



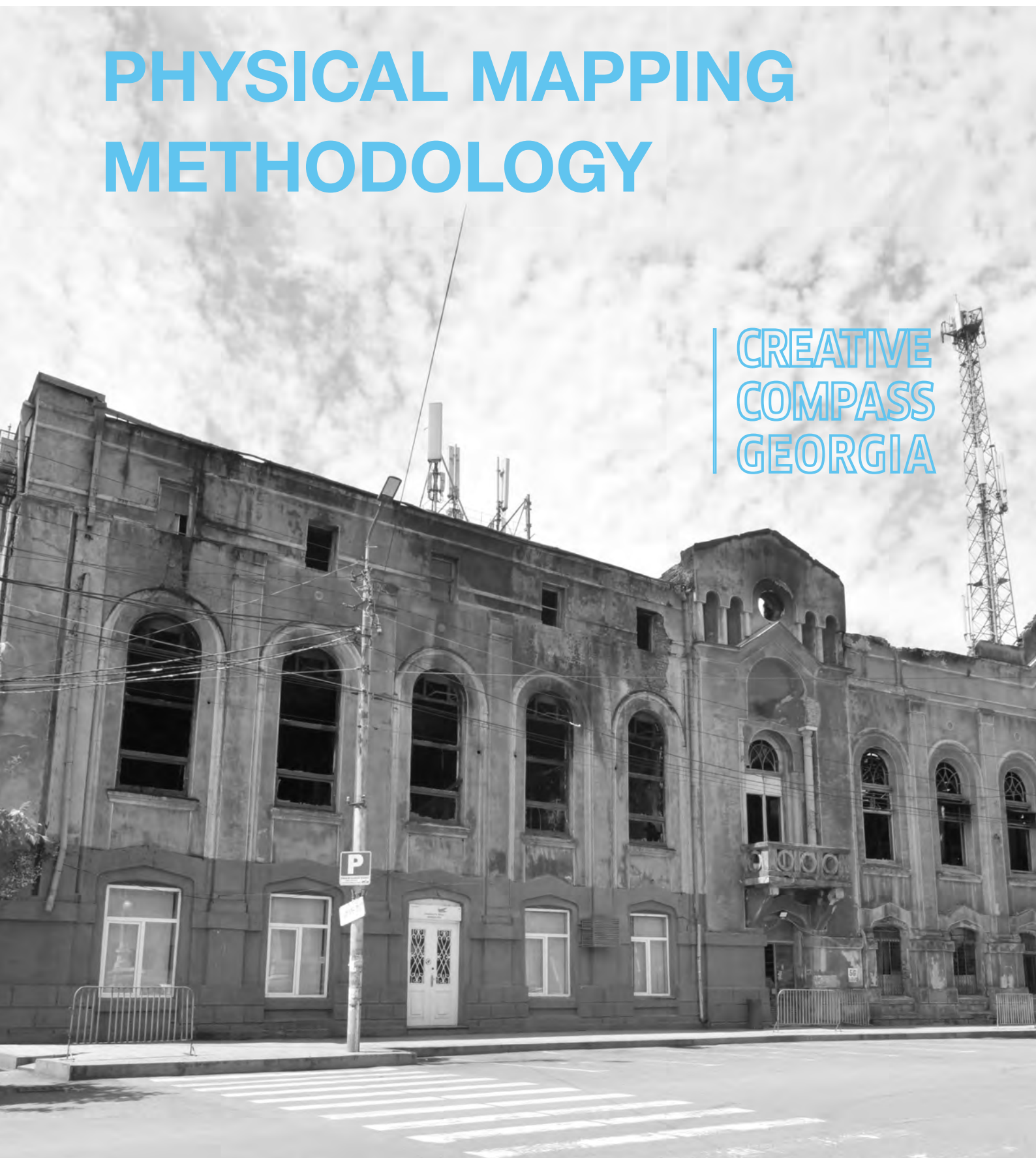
Funded by
the European Union



Co-funds and Implements

PHYSICAL MAPPING METHODOLOGY

CREATIVE
COMPASS
GEORGIA



Physical Mapping Methodology | Tbilisi | 2024

Created within the framework of the project “Creative Compass”

Authors:

Tamar Gachechiladze

Natalia Nebieridze

2024

This publication has been produced with the assistance of the European Union. Its contents are the sole responsibility of the project Creative Compass Georgia and do not necessarily reflect the views of the European Union.

ABSTRACT

*"Maps are engines of meaning, not mirrors of nature.
They make visible what is otherwise invisible."*

Dennis Wood

The history of cartography stretches across the ages, from the dawn of antiquity, flowing through the currents of time, as each era unfolds, following the ever-growing arc of human knowledge, shaped by discoveries and the triumphs of technology. Throughout history, cartography and mapmaking have played a pivotal role in shaping our perception and understanding of the world, guiding navigation, governance, and the preservation and collection of knowledge.

In the contemporary era, maps and cartography frequently serve as tools for interpreting, critically analyzing, and documenting everyday life. Visualizing spatial, material, and social connections, inscribing their significance onto maps, and deciphering their relation to specific places has become a methodological instrument in urban anthropology. There are myriad practices, interdisciplinary approaches, and techniques for mapmaking.

The first part of this paper will explore various cartographic methods, and historical meanings, and offer a brief history of the Soviet-era urban system and architecture. The second part is dedicated to the methodology, principles, tools, and guide to documenting physical infrastructure.

TABLE OF CONTENTS

Introduction.....5

Chapter 1

Cartography - A Brief Historical Overview of Mapmaking7

1.1. Short Historical Discourse.....7

1.2. The Purpose of Maps and How to Read Them8

1.3. Types of Maps.....9

1.4. Modern Technology and Digital Maps.....9

Chapter 2

The Soviet System and the Current Landscape10

2.1. Reflection on the Past.....10

2.2. Soviet City Urban Structure and Architecture.....11

2.3. Transition from Socialism to a Market Economy.....12

2.4. Future Perspective – Transformation with the Preservation of Memory.....13

2.5. The Importance of Preservation and Adaptive Reuse.....14

Chapter 3

Physical Mapping methodology.....20

3.1. The Research Process and Its Key Stages: Mobilizing Information and Fieldwork.....20

3.2. Stage I – Mobilization of the Information20

3.3. Stage II – Fieldwork.....22

3.4. Categorizing Infrastructure for Repurposing.....24

Chapter 4

Database and Physical Infrastructure Integration.....27

4.1. Digitization and Collection of Materials.....27

4.2. Using the Working Files.....28

Summary.....29

Terms.....31

Literature32

What do we mean when we refer to the creative industries?.....33

INTRODUCTION

After the collapse of the Soviet Union, the delicate network of social, cultural, and economic ties unraveled, leaving Georgia's cities and regions with the silent ghosts of a vanished world. Buildings once vibrant with purpose—cultural centers, cinemas, sports halls, and industrial sites—now stand as empty shells, their voices are stilled. In monofunctional regions, these spaces, once woven into the fabric of everyday life, found no place in the new order, their essence having faded into obsolescence.

Today, these structures—cultural, educational, and industrial stand like forgotten relics, trapped between the past and an uncertain future. Owned by the state or private hands, most stay hollow and looted, slowly surrendering to the ravages of time. Their decay is not just physical; it is a quiet, poignant testament to the shifting tides of history, the fragility of human ambition, and the fleeting nature of the worlds we build. In their silence, they remain haunting markers of a lost era, waiting for time to reclaim what remains.

The extent and volume of real estate across Georgia that can be deemed a legacy of the Soviet era remains largely unknown. Furthermore, the significance of spaces left functionless is not fully appreciated; their potential as resources is often overlooked, and their preservation as cultural heritage is not prioritized.

This paper serves as a comprehensive guide for documenting the abandoned and non-functional infrastructure within Georgia. It outlines methods for locating, collecting, and recording information about physical structures that have lost their purpose and are entirely abandoned, partially utilized, or suspended in a state of limbo. By detailing the sequential steps necessary for gathering data on these forgotten buildings, the text aims to illuminate the hidden potential of these spaces. It advocates for their recognition as valuable components of our cultural heritage and offers a framework for systematically mobilizing this information for future use, emphasizing the need to honor and preserve the stories embedded within these remnants of the past.

The paper is divided into two main parts and the following chapters:



Part One

Chapter I – A Brief Historical Overview of Cartography

This chapter discusses the brief historical discourse of mapping and cartography, exploring how and for what purposes old maps were created, how they evolved, and how they communicated information through both scientific and artistic fields. It also covers the general purpose of maps and explains how to read and interpret them as visual narratives of the environment, using abbreviations, notations, and symbols.

In addition, the chapter describes modern technologies, digital platforms, and geoinformation systems (GIS), including their applications and fields of use.

Chapter II – The Soviet System and the Current Landscape

This chapter explores the historical context and ideological strategies that shaped the urban structure of Soviet cities. It discusses the significance of architectural objects and their social context.

To point out the cultural significance of urban structures, a brief overview of the Soviet economic model and its collapse will highlight how the breakdown of the infrastructural chain contributed to the current outcomes.



Part Two

Chapter I – The Territorial Landscape of the Municipalities

This chapter focuses on the first research stage, discussing techniques for mobilizing existing information and methods for searching and gathering data. It also defines the specifics of fieldwork—what it entails, how to conduct it, and the necessary equipment.

The definitions provided in this chapter serve as a guide to assist participants and researchers in selecting, locating, and conducting fieldwork. An important aspect of this chapter is the development of criteria for evaluating places or objects.

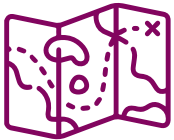
Chapter II – The Database and Documentation of Physical Infrastructure

The final chapter is dedicated to mobilizing the collected material (information passports for each object) and categorizing it. The chapter also provides instructions for using the sample files and tools to categorize the information.

Finally, the summary outlines the results achieved using the methodology, offering municipalities the tools to independently create a database and list the sites within their territory that are dysfunctional, unrestrained, or partially unused.

CHAPTER 1

Cartography - A Brief Historical Overview of Mapmaking



1.1. Short Historical Discourse

The History of Cartography – The Purpose Behind Early Maps

The history of cartography evolves in parallel with the development of civilization. From the earliest forms of representation—primitive clay tablets that often depicted local landmarks or celestial signs—maps have reflected the human desire to understand and navigate the world. Ancient Mesopotamian, Egyptian, and Chinese civilizations crafted simple maps to delineate land boundaries and navigation aids. The Greeks and Romans made significant contributions to cartography, elevating it to a critical tool for governance and conquest. During the Roman Empire, maps were essential for military strategy, administrative planning, and the expansion of trade routes. Yet, with the fall of Rome, the torch of knowledge passed to the Muslim scholars, who refined and expanded classical cartographic wisdom, producing remarkably accurate maps of the world.

In medieval Europe, maps emerged that blended religious symbolism with geographical understanding, known as *mappa mundi*. These maps were not mere tools of navigation but also intricate representations of a worldview, where the divine and the earthly coexisted on the same plane. Thus, the map was not just a chart, but a canvas—capturing not only the physical but the metaphysical dimensions of human existence.

In the Renaissance, the rediscovery of classical Greek and Roman texts fueled a new surge in the evolution of cartography. Innovations like the compass, the astrolabe, and the printing press revolutionized the art of mapmaking, allowing for more precise and widespread dissemination of geographical knowledge. The era of great geographical discoveries, driven by the daring voyages of explorers such as Christopher Columbus, Vasco da Gama, and Ferdinand Magellan, expanded humanity's understanding of the world. These expeditions paved the way for the creation of more accurate global maps.

Visionary cartographers like Gerardus Mercator and other pioneers developed map projections that minimized the distortions inherent in representing the Earth on a flat surface. Their geometrical methods transformed how the planet was depicted, enabling cartographers to compile atlases that

became comprehensive repositories of geographic knowledge. In their hands, the map became more than just a tool—it became a bridge between discovery and understanding, a testament to humankind's quest to chart both the known and the unknown.

During the Enlightenment, cartography entered a new era, shaped by the rising influence of scientific methods. Innovations in fields such as geodesy, trigonometry, and astronomy led to the creation of maps with unprecedented accuracy. The 18th and 19th centuries saw the establishment of national mapping agencies, like Britain's Ordnance Survey and the U.S. Geological Survey, which were tasked with producing detailed topographical maps that captured the landscape with precision.

By the 20th century, the advent of aerial photography, satellite imagery, and digital mapping technologies transformed the discipline entirely. These advancements not only revolutionized cartography but also made maps more accessible and dynamic, shifting them from static representations to interactive tools that could be continuously updated and refined. In this modern age, maps became both mirrors of the earth and gateways to new ways of understanding space and place, blending science and art in their evolving form.



1.2. The Purpose of Maps and How to Read Them

Maps as Visual Narratives of the Environment

Maps serve as a visual narrative of our environment, offering a means to describe a place and its essence. Beyond their descriptive function, maps hold cultural, social, and political significance, acting as powerful tools for understanding and interpreting the world around us.

In their content, maps can be categorized into general geographic and thematic types. General geographic maps provide a visible representation of tangible elements—relief features, river networks, populated areas, and more—allowing us to perceive the landscape at a glance. In contrast, thematic maps delve into specific topics, encompassing geophysical, geological, hydrological, climatic, and other domains. These maps transcend mere representation, inviting us to explore the complexities and interconnections of the natural world, revealing the deeper stories that lie within the contours of our surroundings.

Most maps share common elements: scale, symbols, and a coordinate grid. The map's legend provides textual explanations for the symbols and various markers used on the map. Every map must also include features such as the hydrographic network, settlements, and borders, as these are essential for navigation within geographical space. General geographic maps are used for broad exploration of territory and for orientation on the ground. The thematic layers of these maps often include relief, hydrography, settlements, vegetation cover, soil, industrial, social, and cultural sites, roads, and political-administrative boundaries, among others. Each feature is represented by universally recognized symbols.

The core of any map is its content. The careful selection of map elements is crucial for producing a coherent and expertly crafted cartographic work. The precision with which these elements are chosen defines not just the clarity of the map but also its ability to convey the intricate relationships of the landscape, making it a powerful tool for understanding and navigating the world.



1.3. Types of Maps

Thematic Maps – What Information Should We Expect?

According to cartographer Denis Wood, mapmaking, or cartography, can be understood as an act of creating and imagining space, making it a powerful tool for shaping and defining spatial realities. In the modern world, maps and cartography are often used as instruments for perceiving and documenting the everyday. Visualizing spatial, material, and social connections, inscribing their meanings onto maps, and deciphering their relationship to specific places are essential methodologies in urban anthropology.

Yet, there are countless practices, interdisciplinary approaches, and methods for creating maps. It is crucial, therefore, to rely on methodologies that are tailored to the specific task at hand, ensuring that the process of mapmaking aligns with the unique demands of each situation, whether it's for scientific inquiry, cultural interpretation, or social analysis.

Some approaches, grounded in the practice of spatial analysis, are characterized by the representation of data collected in the field and observations of the environment. By describing the primary layers and fundamental elements—such as name, scale, location, and legend—a certain informational language is created, which enables the viewer to read and interpret the map. This process of building visual and contextual cues helps to transform raw data into a coherent narrative, offering insights into the spatial relationships and meanings embedded within the environment.



1.4. Modern Technology and Digital Maps

Geoinformation Systems, Google Earth, and the National Agency of Public Registry

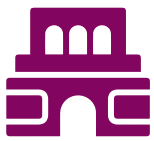
Today, spatial data analysis tools—Geographic Information Systems (GIS)—are widely used across the world. GIS has become a fundamental tool for storing spatial data, including in Georgia, where it is utilized by the Public Registry Agency.

Modern map software and libraries utilize advanced rendering techniques to create visually appealing and interactive maps. Digital maps offer the ability to work with geographic data through various interfaces, such as web browsers, mobile applications, and more. These applications and digital maps enable the processing of multiple data layers for the study and analysis of geographic information. Interactive features, such as search, routing, and geolocation, enhance the usability and functionality of digital maps, making them powerful tools for navigation, data visualization, and spatial analysis.

Today, some of the most popular digital mapping services include Google Maps, Google Earth, and OpenStreetMap. In Georgia, the National Agency of Public Registry provides an electronic map service (<https://maps.gov.ge/>), which allows users to access various types of information across the country. Through thematically divided layers, users can retrieve cadastral and address data, as well as information related to transportation and hydrography. The website also offers topographic and base maps of Georgia at different scales, providing a valuable resource for geographic data and spatial analysis.

CHAPTER 2

The Soviet System and the Current Landscape



2.1. Reflection on the Past

Preconceptions and Objective Evaluation of the Past

The architecture of the Soviet era in Georgia frequently provokes negative sentiments among the population, a response that, in many respects, finds validation within the broader social context. From a sociological and anthropological perspective, these attitudes are rooted in the subjective construction of social reality, which is heavily influenced by individual and collective experiences. These experiences, often imbued with a sense of historical trauma or disillusionment, frame the interpretation of the built environment from that period.

The perception of Soviet-era architecture is not merely an objective assessment of its physical form but is shaped by deep-seated preconceptions and cultural expectations, which tend to distort the understanding of this architectural legacy. Cognitive biases, often reinforced by emotional responses and inherited narratives of repression or ideological conflict, further skew these evaluations. Moreover, the limited availability of nuanced knowledge about the architectural achievements of the Soviet period exacerbates these critical or dismissive attitudes. The deficit in informed discourse fosters a nihilistic or reductive stance, where Soviet architecture is often viewed through the lens of negative historical associations rather than as a complex cultural and aesthetic phenomenon deserving of deeper scrutiny.

Thus, the prevailing negative sentiment is not simply an aesthetic or functional critique but a reflection of the broader sociocultural dynamics that shape collective memory and identity in post-Soviet societies.

Recognizing the significance of Soviet-era architectural artifacts, alongside their socio-historical context, enables researchers to critically articulate and assess these infrastructures grounded in empirical evidence.

An informed understanding of Soviet urban planning principles can facilitate the identification of pivotal urban structures interwoven within the city's fabric. This comprehension not only enriches the discourse surrounding these architectural entities but also encourages a nuanced appreciation of their roles in shaping community identities and social dynamics. By fostering a deeper awareness of these historical contexts, we can encourage a more inclusive dialogue about the legacy of urban spaces, ultimately contributing to a more informed and engaged citizenry.



2.2. Soviet City Urban Structure and Architecture

The Social Context of Architectural Objects

Urban planning during the Soviet period was guided by the principle of centralized management, which regulated all aspects of urban development. The growth of cities, functional zoning, mass housing construction, architectural style and character, standardization, and building regulations were all considered integral parts of a unified vision. This centralized planning dictated the structural development of every administrative unit, large or small, across the whole Union. Through this framework, urban growth was not just a reflection of local needs but a manifestation of a larger ideological and bureaucratic system that sought uniformity and control over every aspect of the built environment.

Soviet urban planning, growth, and development were carefully directed by the central government. The state's development plans were based on long-term national economic goals, with every part of city expansion and architectural design aimed at supporting centralized economic and political objectives. Cities were not just places to live or work but key elements in achieving these broader plans, with each aspect of urban life carefully shaped to fit the Soviet vision of progress. The city's master plan was typically organized based on functional zoning. The planning process took into account the socialist characteristics of political, economic, and social life.

Significant attention was devoted to the design and planning of central squares, avenues, and wide boulevards, with a focus on motorized infrastructure. The methodology for documenting physical infrastructure in Tbilisi (2024, issue 11) emphasizes street network planning, alongside the development and enhancement of recreational and leisure spaces. One of the key challenges in Soviet urban planning was accommodating the growing urban population and ensuring adequate housing. As a result, standardized residential complexes, commonly referred to as "microraions" or "sleeping districts," were developed. Industrial zones were typically planned on the outskirts of the city, away from the center, while various institutions such as schools, kindergartens, and hospitals were integrated into residential areas, ensuring easy access for the population.

Public buildings, monuments, and public art during the Soviet period were often used to propagate socialist ideals. The Socialist symbols and themes, including labor, progress, unity, and the achievements of the working class, remain visible today on building facades, in public spaces, squares, metro stations, and bus stops.

The rapid development of the socialist economy and the accompanying urbanization demanded the standardization of construction. This approach led to a certain homogeneity and monotony in the built environment, which is why Soviet cities exhibit significant similarities in both infrastructure and the uniform rows of residential buildings. Additionally, industrial and manufacturing facilities often followed typical designs, contributing to the widespread architectural uniformity across the urban landscape.

Public and civic buildings also share many similarities. However, it is important to note that throughout the Soviet period, the architectural style shifted in response to various political and economic objectives. For instance, during Stalin's era, the architectural approach was characterized as "national in form, socialist in content," a response to Stalin's ban on constructivism, which gave rise to the so-called "Stalinist Empire" style. This period's architecture was monumental, heavily

ornamented, and infused with national elements, often resulting in highly expensive structures. With Khrushchev's rise to power in the 1950s, his significant decree "On the Elimination of Excesses in Architecture" led to a preference for more austere buildings. This shift enabled the mass development of residential housing through the use of fast and inexpensive construction methods, prioritizing efficiency and speed over decorative features.

In the 1960s, during Brezhnev's era, and in Georgia under Vasil Mzhavanadze, the construction of modernist buildings peaked. For the first time since the 1920s, architects were given more freedom, as international publications became available, and travel opportunities opened up. This period allowed architects to work not only on standardized and typical buildings but also on individual projects, particularly for public-purpose structures.

Even a brief historical overview makes it clear that Soviet-era architecture embodies a wide range of values and distinctive qualities. It cannot be defined by a single style; buildings constructed during different periods reflect the political, cultural, and social events of their time. Today, these structures remain as monuments to those diverse influences.



2.3. Transition from Socialism to a Market Economy

A Brief Overview of the Soviet Economic System and Its Disintegrated Infrastructure

The transition from a socialist to a capitalist economic model, particularly in the case of Georgia, was marked by significant economic, social, and political changes. Following the country's independence in 1991, a series of political and economic crises emerged as a consequence of the collapse of the Soviet system, accompanied by territorial and political conflicts. These crises led to a military coup and the rise of criminal gangs. During this period, much of the state's economic assets were dismantled, looted, and fragmented.

These events contributed to the breakdown of centralized economic planning structures and the dismantling of socialist institutions, marking the beginning of the transition toward a market economy. In the early 1990s, Georgia initiated privatization programs aimed at transferring state-owned enterprises and assets into private hands. This process was intended to stimulate entrepreneurship, attract foreign investment, and promote competition within the economy. However, privatization efforts were often accompanied by corruption, asset stripping, and unequal distribution of wealth.

The shift to a market economy was also characterized by economic shocks, inflation, unemployment, and widespread social hardship, which complicated the process of economic liberalization and restructuring.

The transition from the Soviet economic system to a capitalist model led to a shift in economic priorities. Under socialism, industrial production was often prioritized to meet state-planned quotas and centralized economic goals. However, with the move towards capitalism, the focus shifted to market forces, private enterprises, and foreign investments. This change in economic priorities resulted in the restructuring or closure of many state-owned industrial enterprises, which were no longer competitive in the newly market-oriented economy.

Many industries that had flourished under socialism faced a decline during the transition to capitalism. This regression was driven by factors such as outdated technology, looted infrastructure, inefficient production methods, lack of investment, and an inability to compete in global markets. As a result, factories, warehouses, and other industrial facilities were left vacant or underutilized as businesses closed or downsized their operations.

The political crises, insufficient investment, and the neglect of technical infrastructure, numerous industrial buildings experienced significant physical deterioration. In the absence of adaptive reuse strategies, these structures became obsolete and unappealing for prospective tenants or economic activities, thereby exacerbating the broader difficulties associated with economic restructuring.

The abandonment of industrial buildings has had a significant impact on cultural and architectural heritage. Many of these structures are integral to the industrial heritage of their respective regions and embody the architectural styles of various historical periods. Their neglect has heightened the risk of losing cultural heritage and historical landmarks, which in turn hinders the study and preservation of more recent history.



2.4. Future Perspective – Transformation with the Preservation of Memory

Contemporary examples of the adaptation and repurposing of abandoned buildings. The development of culture and creative industries as a driving force for economic growth.

The 2016 “Culture Strategy 2025” document from the Ministry of Culture and Monuments Protection of Georgia highlights the importance of developing creative industries. It defines creative industries as sectors that generate material and social value by producing products or services rooted in creativity and talent. Alongside the need to foster these industries, the strategy provides several examples of successful transformations, such as the repurposing of an abandoned grain warehouse in Rotterdam. In 2018, this warehouse became a creative hub, housing up to 180 small businesses under one roof, and creating a new center of activity on the city’s outskirts. These global examples highlight the growing demand for informal spaces and illustrate the potential for public-private partnerships involving government, private businesses, and educational institutions.

The 2025 strategy emphasizes the positive impact of culture on tourism and underlines the pivotal role of art and culture in national economic development. In post-Soviet countries, the role of culture and creative industries is especially critical, offering both challenges and opportunities. These industries contribute to job creation, tourism, and international relations but face obstacles such as funding limitations and regulatory barriers. Strategic investments and partnerships can unlock the economic potential of culture and creativity, fostering sustainable growth and enhancing global competitiveness.

For creative industries to thrive in repurposed buildings, especially those of Soviet-era industrial origin, it is crucial that these spaces meet modern building standards. Many of these structures require technological upgrades—improvements in energy efficiency, fire safety, sanitary

conditions, accessibility, ventilation, and cooling systems. Adapting these buildings to meet contemporary standards is essential for them to serve as functional spaces for artistic and industrial development. This trend is evident in the post-Soviet world, where culture and creative industries have become an integral part of economic development, as demonstrated by several successful examples.

2.5. The Importance of Preservation and Adaptive Reuse

In the contemporary world, the preservation of historical, cultural, and architectural heritage is becoming increasingly critical. The future trajectory involves the adaptive reuse and transformation of existing structures, ensuring the continuity of their embedded cultural memory. By repurposing abandoned buildings to align with modern demands, this approach not only catalyzes economic growth through the expansion of cultural and creative industries but also ensures the conservation of both tangible and intangible heritage resources that hold historical significance. This strategy underscores the potential for cultural sustainability while fostering socio-economic development through heritage preservation.

The significance of protecting and preserving the existing built environment remains relevant even when a particular structure may not hold notable architectural or historical value. This is increasingly pertinent in light of growing concerns about ecological sustainability and the reduction of construction waste. The adaptive reuse of such spaces plays a key role in minimizing environmental impact, promoting resource efficiency, and aligning with broader sustainability goals in urban development and heritage management. This approach addresses the environmental implications of demolition and new construction, advocating for a more responsible and sustainable use of the built environment.

The preservation and adaptive reuse of structures have emerged as a pivotal framework for shaping architectural approaches and perspectives, serving as a key strategy for mitigating the negative impacts of mass construction on the environment. This practice not only fosters sustainability but also encourages innovative design solutions that respect and integrate the existing built environment, promoting ecological balance and cultural continuity within urban landscapes.

Below few notable examples:

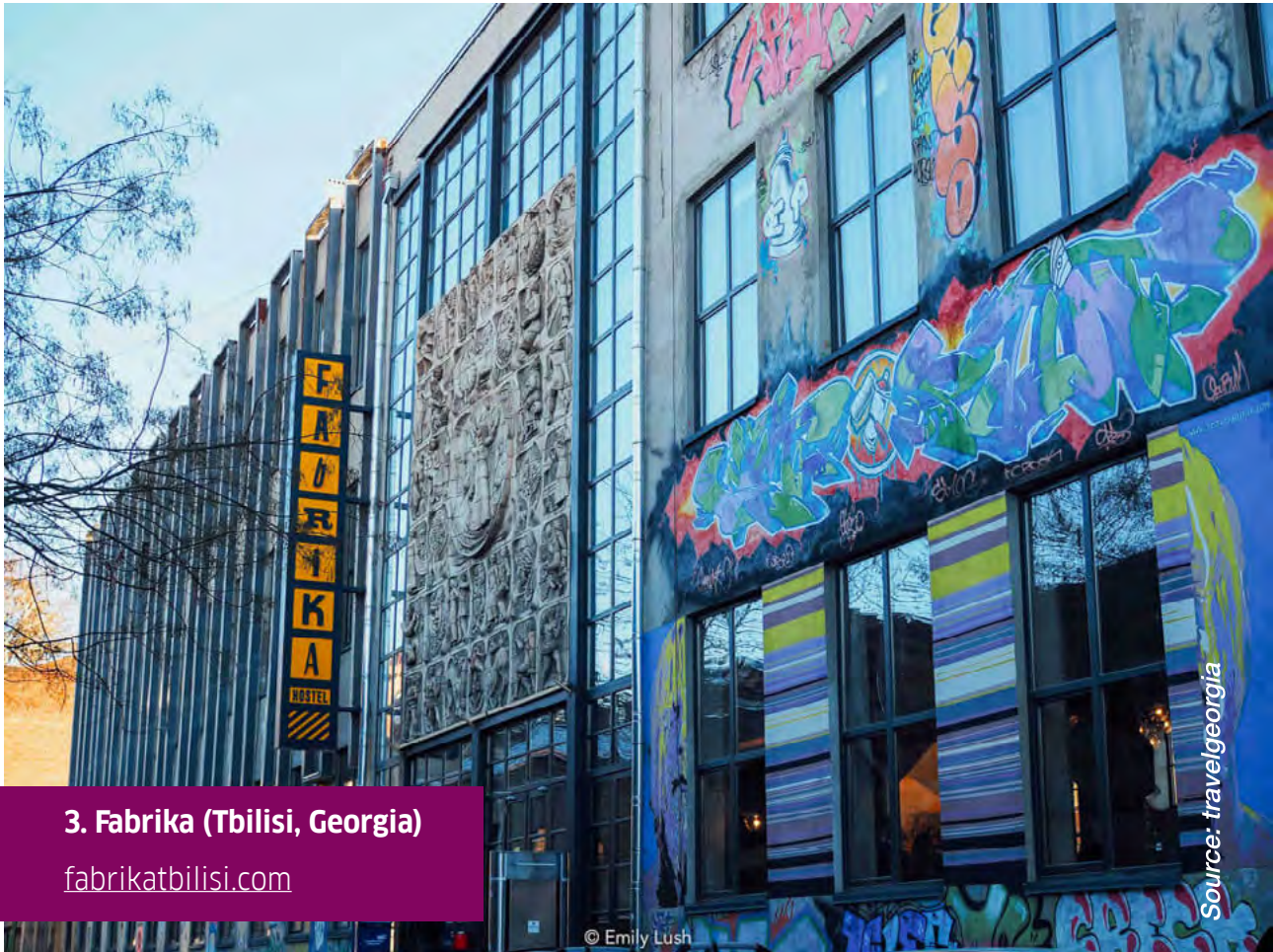




Art Zavod, a former silk factory on the outskirts of Kyiv, ceased operations in 1993. After 40 years of production, part of the factory was converted into a commercial center. In 2014, a transformation began across its 120,000-square-meter area. Today, it hosts music festivals, film screenings, exhibitions, and co-working spaces. This vibrant venue attracts culture enthusiasts seeking both entertainment and knowledge. Source: archive.kyivpost.com



In 2022, with support from the European Union, the groundwork was laid for transforming a Soviet-era garment factory into an innovative space. The Municipality of Dilijan, with co-financing from the EU (1 million euros) and the IDEA Foundation, is leading this initiative. The goal is to stimulate the local economy in the Tavushi region by promoting crafts, and entrepreneurship, thus creating a new cultural center for Dilijan. Source: <https://eu4business.eu/>



3. Fabrika (Tbilisi, Georgia)

fabrikatbilisi.com

“Fabrika Tbilisi” is an adaptive reuse project by the architectural firm MUA. Starting in 2015, the former Soviet-era garment factory located in a historic district on the left bank of the Mtkvari River was transformed into a vibrant urban cultural hub. This once dormant area, rich in history, has been revitalized, drawing locals, visitors, and travelers alike. The multifunctional space now serves as a dynamic venue charged with creative energy and also houses the largest youth hostel in the region. Source: mua.ge



4. Zollverein Industrial Complex (Essen, Germany)

zollverein.de

The Zollverein coal mine complex, operational during the 19th and 20th centuries, has been a UNESCO World Heritage Site since 2001. Known for its artistic and architectural significance, the complex was repurposed after the mine's closure in 1986. Today, it is one of the region's major tourist attractions, featuring cultural, sports, leisure, dining, and retail spaces. The main building houses the Ruhr Museum, which exhibits the history, culture, and nature of the Ruhr region, as well as the Red Dot Design Museum, known for its exhibitions of international design products. The complex also includes spaces for swimming pools, ice rinks, and plazas. Zollverein is one of the most successful examples of industrial area redevelopment in Essen. Source: zollverein.de



5. Haus der Statistik (Berlin, Germany)

hausderstatistik.org

Haus der Statistik is a historic building complex in Berlin, originally constructed in the 1960s as a government office. It is renowned for its distinctive architecture, which blends modernist and brutalist elements. The complex consists of several interconnected buildings that form a central courtyard, home to a variety of multifunctional spaces. Since the 2000s, the building has been transforming into a socio-cultural hub through a collaborative effort between independent artists and government institutions. Today, it houses affordable housing units, art studios, workspaces, and venues for cultural events. Haus der Statistik is a global symbol of urban participatory planning and the adaptive reuse of abandoned spaces, showcasing the potential of creative industries in fostering social cohesion.



6. Zeitz MOCAA and The Silo Hotel (Cape Town, South Africa)

heatherwick.com/projects/buildings/zeitz-mocaa

<https://zeitzmocaa.museum>

theroyalportfolio.com/the-silo-hotel

Cape Town's iconic grain silo, which once stored wheat and corn, has been transformed into one of South Africa's most prominent cultural landmarks. The silo complex has been repurposed into a mixed-use facility that now houses the luxurious Silo Hotel, residential apartments, retail spaces, and the Zeitz Museum of Contemporary African Art (Zeitz MOCAA). Opened in 2017, Zeitz MOCAA occupies the heart of the complex and has become a major institution for modern African art. The Silo Hotel, with its opulent apartments and panoramic views of Cape Town's waterfront and Table Mountain, adds further prestige to the redevelopment. The adaptive reuse of this historic building has revitalized the Victoria & Alfred Waterfront, enhancing Cape Town's cultural scene, boosting tourism, and contributing to the city's economic growth. The project represents a fusion of utility, art, architecture, and hospitality, symbolizing the transformative power of adaptive reuse.

CHAPTER 3

Physical Mapping methodology

3.1. The Research Process and Its Key Stages: Mobilizing Information and Fieldwork

The Process of physical mapping requires basic computer skills and competencies such as analytical thinking, communication, photography, and writing skills. This methodology has been developed to facilitate the effective management of tasks, without specialized education.

It is important to note that the research design evolves and undergoes changes in response to specific situations. As a result, approaches may be adjusted during the process, leading to the emergence of new challenges and various strategies for addressing different cases.

In this methodology document, the important stages of the mapping process will be briefed. Additional stages, tailored for each case, are of further elaboration.

The research/mapping process consists of two main stages:

- Mobilization of the Information – Gathering information from available sources.
- Fieldwork – Visiting and photographing the sites.
- Furthermore, it will be necessary to Categorize collected information and digitalize collected materials to create a digital database.

3.2. Stage I – Mobilization of the Information

At the initial stage of the research, it is essential to define the study area. This involves determining the research area, and its geographical characteristics. The number of objects to be studied, of course, depends on the size of the research area.

The identification and documentation of objects should commence from the area closest to the administrative center, with the potential to expand the study area over time, considering available resources and temporal considerations.

Various methods can be applied in the process of information mobilization:

- Desktop study: Start with an online search using key terms on search engines such as Google <https://www.google.com>.
- Google Maps: Use <https://www.google.com/maps> to familiarize yourself with the study area. Satellite imagery allows for a virtual “walk” through the city, enabling quick and easy exploration of large areas. This visual study helps to understand the street network, building scale, points of interest, green spaces, transportation infrastructure, and other key features.
- Public Records and Archives: After identifying potential research objects, the next step is to request information from public registers, city halls, libraries, archives, and municipal databases.

Recommendation: Informal channels for information gathering, such as consulting acquaintances and relatives, can also be advantageous. Utilizing oral histories and narratives, along with interviewing the local population, is crucial in this context (this method will be discussed in greater detail at the beginning of the fieldwork section).

Note: To ensure the reliability and objectivity of the acquired information, it is vital to document the sources of information and the methods of acquisition in the project’s documentation.

Key Consideration: Consider the perspectives of local researchers involved in the project, as they possess insights into the needs and desires of the local population regarding what is required in specific regions and locations, what resources are lacking, and which creative directions would be of interest to them. Their engagement is, therefore, of huge importance.

Recommendation: The documentation process benefits from comprehensive involvement and support. The voices and initiatives of local residents hold significant value when contemplating the exploration of spaces and ideas for their future use. The participation of the civil sector is critical in processes that inherently involve initiating community-beneficial projects from the outset.

Engaging local residents in the process can be achieved through a variety of methods, each tailored to different age groups.

- » Schoolchildren: For school students, a competition could be organized in which they create a map of the city, highlighting places of personal significance and articulating their aspirations for the development of their environment
- » Students: Involving university students may involve hosting small workshops where each participant researches a specific cultural site near their residence and subsequently presents their findings to the group.
- » From the age group that spent significant portions of their lives in the Soviet Union, invaluable insights can be gained, akin to consulting a living encyclopedia. Conducting a series of interviews with this demographic would be a strategically focused approach to extracting rich, contextual information. These interviews can offer unique insights that may otherwise be difficult to obtain, preserving their lived experiences for future generations.

3.3. Stage II – Fieldwork

Once a research object has been identified, the subsequent phase necessitates an immersive engagement with its surrounding environment, a process integral to anthropological fieldwork. This stage includes several key components:

- » **Visiting the site:** The physical presence at the location allows for the object to be examined within its broader spatial and sociocultural context. This direct engagement facilitates an embodied understanding of the object's place within the landscape and its relational dynamics with surrounding elements.
- » **Photo documentation and visual assessment:** Visual data collection through photography serves as both an archival tool and a method of analysis. The act of capturing images not only freezes the materiality of the object but also reflects the researcher's gaze, structuring a framework for later critical engagement with the visual data.
- » **Taking field notes:** Detailed field notes are a foundational practice within anthropological research, providing a narrative and reflexive account of the immediate observations, sensory experiences, and preliminary interpretations. These notes transcend the limitations of visual data by incorporating subjective and contextual nuances that may remain imperceptible in photographic evidence alone, preserving the fluidity and complexity of the field encounter.

This methodological approach anchors the research object within a web of socio-material relations, revealing layers of meaning that emerge through direct observation and embodied interaction with the field.

Key Considerations:

While conducting a visual and external survey, fieldwork reveals valuable insights into the geographical, social, and functional dimensions of the object under investigation. This process, situated within the broader framework of spatial and social analysis, enables the researcher to contextualize the object within its immediate environment. Key aspects for observation include:

- **Architectural style:** Analyzing the architectural features offers a temporal anchoring of the object, linking it to specific historical periods or cultural movements.
- **Signage and symbol:** These elements, whether current or historical, provide clues about the object's function, tracing its evolution through different socio-economic or political contexts.
- **Urban context:** Locating the object within the urban fabric illuminates its relationship to the surrounding cityscape, revealing how it operates within the community's socio-spatial arrangements. Its location may reflect broader urban planning ideologies or shifts in power dynamics, influencing its past and potential future significance.

This preliminary external observation generates critical questions that will drive the deeper stages of inquiry. These questions act as a guiding framework for subsequent research, shaping the trajectory of ethnographic investigation and contributing to a more nuanced understanding of the site's role and value within the social and material landscape.

Fieldwork unfolds through a multi-staged process that often requires repeated engagement with the site. The iterative nature of this process allows the researcher to refine their observations, build relationships, and gather comprehensive data. The stages typically include:

1. First Visit – Initial Exploration:

The initial visit serves as a moment of entry into the field, where the researcher establishes rapport with the individuals encountered on-site and introduces themselves within the local context. This step involves not only explaining the research goals but also gaining trust, which is critical for accessing deeper layers of information. Establishing the researcher's presence and negotiating access to the space requires sensitivity to local dynamics and power structures.

2. Second Visit – Clarification and Data Refinement:

Following an analysis of the initial observations, a return visit may be necessary to refine or verify the gathered data. This phase often includes interviews with local residents or key informants, which should be approached with a clear set of prepared questions. Yet, the ethnographic interview is inherently dialogical; while structured questions guide the interaction, emergent lines of inquiry may arise organically, offering unanticipated insights. Consent for audio or video documentation must be negotiated ethically, respecting the informants' autonomy and privacy.

3. Third Visit – Follow-Up Engagements (Optional):

If necessary, further visits may be scheduled to conduct follow-up interviews or engage in deeper discussions with community members or other stakeholders. These meetings, if prearranged, allow the researcher to gather additional data or pursue emerging lines of inquiry, enhancing the depth and breadth of the ethnographic narrative.

Important Considerations for Interviews:

- In conducting interviews, it is crucial to recognize that informants' responses may be shaped by subjective experiences, personal biases, or concerns about privacy. The researcher must remain attuned to the complex social dynamics at play, where participants might tailor their answers to what they perceive as the researcher's expectations, or conversely, withhold information due to mistrust or discomfort.
- As Lia Tsuladze notes in her work *Qualitative Methods of Sociological Research* (2020), the researcher must be adept at “discovering” the social environment—navigating the layered complexities of the field site to capture the full spectrum of social life. This capacity to interpret the social fabric is essential for producing a nuanced and comprehensive account of the object under study. Successful fieldwork, therefore, hinges on the researcher's ability to engage reflexively with both the material and social dimensions of the field, continually adjusting their methods to the evolving dynamics of the research environment.

3.4. Categorizing Infrastructure for Repurposing

The purpose of conducting an infrastructure inventory is to gain a comprehensive understanding of the municipality's landscape. This inventory will highlight two main types of spaces:

- 1. Non-functional, unoccupied, or partially unused spaces that hold potential for future creative or alternative uses, adapted to meet modern needs.**
- 2. Functional, actively used spaces that are already serving a purpose.**

To effectively categorize the infrastructure for future planning, it is recommended to classify the spaces into three main categories:

1. “Free” Spaces:

These are non-functional, unoccupied, or partially unused spaces that could be repurposed or adapted for creative, cultural, or other modern uses in the future. They represent potential opportunities for development and revitalization.

2. Active Spaces:

These spaces are already fully functional and utilized, often serving as creative or cultural hubs. They are already integrated into the municipality's infrastructure and are important for sustaining current activities.

3. Mixed Spaces:

These are spaces where part of the area is actively used while another part remains unoccupied or underutilized. Mixed spaces offer the dual potential for expansion of existing functions or the introduction of new uses, depending on their current state.

By organizing the municipality's infrastructure into these categories, it becomes easier to plan for future development, identify opportunities for repurposing, and ensure that both unused and active spaces are utilized efficiently to meet modern demands.

Category 1 – Free (Inoperative, Unoccupied, or Partially Unused) Spaces:

Within the scope of the project, it is essential to consider both types of infrastructure from the start:

- Cultural Infrastructure: This includes flexible spaces originally designed for cultural purposes such as community centers, clubs, cinemas, and theaters.
- Other Existing Buildings: These are spaces that were designed for other purposes but are now fully or partially non-functional. Examples include administrative buildings, warehouses, and industrial facilities that are no longer in use.

These underutilized spaces offer significant potential for being repurposed for creative and other modern functions. They could be transformed into:

- Workshops: Spaces with high ceilings and good lighting ideal for artists, artisans, and craftspeople.
- Retail and Gastronomy: Shops, cafes, or gastro schools where culinary arts and small businesses could thrive.
- Offices: Spaces tailored for architects, designers, or other creative professionals.
- Cultural Venues: Larger spaces, ideal for film screenings, theater performances, lectures, or other educational events.
- Event Spaces: Large pavilions or halls that can be used for festivals, meetings, and various events, fostering cultural and community engagement.

By identifying and documenting these free spaces, the municipality can create opportunities for development and revitalization, bringing new life and purpose to underused buildings.

Category 2 – Active Spaces:

In addition to documenting unused spaces, it is also crucial to capture information about existing creative spaces currently in operation within the municipality. These may include:

- Original Cultural Buildings: Structures that were designed from the start for cultural purposes and continue to function as such.
- Repurposed Spaces: Places that were built for other functions but are now being used creatively, such as a hall in a commercial building being rented as a dance studio or other cultural activity.

This category outlines active creative processes, mapping the artistic and cultural initiatives within the municipality. Creating such a list will:

- Help build connections between regional artistic initiatives.
- Serve as a valuable information base for project initiators and potential donors.
- Provide a comprehensive understanding of the current cultural landscape in the area.

Important Consideration:

Since the 1990s, most public or industrial buildings have been privatized, meaning that many of the spaces mapped may be privately owned. Regardless, it is important to record these buildings as part of a holistic inventory. Understanding the full picture of available spaces, both free and active, is essential for planning future development and unlocking the potential of these locations.

CHAPTER 4

Database and Physical Infrastructure Integration

4.1. Digitization and Collection of Materials

To organize and manage the collected materials, Google Drive (<https://drive.google.com/>) has been selected as the platform for file storage and synchronization across multiple devices. This cloud-based service allows project participants to electronically share folders containing research data and continuously update or edit information in real time, ensuring smooth collaboration and easy access.

Three primary folders will be created for efficient categorization of the materials:

1. Mobilized Information:

This folder will contain references gathered during the first stage of research for each object. These could include online articles, archive documents, or other source material.

2. Field Research:

This folder will store the information collected during the second stage of research. It will contain photographs, field notes, interviews, and other data specific to each object, organized into corresponding folders.

3. Passports:

This folder will contain documents in a template format that have been filled out for each object based on the research. These passports will serve as a comprehensive record of the data collected.

Note: The principles of working with these folders, including how to manage and organize the data within each, will be covered in detail during the training phase.

4.2. Using the Working Files

How to Complete the “Passport” Working File

A key aspect of creating the passport working file is ensuring the reliability of the sources used. Each piece of information in the file must clearly cite its source to avoid misunderstandings and allow for easy correction of errors, should they arise later in the process.

The Passport is a template document with pre-structured fields or “graphs” that need to be filled in as part of the research. If a particular column does not apply to the object being studied, it can be skipped. However, certain fields are mandatory and must be filled out for every object. These mandatory fields will ensure consistency across all records.

The document will be accompanied by detailed explanations for each field so that the researchers understand what is required and how to complete the form accurately.

Note: Detailed instructions on how to work with the passport document will also be covered during the training sessions.

SUMMARY

This document presents a methodology developed within the framework of the “Creative Compass” project, aimed at the documentation and preservation of physical infrastructure across the territory of Georgia. The objective of this methodology is to serve as a guiding framework for the systematic recording of infrastructure within Georgian municipalities, specifically focusing on spaces that are currently vacant or underutilized.

These spaces hold potential as valuable resources, inviting a reimagining of their future use through contemporary functions. By engaging in this process, we not only document the tangible elements of our built environment but also engage in a philosophical exploration of place, identity, and memory. This approach emphasizes the dynamic interplay between past and present, highlighting the significance of these infrastructures as cultural artifacts that embody historical narratives and social relations.

Documented spaces may include culturally designated structures such as theaters, cinemas, cultural houses, and village clubs; educational, research, or sports facilities like schools, kindergartens, libraries, various research institutes, sports complexes, gyms, swimming pools, and more; industrial infrastructure encompassing production or storage spaces; as well as hotels, sanatoriums, and cottages; commercial infrastructure including market buildings, supermarkets, and shops; and transportation facilities such as railway stations, depots, and auto bases.

The primary objective of the project is to identify and document the “free” (unoccupied, functionally changed, or underutilized) infrastructure within the municipalities of Georgia. This initiative aims to create a unified database, mapping, and registry of these “free” spaces, which will facilitate their assessment from both resource-based and cultural heritage perspectives. The existence of such a “registry” will enable a deeper examination of identified spaces and analysis of their future uses and potential.

Moreover, information regarding free and vacant spaces may serve as a catalyst for development opportunities within the creative industries. As architects, the authors of this work consider the study of Soviet heritage and recent history to be of paramount importance. We believe that recognizing and examining the existing context, observing it, and discovering sustainable, long-term pathways for future development is the only appropriate approach to address the challenges present in the contemporary world and our local reality.

Given that the project’s central aim is to locate infrastructure conducive to creating creative spaces within the municipalities, the application of this methodology will empower municipalities to evaluate their infrastructural resources, re-envision the role of industrial heritage, and explore pathways for its adaptive reuse.

It is essential to recognize that leveraging these free spaces for the creative industries will contribute to regional development and foster the entrepreneurial growth of creative individuals. The chain of actions planned within the framework of the “Creative Compass” project will enhance awareness of cultural, industrial, and architectural heritage in municipalities, ultimately creating a resource base of cultural infrastructure, abandoned industrial buildings, and other sites. This foundation will be utilized for a diverse array of engaging and innovative creative initiatives within the regions.

TERMS

Mapping: The process of creating a map based on collected data. This involves two stages: (I) data collection and (II) mapping based on existing information and infrastructure.

Desktop Study: The mobilization of existing information, metaphorically referring to research done at a desk, such as from books or computers.

Field Work: The term used to describe the process of collecting primary data during research, often conducted on-site. (Referenced from Civil Encyclopedic Dictionary: nplg.gov.ge)

Digitization: The process of converting information into digital format.

Capacity Building: The process through which communities or organizations improve their resources and skills, enabling them to grow, develop, and stay in sync with modernity.

Visual Language: A form of storytelling or expression through visual meanings.

Visual Complexity: The richness, intricacy, and depth found within visual representations.

Render: The process of generating a visual representation or image from a 3D model or scene. In the context of computer graphics and design, rendering plays a crucial role in creating realistic and detailed images, animations, or other visual simulations.

Storytelling: The oral or narrative transmission of stories, ideas, and experiences.

Urbanization: The process of growth and development of a city or urban area.

Cultural Landscape: A geographical landscape that has been altered by human economic activity.

Urban Anthropology: A field of study that examines the political, economic, and cultural forces shaping urban forms and processes. (Source: <https://www.britannica.com/>)

Creative Industries: A combination of sectors that generate material and social value through creativity. These industries create products or services based on talent, and the outputs are typically protected by copyright. (Source: Creative Economy Strategy of Georgia)

Creative Economy: The sum of all elements of creative industries, including trade, labor, and production, as defined by UNCTAD. The output of creative industries generates this economy and also includes creative professionals working in other sectors.

Spatial Data (Geographic Data - ISO 19100): Any data that is directly or indirectly linked to a specific location within a geographic area. (Source: National Spatial Data Infrastructure)

Cartography: The science of mapmaking, a field that examines the creation of geographic maps. (Britannica.com)

LITERATURE

Tsuladze, Lia (2020). *Qualitative Methods of Sociological Research*. Ivane Javakhishvili Tbilisi State University Publishing House. ISBN 978-9941-13-930-7 (PDF).

Ministry of Culture and Monument Protection of Georgia (2016). Culture Strategy 2025. (PDF).

Tsanava, Nino (2021). "Social Reality as Our Subjective Construct." Retrieved from <https://intermedia.ge/> (Accessed on 29.02.2024).

Laoshvili, Zurab (2013). Fundamentals of Applied Cartography. Geoid 2011 Publishing House.

Genz, Caroline, & Lucas-Drogan, Diana (2018). "Decoding Mapping as Practice: An Interdisciplinary Approach in Architecture and Urban Anthropology." Retrieved from <https://www.researchgate.net/> (PDF).

Wood, D. (1992). *The Power of Maps*. The Guilford Press, New York.

Potter, Jonathan (1989). Antique Maps - An Introduction to the History of Maps and How to Appreciate Them. Chartwell House. ISBN 978-1555213633.

Creative Industries Platform of Georgia. Retrieved from <https://creatives.ge/> (Accessed on 03.02.2024).

What do we mean when we refer to the creative industries?



Architecture



Music



Visual Art



Advertisement



Film and video



Performing arts



Design and fashion



Craft



**Media and
broadcasting**



Cultural heritage



**Artistic and cultural
education**



**Literature and
the publishing**



**Gastronomy and
Culinary industry**



**Digital technology
industry**