

Cultural roots in contemporary grounds: intangible heritage and sustainable urban landscape

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Abstract

This article explores the integration of intangible cultural heritage into sustainable urban design, using the Meskhetian Terraces in Georgia as a case study. These terraces, which represents centuries-old agricultural practices, are highlighted as both historical sites potential designs for addressing current sustainability

Key words: Cultural heritage, Sustainable architecture, Sustainable tourism development, Georgia's intangible cultural heritage, Resilient urban landscapes.

The research points up the role of cultural heritage in fostering community identity, social cohesion, and resilience within urban landscapes, drawing parallels with global examples of integrating heritage into urban planning (Pietryk-Kaszyńska et al., 2016). Additionally, the article examines how elements of Georgia's intangible heritage, such as Qvevri winemaking and the Tone bread oven, have been integrated into contemporary architectural practices to promote sustainable tourism development (UNESCO, 2013; Tsilosani, 2023b). By combining historical practices with innovative design, this research provides a framework for exploited cultural heritage as a foundation of sustainable urban development, promoting cultural diversity, environmental direction, and cultural flow (Soini & Birkeland, 2014; Richards, 2018).

Introduction

In the dynamically evolving discourse on sustainable development and urban planning, the integration of intangible cultural heritage is emerging as an important, yet often neglected, component (Soini & Birkeland, 2014). The richness of traditions, practices, knowledge systems, and rituals collectively define the cultural fabric of societies, shaping identity, values, and connections to place (Richards, 2018). The challenge of maintaining

challenges, such as climate change adaptation and ecological preservation (Deng et al., 2021; Tarolli et al., 2014). The study shows how traditional knowledge systems, such as the sustainable agricultural methods represented by the terraces, can inform modern urban planning and architectural innovation (Geografski inštitut Antona Melika ZRC SAZU, 2017).

sustainability in the process of growth and transformation of urban landscapes is closely linked to the maintenance of cultural progression, which connects societies to their history and to each other (UNESCO Urban Heritage Atlas, 2023).

The importance of integrating intangible cultural heritage in a sustainable urban landscape is various. First, it recognizes that cultural practices, expressions, and knowledge are as important components of a society's identity as the physical environment (Pietryk-Kaszyńska et al., 2016). By integrating intangible aspects of heritage into the urban fabric, cities can create a sense of belonging and progression for their residents. This integration not only enriches the urban experience but also counteracts the integration process of globalization, preserving the uniqueness and diversity of urban environments (Richards, 2018).

On the other hand, intangible cultural heritage provides invaluable knowledge about sustainable living practices developed over generations. Traditional knowledge, such as agricultural techniques, water management, and ecological protection, reflects a deep understanding of the local environment and a sustainable coexistence with nature (Deng et al., 2021; Tarolli et al., 2014). Using this wisdom, urban planners and architects can create innovative and time-tested solutions that increase the sustainability and resilience of urban environments (Geografski inštitut Antona Melika ZRC SAZU, 2017).

Furthermore, the promotion of intangible cultural heritage in urban environments escalates social cohesion and public engagement (Pietryk-Kaszyńska et al., 2016). Cultural expressions and practices create a platform for community engagement, which strengthens the connection between individuals and between a community and its environment. This engagement is critical for the success of sustainable urban development initiatives, ensuring that they are inclusive and responsive to the needs and values of society (Soini & Birkeland, 2014).

Studies on the Meskhetian Terraces and the integration of Georgian intangible cultural heritage into wider architectural practices highlight the potential of cultural heritage as a foundation of sustainable urban development (Tsilosani, 2023a). The analysis of these cases clearly demonstrates the importance of preserving and integrating intangible cultural heritage in shaping sustainable, resilient, and vibrant urban landscapes. This integration not only protects cultural diversity and heritage but also sends the urban environment towards a sustainable and inclusive future, where the cultural and environmental dimensions of sustainability are inseparable (Tsilosani, 2023b).

In the process of the evolution of urban landscapes, the integration of intangible cultural heritage into sustainable development strategies offers a path that respects the past while creating a sustainable future. It challenges urban planners, architects, and policymakers to rethink the role of culture in shaping the cities of tomorrow, ensuring that the spirit of community is preserved and celebrated in every brick that is laid and in every policy that is implemented (UNESCO Urban Heritage Atlas, 2023).

Methodology

The methodology adopted in researching the integration of intangible cultural heritage within sustainable urban landscapes, as illustrated in the studies on Meskhetian terraces and sustainable architectural practices in Georgia, employs a multi-disciplinary approach. This methodology is designed to comprehensively address the complexities of preserving intangible cultural heritage within

the context of modern urban development and sustainability. It surrounds a combination of qualitative and quantitative research methods, fieldwork, comparative analysis, and collaborative approaches to ensure a holistic understanding and actionable insights.

A great review of existing literature forms the basis of the research, shutting in academic journals, UNESCO reports, architectural and urban planning texts, and documentation of intangible cultural heritage practices. This review establishes a theoretical framework that guides the exploration of sustainable urban development, architectural innovation, and the significance of intangible cultural heritage. It also aids in identifying gaps in current practices and knowledge, setting the stage for further investigation.

Fieldwork in Georgia, focusing on the Meskhetian terraces and other relevant sites, plays a crucial role in the methodology. This includes direct observation, photographic documentation, and soil and biodiversity analysis where applicable. Engaging with local communities, practitioners, and experts through interviews and collective workshops ensures an in-depth understanding of the intangible cultural practices, their significance, and the challenges faced in preserving them among urban development pressures.

Drawing on global examples of sustainable urban planning and architectural practices that have successfully integrated intangible cultural heritage, the research employs a comparative analysis. This method highlights effective strategies, innovative solutions, and potential risks, offering a broader perspective on the challenges and opportunities in integrating cultural heritage within sustainable urban landscapes.

Incorporating cooperative design and planning processes is essential to ensure the research is grounded in the needs, values, and aspirations of the communities involved. Workshops, community meetings, and stakeholder consultations facilitate the co-creation of design and planning solutions that are culturally sensitive, sustainable, and reflective of community identities.

The collected data, both qualitative and quantitative, undergoes exact analysis to

identify patterns, insights, and correlations between the preservation of intangible cultural heritage and sustainable urban development outcomes. This analysis informs the development of guidelines, best practices, and policy recommendations tailored to the integration of these elements in urban landscapes.

Building on the insights gained, the research aims to develop conceptual and practical models for integrating intangible cultural heritage into sustainable urban planning and architectural design. These models serve as a design for practitioners and policymakers, illustrating how to support cultural heritage for increasing urban sustainability, resilience, and community well-being.

Main part

Set in the historic heart of Meskheti, Georgia, the Meskhetian Terraces are a breathtaking example of human innovation and a example to the hard work spirit of the Georgian people. These ancient agricultural landscapes, carefully cut into the mountainous landscapes of the region, not only show the innovative agricultural practices of past civilizations but also represent the rich cultural heritage and identity of Georgia. However, the winds of change, marked by fast urbanization and the shift towards modern agricultural techniques, pose significant risks to the preservation of these terraced landscapes. This article explores the cultural, ecological, and architectural importance of the Meskhetian Terraces and presents a persuasive case for their preservation and integration into contemporary society.



Fig. 1 Meskhetian Terraces

The Meskhetian Terraces are more than just agricultural landscapes; they are a living museum of Georgia's past, presenting centuries of traditional farming practices, community

life, and resilience in the face of natural suffering (Tsilosani, 2023a). These terraces are the example to the deep connection between the Georgian people and their land, a relationship further through generations of careful direction and respect for the natural world (Nikolaishvili et al., 2019). However, the survival of these terraces is under risk from modern challenges, including climate change, urban sprawl, and the dropping of traditional farming methods (Deng et al., 2021; Tarolli et al., 2014). This research shows to highlight the urgency of preserving these landscapes, not just as objects of the past, but as pointers for sustainable living and cultural flow (Geografski inštitut Antona Melika ZRC SAZU, 2017).

One of this study's key objectives is to explore the integration of ancient terracing techniques into modern architectural practices. The Meskhetian Terraces offer invaluable insights into sustainable construction, water management, and landscape design that can inform contemporary building practices (Tsilosani, 2023b). By studying these ancient systems, architects and urban planners can develop innovative solutions that address today's environmental challenges, such as soil erosion, biodiversity loss, and water shortage (Deng et al., 2021; Tarolli et al., 2014). Moreover, the terraces' ability to harmonize with the natural landscape serves as a model for eco-friendly construction, promoting a balance between human habitation and nature conservation (Slamova & Belcakova, 2019).



Fig.2 Sustainable Urban Landscape

The potential of the Meskhetian Terraces to increase Georgia's hospitality industry is another important point of this research. As travelers increasingly seek authentic and impressive experiences, the terraces can serve as a unique attraction that connects visitors with Georgia's rich cultural heritage and

breathtaking natural beauty (Richards, 2018). This study explores how the hospitality sector can support these ancient landscapes to offer sustainable tourism experiences that celebrate Georgia's history and support local communities (Landorf, 2009).

In Georgia's beautiful landscapes, where echoes of the past connect perfectly with the heart of contemporary, cultural heritage preservation and architectural innovation go hand in hand. The research paper *"Preservation and Innovation: Integrating Sustainable Practices and Historical Georgia's Intangible Cultural Heritage in Architecture"* presents a comprehensive look into this beneficial relationship, with a special focus on the Meskhetian terraces—a landmark to Georgia's lasting history of sustainable agricultural and architectural practices (Tsilosani, 2023b).

At the heart of this study lies the Meskhetian terraces, symbolic of Georgia's commitment to sustainability long before the term entered the global dictionary. These terraced landscapes, formed with correct care and profound understanding of ecological balance, serve not only as agricultural sites but as guardians of cultural narratives, connecting the tangible with the intangible heritage of the Georgian people (Nikolaishvili et al., 2019). By examining these terraces in conjunction with global examples, the research illuminates their significance not only as historical artifacts but also as designs for future sustainable architectural efforts (Geografski inštitut Antona Melika ZRC SAZU, 2017).



Fig.3 Meskhetian Terraces

Georgia's storied history as a wine-producing country, coupled with its recognition by UNESCO for its intangible cultural heritage, provides a rich tapestry for analysis (UNESCO, 2013). This dual heritage, both tangible in its

landscapes and intangible in its winemaking traditions, offers unique insights into the integration of cultural elements into architectural innovation (Richards, 2018). The research explores into how these linking heritages can inspire contemporary architectural designs that are both sustainable and culturally meaningful (Tsilosani, 2023a).

The combination of sustainable architectural practices with Georgia's intangible cultural heritage offers a unique pathway toward preserving the nation's rich historical tapestry while fostering innovation within its contemporary architectural landscape. This chapter seeks into two specific elements of Georgia's intangible cultural heritage—Qvevri winemaking and the traditional Georgian bread oven, Tone—as pivotal components in promoting sustainable tourism development through architectural innovation (Nikolaishvili et al., 2019; Timothy, 2016).

Qvevri, large clay pots used for the fermentation, storage, and aging of traditional Georgian wine, represent a method dating back over 8,000 years (Tsilosani, 2023b). In 2013, the UNESCO recognition of the Qvevri winemaking method as an Intangible Cultural Heritage of Humanity underscored its global cultural significance (UNESCO, 2013). This ancient practice is not only an example to Georgia's historical depth as a wine country but also highlights a sustainable approach to wine production that harmonizes with nature rather than seeks to dominate it (Landorf, 2009).

The architectural integration of Qvevri into modern designs offers an innovative approach for preserving this ancient tradition. By integrating Qvevri within the structures of contemporary wineries and visitor centers, architects can create spaces that are deeply rooted in Georgian culture while meeting modern sustainability standards (Ragheb et al., 2016). Such designs encourage the use of local materials and traditional techniques, reducing the environmental footprint and strengthening the connection between the built environment and the landscape (Deng et al., 2021).

Similarly, Tone, the traditional Georgian bread oven, is a symbol of Georgia's culinary heritage. The process of making bread in a Tone is a ritual that has been passed down through

generations, a symbol of the Georgian way of life (Timothy, 2016). Integrating the concept of Tone into the design of restaurants, bakeries, and cultural centers can offer a unique dining experience that elevates the architectural space to more than just a place for eating but a venue for cultural immersion (Richards, 2018).

By designing spaces that accommodate the Tone, architects can contribute to the preservation of Georgian culinary traditions and offer visitors a tangible connection to Georgian culture. This approach not only upgrade the architectural landscape with cultural base but also supports the improvement and continuation of traditional baking methods, fostering a sustainable link between culture and contemporary practices (Pietryk-Kaszyńska et al., 2016).

The integration of Qvevri and Tone into Georgia's architectural and tourism landscapes serves as a catalyst for sustainable tourism development. These practices offer a unique selling point for Georgia's tourism industry, attracting visitors interested in authentic cultural experiences and sustainable practices (Slamova & Belcakova, 2019). By promoting an impressive experience into Georgia's intangible cultural heritage, the country can differentiate itself in the global tourism market, encouraging responsible travel and deeper cultural engagement (Landorf, 2009).

Moreover, the architectural preservation and innovation that Qvevri and Tone contribute to the broader goals of sustainable development by promoting environmental sustainability, cultural diversity, and economic benefits for local communities. These initiatives can inspire the development of educational programs, workshops, and cultural events that further upgrade the tourism experience and foster a sustainable relationship between visitors and the host community (Geografski inštitut Antona Melika ZRC SAZU, 2017).

A significant dimension of this study is the exploration of how Georgia's UNESCO recognitions and its vibrant tourism industry can benefit from the integration of intangible cultural heritage. The inclusion of cultural elements not only strengthens the architectural landscape but also improves the tourism experience, promoting a deeper connection

between visitors and the local culture (UNESCO, 2013). This approach not only promotes sustainable tourism development but also ensures the preservation of cultural heritage for future generations (Tsilosani, 2023b).

The paper shows a future where architectural practices are represent the heart of Georgia's cultural heritage, combining preservation with innovation. It argues for a comprehensive approach to architecture, one that respects and improves historical practices while containing modern sustainability principles. Through detailed analysis and case studies, the research offers a model for architects and planners worldwide to incorporate cultural heritage into their projects in meaningful and sustainable ways (Soini & Birkeland, 2014).

Conclusion:

The study of the integration of intangible cultural heritage into the framework of sustainable urban development and architecture, drawing on the examples of Meskheta terraces and sustainable practices in Georgia, makes an important discovery: intangible cultural heritage is not only a object of the past, but also a living and important element in the creation of sustainable, resilient and significantly developed urban environments. This study highlights the profound importance of intangible cultural heritage, which expresses, improves and contributes to the sustainability and socio-cultural vulnerability of contemporary urban and architectural practices.

Intangible cultural heritage, which includes traditions, practices, knowledge and skills that are passed down from generation to generation, offers us valuable and important knowledge about sustainable living, social sustainability and environmental protection. The Meskheta Terraces, as an ancient agricultural wisdom, are an example of how traditional knowledge systems can help address contemporary sustainable development challenges such as biodiversity conservation, soil erosion control and climate change management. Also, the integration of Georgia's rich winemaking traditions into contemporary architecture not only preserves cultural identity, but also

promotes sustainable tourism and the economic development of the community.

The importance of intangible cultural heritage in sustainable urban landscapes and architecture goes beyond environmental sustainability and considers social cohesion, identity and continuity. It acts as a conduit for community engagement, ensuring that urban development is not only physically sustainable, but also culturally resonant and inclusive. By integrating cultural heritage into urban networks, cities help a sense of belonging, pride and ownership among their citizens and boost social sustainability and well-being.

Integrating intangible cultural heritage into urban planning and architectural design also challenges the integration of urban spaces and promotes diversity and innovation. It encourages architects and planners to reevaluate design paradigms to use traditional knowledge and practices to create unique, context-specific solutions that reflect the importance of local cultural narratives. This approach not only increases the rich architectural and functional qualities of urban environments, but also contributes to the global discourse on sustainable development, the topic of intangible traditions and problems, and alternative visions.

As a result, the preservation and integration of intangible cultural heritage into sustainable urban landscapes and architecture is essential for creating environments that are environmentally sustainable, socially cohesive and culturally rich. This study highlights the need for a paradigm shift in urban development and architectural practices that recognizes the natural value of cultural heritage as a foundation for sustainability. As cities continue to evolve, embracing intangible cultural heritage as an important part of urban planning and design will be essential to ensure that future generations have urban landscapes that are not only usable but also reflect the diverse works of cultures.

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