building, which had a major impact on the development of the city.



Typical double storey family house



Typical double storey family house



Typical apartment building typology



Infrastructure

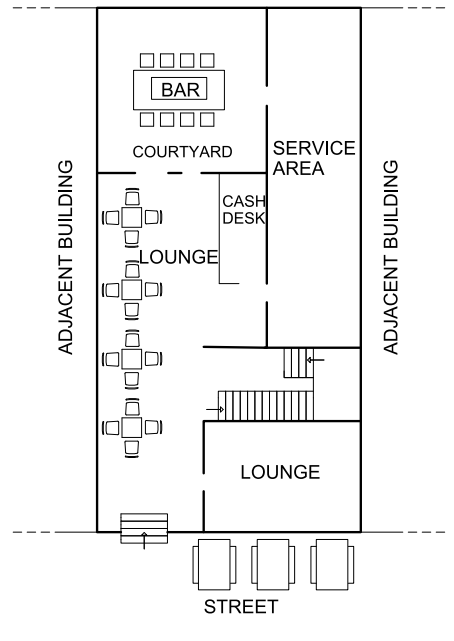
The form of the city remained relatively unchanged until the end of the 19th century. The general transportation network in the city and the plots have been preserved (2). From 1925 to the 1930s, completely new infrastructure was implemented. Instead of organic streets, more geometric direct connections were designed. **New public green spaces** were linked to **wide boulevards**.

The Levantine houses were located parallel to the promenade in Kordon. This area was between the port and **the train station** in the nineteenth century. (17) After the migration in the twentieth century, the surroundings of this residential area grew without any control. Therefore, the shift to living in apartment buildings has emerged. Because of the late promulgation of legislation on the protection of cultural assets including Levantine houses, in the 1970s,

most of the buildings were demolished to use the area for multi-story buildings. The Levantine houses, which survived, suffered a functional change from residential to entertainment. (6)

Public Space

Since the historic Frank Street was changed with the new plan, some parts of it are called today **Kıbrıs Şehitleri Street**. This street is in Alsancak where it is the most popular social, economic, and cultural center in İzmir(10). Kordon is directly connected to Kıbrıs Şehitleri Street with mostly narrow pedestrian streets. Some of those streets are **Bornova Street, Muzaffer İzgü Street, Gazi Kadınlar Street, Cumbalı Street** where some of the historical İzmir houses are located. The area's function has completely changed from residential to commercial due to its location and the change of the building's owners. After the 1950s, Turkish taverns became popular especially in İzmir. These streets have been transformed over the years into tavern and pub streets. Many of the İzmir style houses have been re-functioning as meeting places. The importance of culinary culture and need for nightlife spots led to this reuse. Recent research on İzmir houses shows that almost all these buildings in the area have changed their original functions to bar, tavern or café. (3) Tables and chairs along the streets, creating a social space for citizens, show the **new character of the streets**.



21st century adapted planning typology with bar function

Programs

On parts of Kıbrıs Şehitleri Street, traditional İzmir houses can be observed. The plan typologies of the İzmir houses are showing similarities, but the facades are different from each other. This difference in the facade can be seen in all the details, and decorations. Since the facades of the buildings were the main elements of showing prestige, there is variety in terms of facade elements. Generally, houses can be entered from the street into the building by taking five steps of stairs to the ground floor. The **entrance door** is generally a double-winged door in İzmir houses.(3) It usually opens to a space called sofa. The main room and side room can be entered from sofa space. In sofa there is usually a timber staircase that allows accessibility to second floor (17). From the main room, a service area and a courtyard can be entered.

The functions of the areas in the plan have been adapted as follows, with the new bar function: Side room and main room usually serves as bar lounge. The main bar space is the courtyard which is a semi-open space. The bar counter is located here and there are a lot of seating areas. Since smoking is very common (18), this area has been re-designed as the main space rather than the main room.

Conclusion

The city's image has been highly affected not only by political changes and trends, but also by unfortunate events like wars, fires and earthquakes. The skyline of İzmir is nowadays dominated by 40-50 story to-



Bar, tavern streets

wers. Today, the trend in the mid-20th century to build apartment blocks of 8-9 story has been replaced by towers of nearly 40 story. Conservation is not only to preserve historical houses such as these Levantine houses, but also to consider their relationship with their surroundings. Preserving the relationship between streets as public areas and the built area can be achieved by following an urban design strategy that considers all scales and the connections with each other.

References

1. Ballice, Gülnur (2006): Evaluation of the changes and transformations of the architecture of housing in İzmir within the 20th century with general emphasis on urban scale and in the case of Waterfront area (Dissertation, The Graduate School of Natural and Applied Sciences) İzmir, Dokuz Eylül University, pp.61-77.
2. Gürhan, İlayda (2022): A study on 19th century İzmir Levantines and their effects on urban morphology (Master's thesis, Institute of Science) Ankara, Baskent University, pp. 26-59.
3. Gazi, Aylin / Boduroglu, Elvin (2015): "Effects of Functional Change on Historical Houses: The example of "Alsancak Levantine Houses"". In: Megaron, Vol. 10(1), pp.57-65.
4. Akkurt, Humeyra Birol (2004): Consideration of spatial identity of levantine residences in Bornova and Buca, in 19th century

- westernization process (Dissertation, The Graduate School of Natural and Applied Sciences) İzmir, Dokuz Eylül University, pp. 34-58.
5. Alpaslan, Halil Ibrahim (2020): "Reading the Transformation of the City from a Parcel: The 150-Year History of Parcel 1201/20 at Kordon of İzmir". In: Megaron, Vol 15(2), pp. 217-229.
6. Narin, Salih (2012): The laventen's of İzmir and their cultural effects (Master's thesis, Institute of Social Sciences) Diyarbakir, Dicle University, pp. 102.
7. Photos by Oktay Kanbur, İzmir
8. Alpaslan, H. Ibrahim (2012): "Effects of Socio-Economic Changes in Communities on the Settlement Pattern in İzmir during the Ottoman Period". In: Aegean Geographical Journal, Vol 21 (2), pp. 25-35.
9. Yılmaz, Fikret / Yetkin, Sabri (2002): İzmir Kent Tarihi (İzmir Liseleri Sertifikalı Kent Tarihi Konferansları Projesi) İzmir, pp. 22-74.
10. Ahmet Pirstina City Archive and Museum (APIKAM). İzmir Levantines (Exhibition Catalogue) (2020). <https://www.apikam.org.tr/tr/AltKitaplikListele/7>, Date of Access: 24.07.24, pp. 24-35.
11. Bilsel, Cana (2009): "İzmir' de Cumhuriyet Dönemi planlaması (1923-1965): 20. Yüzyıl kentsel mirası". In Ege Mimarlık Dergisi, 71 (4), pp. 12-17. <https://www.egemimarlik.org/cevirim-ici-okuma/71/1081>, Date of Access: 24.07.2024.
12. Konak Belediyesi (2017): İzmir İli, Konak İlcesi, Akinci Mahallesi, 369 Ada,

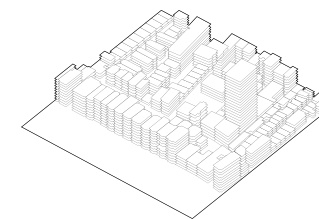


Photo by Oktay Kanbur, İzmir

- 38 Parsele İliskin 1/1000 Olçekli Koruma Amaçlı Revizyon İmar Planı Değişikliği ve 1/500 Olçekli Yerleşim Planı Değişikliği Plan Açıklama Raporu. Etud Proje Mudurluğu, İzmir, pp. 7. https://www.konak.bel.tr/files/plan/369-ada-38p-plan-aciklama-raporupdf_04-04-2018_10-08-19.pdf, Date of Access: 05.08.2024.
13. Resmi Gazete (1983): Kultur ve Tabiat Varliklarini Koruma Kanunu. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=2863&MevzuatTur=1&MevzuatTertip=5>, Date of Access: 05.08.2024.
14. Akyuz Levi, Eti / Gens, Umut Devrim (2018): "19. Yüzyıldan Günümüze İzmir'in Morfolojisindeki Değişimde Tarihi Dokuların Yeri". In: "DeğişKent" Değişen Kent, Mekan ve Bicim, Türkiye Kentsel Morfoloji Arastırma Ağı II. Kentsel Morfoloji Sempozyumu, pp. 471-492. <https://kentselmorfolojisem-pozyumu2018.wordpress.com/>, Date of Access: 05.08.2024.
15. Resmi Gazete (1965): Kat Mülkiyeti Kanunu. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=634&MevzuatTur=1&MevzuatTertip=5>, Date of Access: 05.08.2024.
16. Polat, Yeliz / Kartal, Meryem (2018): "Self-Enclosed Dwelling Production in the Context of Modernization in Turkey Since the Foundation of Turkish Republic". In: Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, Vol 10 (4), pp. 63-75.
17. Cıkis, Seniz (2009): "Nineteenth Century İzmir Houses as 'Modern': Formal and Conceptual Overlappings". In: METU Journal of the Faculty of Architecture, Vol 26 (2), pp. 211-233. DOI:10.4305/METU.JFA.2009.2.11
18. Turan, Pakize Ayse / Ergör, Gül / Turan, Onur / Doganay, Sinem / Kilinc, Oguz (2014): "Smoking related behaviours in İzmir". In: Journal of Tuberculosis and Thorax, Vol 62(2), pp. 137-146. DOI:10.5578/tt.6132

İzmir, Alsancak, Kordon

Structural Density
Floor Area Ratio: 2.56



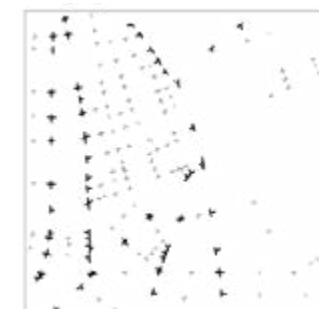
Building Typology
Perimeter block development



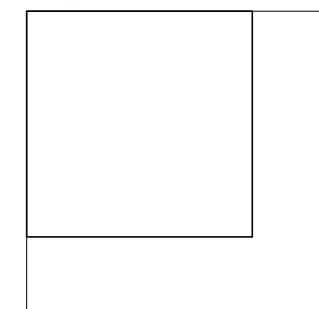
Street Network
Unregular Grid
3,844.8 m



Network Configuration
164 intersections,
58 accesses



Built Area:
21921 square meters
54,8 percent



Open Space:
20,4 percent



Hyderabad Unveiled: A Tale of Two Worlds

Nitisha Srikurmam, Liyuan Ma



©Kanuri, K. (2019)

The dynamic cityscape of Hyderabad, where history intertwines with modernity, journey through the contrasting neighborhoods of the ancient Qutb Shahi Tombs and the lively Film Nagar. Discover the intertwined harmony of tradition and innovation as we unravel the captivating tale of these two worlds coming together.

Introduction

Hyderabad, located on the Deccan Plateau, is one of the most populous cities in southern India with more than 10 million people. The city is a major centre embodies a dynamic urban blend of historic landmarks, and the bustling cinematic district. The Qutb Shahi Tombs, share the stage with Film Nagar, a lively cinematic district. This union is not a clash, but it weaves together iconic structures and modern creativity. Hyderabad’s narrative unfolds as an intriguing tale, a cityscape where the echoes of heritage seamlessly mingle with the beats of urban advancement.

Delving into the city’s diverse themes reveals a captivating narrative for those intrigued by urban environments. Heritage conservation, sustainable practices, mixed-use development, and technological integration create a rich tapestry. Hyderabad’s story becomes a beacon, offering insights into the delicate balance between historical legacies and contemporary needs. Each theme echoes in the city’s urban fabric, forming a roadmap for those exploring the evolution of urban spaces.

Old and New Neighbourhoods

“How does the ancient allure of Qutb Shahi Tombs converse with the modern vibrancy of Film Nagar?” This question forms the crux of our exploration into the contrasting yet interconnected neighbourhoods of Hyderabad. Hypotheses abound as we delve into the juxtaposition of these two worlds.



Could it be that the historical gravitas of the Qutb Shahi Tombs complements the dynamic energy of Film Nagar, creating a unique synergy between tradition and innovation? Or perhaps, the modernity of Film Nagar serves as a backdrop against which the timeless elegance of the Qutb Shahi Tombs shines even brighter?

This exploration reveals the possibilities when ancient heritage meets contemporary vibrancy.

History

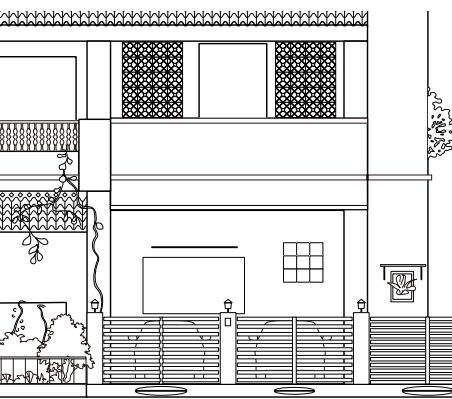
The historical evolution of these areas tells a tale of two worlds colliding. Film Nagar, born in the 1950s, resonates with the echoes of legendary filmmakers drawn to its conducive film production environment. It has evolved into a vibrant cinematic district, a cornerstone in India’s cinematic history. On the other hand, the Qutb Shahi Tombs area, dating back to the 16th and 17th centuries, echoes the grandeur of the Qutb Shahi dynasty. These tombs, adorned with intricate stone carvings and surrounded by landscaped gardens, embody Hyderabad’s rich cultural heritage.

Analysing this historical tapestry reveals not just stories of the past but a city’s ability to embrace divergent narratives. Film Nagar’s growth is driven by the demands of the entertainment sector, establishing it as a

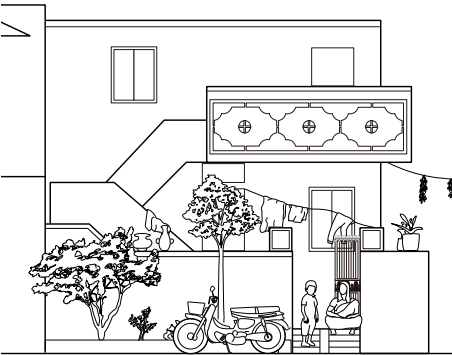
bustling hub for filmmaking. Meanwhile, the Qutb Shahi Tombs area, with meticulous attention to preservation, becomes a living testament to Hyderabad’s commitment to its roots.

Urban Character:

Fostered by the historical circumstances mentioned above, the two communities also display distinct characteristics. Film Nagar, a central hub for the film industry, unfolds with modern architectural marvels, expansive sound stages, and accessible public spaces. In contrast, Qutb Shahi Tombs showcases historical structures, with ground floors serving as entrances or public spaces, surrounded by lush gardens.



Film Nagar Area



Qutb Shahi Tombs Area

The deliberate emphasis on limited contemporary development underscores the city’s commitment to preserving its rich heritage. This distinction in urban characteristics provides a basis for critically examining the relationship between Qutb Shahi Tombs and Film Nagar. Hyderabad’s streets illustrate how historical significance and modern development coexist, shaping the city’s unique identity. This blending of contrasting elements highlights Hyderabad’s approach to balancing preservation with progress, showcasing the city’s ability to integrate the

old and the new in its urban landscape.

Development

The development in both areas, while differing significantly, aligns with their unique historical, cultural, and functional contexts. Film Nagar, propelled by the Telugu film industry, witnesses rapid commercial growth and infrastructure development. Film studios, production houses, post-production facilities, and modern equipment create a thriving cinematic epicenter. Simultaneously, the Qutb Shahi Tombs area prioritizes heritage conservation, focusing on preserving historical structures and enhancing the user experience through pathways, information centres, and landscaping.

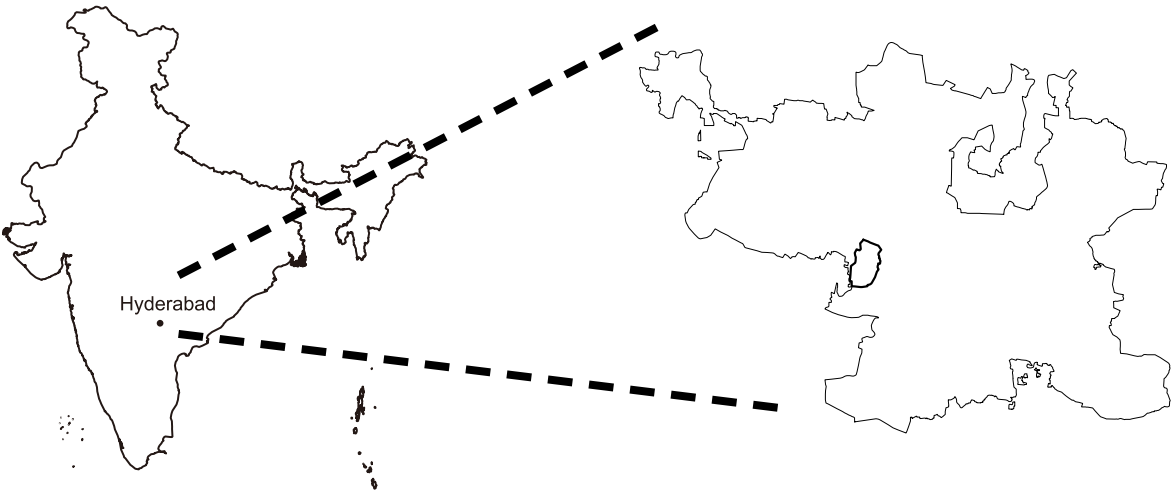
The development trajectory in these areas, though significantly different, aligns seamlessly with their unique historical, cultural, and functional contexts. Film Nagar has developed into the hub of Tollywood, catering to the needs of the entertainment industry. In contrast, the Qutb Shahi Tombs area is maintained as a significant historical site, reflecting a dedicated effort towards preservation. This duality reflects Hyderabad’s commitment to adapting development strategies that honour its multifaceted identity.

Transportation Infrastructure

The web of pathways and streets in both neighbourhoods reveals an intricate maze catering to a blend of vehicular and pedestrian activities. Film Nagar, with its wider roads designed for film production, stands in stark contrast to the Qutb Shahi Tomb area, preserving narrower streets with historical significance. The existing street hierarchy in Qutb Shahi Tomb area establishes distinct levels of visibility and seclusion, emphasizing pedestrian movement and maintaining historical context.

Based on this road network, public transportation, represented by buses and autos, is more prevalent in the Qutb Shahi Tomb area. Conversely, the Film Nagar area relies heavily on private vehicles like cars and trucks, establishing a distinct contrast in transportation preferences. Despite this divergence, both areas share a common character of dominant role of using motorcycles and the auto rickshaw.

This analysis of transportation infrastructure goes beyond the physical layout of streets.



It becomes a narrative of urban planning choices, where the city’s historical character and contemporary needs are delicately balanced. Hyderabad’s streets have become more than pathways; they reflect the city’s commitment to preserving its history while embracing progress.

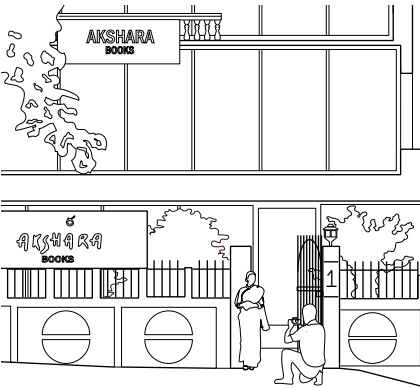


Public Space

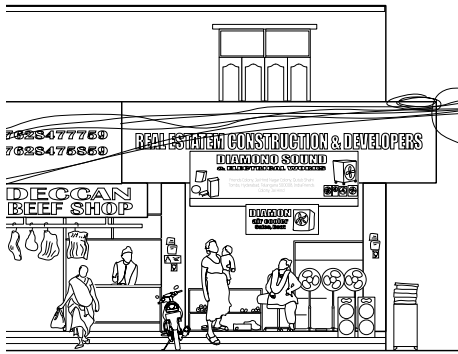
In addition to transportation preferences, the distinction between the Qutub Shahi Tombs area and the Film Nagar area is becoming even more pronounced when considering the availability of public space. Public space in Qutub Shahi Tombs area and Film Nagar becomes a study in spatial form and atmosphere. Due to the enormous historical density the Qutub Shahi Tombs area leaves almost no room for open spaces with natural vegetation. Only a few places of open public spaces arise exclusively in the vicinity of collectively used urban structures, such as water tanks, community centers, or schools. As a result, the streets become bustling hubs for both commercial transactions, small businesses, and social interactions. Street markets and vendors contribute to the vibrant neighborhood atmosphere.

On the other hand, Film Nagar boasts notable public green spaces like parks and gardens, creating a stark contrast. Street trees are more densely planted, providing a plaza for impromptu gatherings, discussions, and occasional film events. The atmosphere in Film Nagar’s public spaces becomes a reflection of its creative and vibrant identity.

This difference in public space availability not only distinguishes the two areas but also significantly influences their overall lifestyle preferences. The stark difference between the crowded streets of Qutub Shahi Tombs area and the green tranquility of Film Nagar’s parks tells a story of two atmospheres coexisting in Hyderabad’s urban landscape.



Film Nagar Area



Qutb Shahi Tombs Area

9. Demography

As a result of the previous factors of urban form and development history, the demographic structures of Qutub Shahi Tombs neighborhood and Film Nagar exhibit unique characteristics, each shaped by distinct historical, cultural, and economic factors. The historical significance and architectural heritage of Qutub Shahi Tombs attracts a diverse demographic, creating a dynamic and inclusive community. Families, students, and professionals blend in a mix of traditional and modern influences, reflecting the evolving nature of the neighborhood.

Contrastingly, Film Nagar’s demography is heavily influenced by the entertainment industry. Professionals in the film sector, including actors, directors, and crew members, shape the neighborhood’s cultural landscape. The age distribution in Film Nagar leans towards a working-age population, a demographic unique to the needs and preferences of those associated with the entertainment sector.

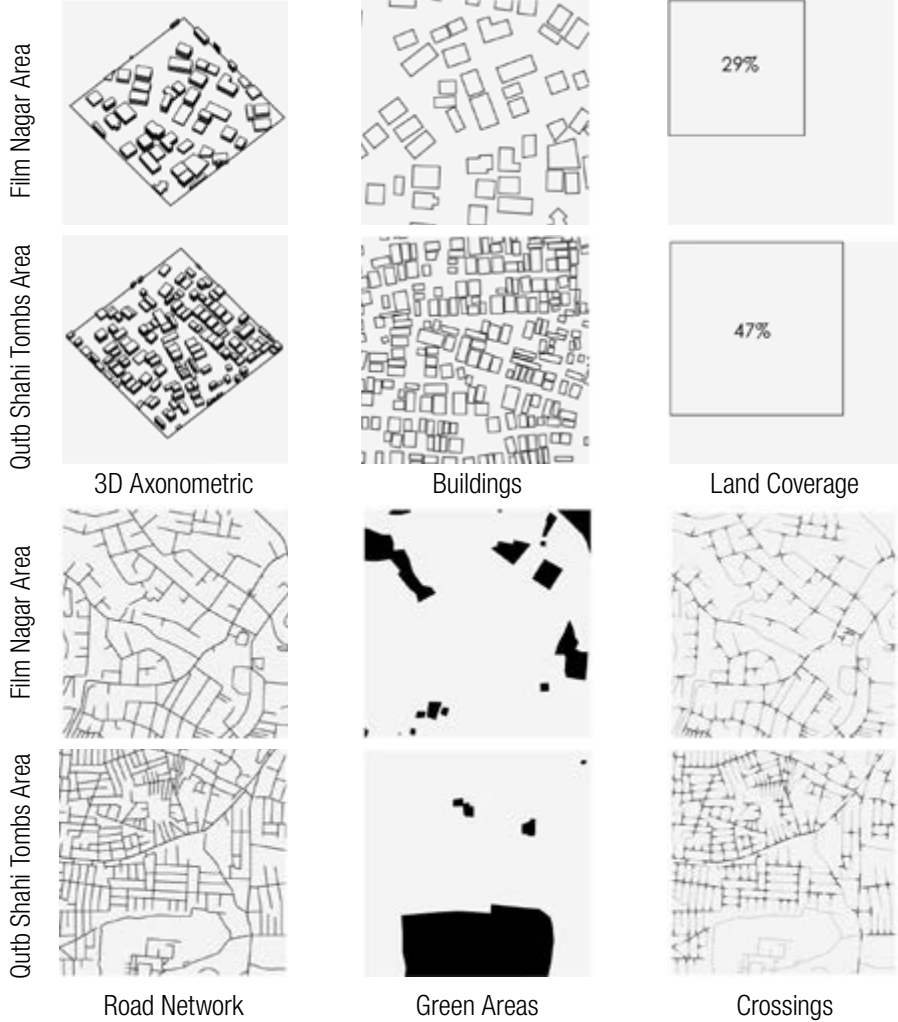
Examining these demographic disparities, the contrast between these two Hyderabad neighborhoods extends beyond spatial form to encompass social and cultural aspects. Understanding these demographic differences becomes essential to unravel the diverse social fabric of these two Hyderabad neighborhoods.

It’s not just about numbers but a journey into the lives and stories that shape each community, from the traditional roots of Qutub Shahi Tombs to the glamour and dynamism of Film Nagar.

Urban Particularity

Navigating through Hyderabad’s urban landscape unveils a captivating interplay between its historic and modern neighborhoods. The Qutb Shahi Tombs exude an aura of ancient grandeur, while Film Nagar pulsates with contemporary vibrancy. Yet, beyond the visible contrasts in history, development, infrastructure, public space, and demography lies a profound message that defines the essence of the city.

At its core, Hyderabad embodies an inclusive culture that transcends physical and demographic disparities. This inclusive ethos serves as the unifying force, fostering harm-



ony and coexistence among the city’s diverse communities. Despite the disparities in history and development, the city’s streets resonate with a mosaic of traditions, languages, and lifestyles. It’s a testament to Hyderabad’s acceptance and open-mindedness that allows the old and the new to coalesce seamlessly.

As we delve deeper, it becomes evident that the essential message underlying Hyderabad’s urban particularity is its commitment to inclusivity. This commitment goes beyond mere tolerance; it celebrates diversity and embraces differences. In the bustling streets of Film Nagar and the serene surroundings of the Qutb Shahi Tombs, residents and visitors alike experience the richness of Hyderabad’s cultural tapestry.

In essence, Hyderabad’s urban landscape is not just a juxtaposition of old and new but a testament to the city’s inclusive spirit. It’s a reminder that progress and tradition need not be at odds; rather, they can complement each other in a harmonious dance of coexistence. In Hyderabad, the past informs the present, and the future is shaped by a collective celebration of diversity.

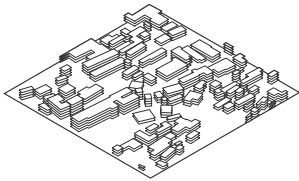
References

- Gmelch, G., Kuppinger, P., & Leonard, K. (2018). Hyderabad: Continuities and Transformations. In Urban life: Readings in the anthropology of the city (pp. 351–360). es-say, Waveland Press, Inc.
- Guest Blogger. (2018). Life In Old City Vis A Vis Hitech City. Whatsuplife. <https://www.whatsuplife.in/hyderabad/blog/old-city-new-city-hyderabad>
- Kamraju, M. (2018). „Changing Pattern of Urban Growth in Hyderabad City: A Study.“ The Journal Jai Maa Saraswati Gyandayni: An International Multidisciplinary E-journal, 3, 483-503.
- Urban Planning and Development. Forum for a Better Hyderabad. (n.d.). <http://hyderabadgreens.com/urban-planning-and-development/>
- Kanuri, K. (2019). Qutb Shahi Tombs from Film Nagar hill [Photograph]. Retrieved from https://commons.wikimedia.org/wiki/File:Qutb_Shahi_Tombs_from_Film_Nagar_hill_%282%29.jpg

Hyderabad



Structural Density
93 percent



Building Typology
Residential block



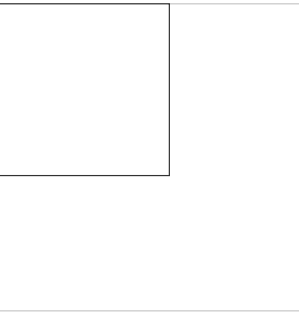
Street Network
Irregular grid:
38646m



Network Configuration
233 ; 280



Built Area:
37318,4 square meters
47 percent



Open Space:
5,4 percent



Reflection

Fabio Bayro Kaiser, Liliana Iuga, Verónica García Donoso, Caner Telli

The Transforming City Regions (TCR) research module reflects a comprehensive and innovative approach to urban planning education. By integrating traditional fieldwork with advanced digital tools such as Uuurble, it addresses the multifaceted challenges of urban transformation in a global context. Through detailed case studies from Münster, Naples, Medellín, Izmir and Hyderabad, the module addresses critical issues such as urban resilience, heritage conservation and social equity. These studies underscore the value of combining theoretical learning with practical application, fostering a nuanced understanding of how cities can manage rapid change while preserving their unique identities. This dual approach not only enhances students' analytical and methodological skills, but also provides actionable insights for policymakers and urban planners.

Still, traditional fieldwork remains essential for understanding the complexities of urban environments. Physical exploration allows students and researchers to engage directly with local communities, observe the nuances of spatial interactions, and experience the socio-cultural dynamics of a place. However, the limitations of on-site research, such as geographical and time constraints, are evident. Digital tools such as Uuurble complement these methods by providing continuous access to urban data and enabling the study of diverse sites beyond physical reach. This integration enriches the research process by providing a more comprehensive perspective that combines tactile observations with digital analysis.

The individual case studies in the Uuurble research module illustrate the transformative potential of combining on-site and digital research. In Münster, Uuurble enabled an in-depth examination of how gentrification challenges social justice in the Hansaviertel. Similarly, the platform's visualisation tools enriched the Naples study by revealing the spatial dynamics of the impact of tourism on the Quartieri Spagnoli. In Medellín, Uuurble helped contextualise the success of urban acupuncture projects such as the MetroCable, while in Izmir it supported a comparative analysis of heritage conservation poli-

cies. Finally, in Hyderabad, Uuurble enabled a detailed exploration of the tensions between modernisation and heritage conservation, highlighting the city's dual identities. These contributions demonstrate how digital tools can deepen insights and broaden the scope of urban research.

The integration of digital platforms such as Uuurble into urban research and education demonstrates promising outcomes. By democratising access to data and encouraging interdisciplinary collaboration, these tools equip future urban planners with the adaptability needed to meet evolving challenges. Digital platforms make it possible to analyse urban phenomena across a broader geographical and thematic spectrum, bridging gaps in traditional methodologies. For educators, the ability to combine local and distance learning enhances curriculum design and ensures that students are prepared to operate in an increasingly interconnected and complex world. This evolution underscores the need to embrace technology as an enabler rather than a replacement for hands-on exploration.

Looking ahead, the ideal approach to urban research and education is to harmonise field-based and digital methods. Rather than competing, these methods should be seen as complementary, each offering unique strengths and developing specific competences. Field research grounds students in the lived realities of urban environments, creating empathy and contextual understanding, while digital tools extend the reach and depth of analysis. This synergy not only broadens the geographic and thematic scope of research, but also enhances its impact by producing insights that are both locally grounded and globally relevant. By adopting this dual approach, the TCR research module sets a benchmark for innovative, inclusive and forward-looking urban research and education.

Impressum

Partner Universities and Team:

RWTH Aachen University

Fabio Bayro Kaiser, Liliana Iuga, Verônica Garcia Donoso, Caner Telli, Esther Padberg, Elif Ertemiz

Leibniz University Hannover

Ines Dobosic, Alkistis Thomidou

Students:

Yasmin Makki
Esther Padberg
Tabea Rückle

Mebrure Ezgi Ismar
Raveena Gadkar
Selcen Fidan

Ana Paulina Cabello Ocampo
Janet Ivonne Preciado Otero

İrem Bozdagli
Cemre Bingöl

Nitisha Srikurmam
Liyuan Ma

Partner Universities:

RWTH Aachen University

Leibniz University Hannover

Contacts:

RWTH Aachen University
Faculty of Architecture
Institute and Chair for Urban Design

Univ.-Prof. Dipl.-Ing. Christa Reicher

Wüllnerstraße 5b
52062 Aachen
Tel.: +49 241 80 95033
info@staedtebau.rwth-aachen.de
www.staedtebau.rwth-aachen.de

Email:

Fabio Bayro Kaiser:
bayrokaiser@staedtebau.rwth-aachen.de
Liliana Iuga:
iuga@staedtebau.rwth-aachen.de
Ines Dobosic:
dobosic@staedtebau.uni-hannover.de

Issue:

02 | 2026
Workflow 09
Aachen
DOI 10.18154/RWTH-2026-02882

Layout:

Elif Ertemiz

Cover Image:

The cover image was developed on basis of the Uuurble Cover Image developed by the Leibniz University Hannover

