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Compatible Reuse of a Historic Site as a Tourist Destination: Qishla of Akre

Kompatybilna adaptacja zabytku jako atrakcji turystycznej: Kiszla w Akrze

Keywords: compatible reuse, historic building, built Heritage, tourism, sustainability, Qishla of Akre

Słowa kluczowe: kompatybilna adaptacja, zabytek, dziedzictwo architektoniczne, turystyka, zrównoważony rozwój, Kiszla w Akrze

Introduction

Historic buildings are vital cultural landmarks, known for their architectural and artistic styles, and are preserved as integral parts of cultural heritage [Munshed, Ashour 2024]. Compatible reuse is crucial for sustainable development, offering environmental, social, and economic benefits over demolition and new construction [Alabaachi, Alalaf 2023]. Reusing historic sites as tourist destinations merges cultural preservation with economic growth [Chan et al. 2023]. These sites, including ancient ruins and castles, attract tourists seeking authentic experiences but require careful planning to maintain historical integrity while ensuring accessibility [Abdulrahman, Al-Allaf 2023]. Compatible reuse enhances sustainability in construction, and well-planned adaptive reuse can prevent significant losses [Wahab et al. 2023].

This study uses an analytical descriptive approach, reviewing recent literature on reuse and tourism industry requirements. It employs mixed methods to evaluate criteria for safeguarding historic buildings and meeting complex tourist needs. The methodology combines qualitative and quantitative techniques, including literature reviews, site analysis, stakeholder

interviews, and data analysis, to assess a site's potential, limitations, and challenges. The research addresses the gap in comprehensive methodologies for repurposing historic sites for tourism, focusing on benefits and challenges. By examining global examples, it identifies best practices for sustainable tourism development, considering economic impacts on local communities, stakeholder engagement, and the balance between preservation and commercialization.

Ultimately, this study aims to provide insights into effectively integrating historic sites into the tourism industry, enhancing cultural preservation and economic vitality. Akre, a historically significant city in northern Iraq's Kurdistan Region, is renowned for its cultural, commercial, and administrative importance. Founded around 580 BCE, it features landmarks reflecting its rich heritage and attracts visitors with its natural beauty. The city has undergone various governance transitions, underscoring its strategic significance. The Qishla of Akre, built in 1858, originally served as a military base and was later used by British and Iraqi governments until 2003. Despite conflicts and financial issues interrupting renovation efforts, the local government continues to maintain and use this historic fort.

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Cytowanie / Citation: Ismaeel E.H., Mohammed L.A. Compatible Reuse of a Historic Site as a Tourist Destination: Qishla of Akre. *Wiadomości Konserwatorskie – Journal of Heritage Conservation* 2025, 83:158–169

otrzymano / Received: 18.06.2025 • **Zaakceptowano / Accepted:** 29.07.2025

doi: 10.48234/WK83AKRE

Praca dopuszczona do druku po recenzjach

Article accepted for publishing after reviews

Historic sites and compatible reuse

Historic buildings and sites are essential cultural, architectural, or historical structures that preserve a society's cultural heritage. Their rehabilitation offers significant economic, cultural, social, and environmental sustainability benefits [Ismael 2023]. Protected by various heritage preservation laws and organizations, these buildings provide insights into their time and place, serving as tangible links to the past [Al-Sakkaf et al. 2020]. Historic sites, including significant cultural items, can be restored in old urban areas using moderate reconstruction techniques to maintain the urban texture. Careful restoration methods are crucial to ensure the authenticity of the original structure and preserve the continuity and integrity of the historical environment, integrating seamlessly with the overall style of the area [Shen et al. 2023].

Cultural heritage conservation emphasizes preserving the historical and cultural values inherent in historic locations, advocating for the protection and maintenance of these sites to safeguard their authenticity and integrity [Hamad, Ismael 2023]. The concept of compatible reuse of culturally valuable buildings has been widely adopted to make rational choices about their new functions [Lo Faro et al. 2018]. Achieving compatible use may require adapting certain elements and spaces within the building, such as modifying rooms, improving lighting, ventilation, temperature control, and enhancing accessibility. However, design choices may lead to significant alterations, resulting in negative conservation outcomes [Jasim, Ismael 2025].

The financial outlay for renovation projects depends on the extent of work required to adapt the building to new uses [Pinto et al. 2017]. It is essential to integrate compatible elements between the reuse of built heritage structures, the restoration of traditional materials, the protection of cultural values, synergy with the surrounding landscape, and adaptation to climate change. These elements must align with the reuse of existing buildings and accommodate restrictive environmental conditions. Economically, using locally sourced materials reduces construction costs and energy consumption. Socially, compatible and sustainable reuse strategies facilitate local economic growth, enhance cultural appreciation, and contribute to climate resilience [Mazzetto 2021].

Adaptation is a sustainable practice that minimizes the impact on a place's cultural significance by modifying its materials only after considering alternative options [Latham 2000]. The goal is to maintain the building's original function while enhancing its performance to meet contemporary standards [Haidar, Talib 2014]. Compatible reuse considers economic, environmental, and social aspects, focusing on safeguarding cultural heritage [Jasim, Ismael 2023]. Some architects recommend timely conversions to prevent damage and cultural extinction [Fajarwati, Hendrassukma 2022], presenting opportunities and challenges in architecture

and interior design and encouraging innovation in various aspects [Laksitarini, Lase 2023].

Tourism and Heritage

Tourism significantly contributes to economic development by generating income, employment, and infrastructure growth in destinations like Lesotho. Understanding tourism marketing is crucial for managers due to increased industry competition [Nqosa et al. 2019]. Heritage tourism can boost the economy by coordinating factors at governance and community levels, integrating conservation, community development, and tourism into strategic planning for economic growth [Taymourash et al. 2023]. In urban planning, tourism clusters are highly effective due to cooperation among enterprises and infrastructure elements, enhancing tourism product quality and competitiveness [Hamad, Ismael 2023; Bakayeva, Simakova 2023]. Heritage tourism is a vital economic and marketing tool, offering memorable experiences but facing challenges like inadequate maintenance.

Governments must preserve and restore these structures, with authorities prioritizing upgrades and opportunities for heritage and eco-tourism [Joshi, Motiwala 2022]. Cultural tourism impacts heritage city economies and societies, with their global competitiveness dependent on sustainable urban cultural heritage use [Al-A'abachi, Alalaf 2023]. However, using cultural heritage for urban regeneration can lead to superficial refurbishments without functional transformations [Cerreta, La Rocca 2021]. Successful urban redevelopment requires active local stakeholder involvement, though cultural tourism can constrain other tourism forms [Branislav et al. 2024]. Urban renewal initiatives can degrade historic sites, with tourism industry growth pressuring environmental preservation. Ineffective penalties or regulatory authorities can cause irreparable damage, including layout destruction and historical environment modifications [Zhao, Han 2023].

Addressing these challenges involves functional zoning, dividing sites into accommodation facilities, recreation areas, restaurants, service zones, and green spaces [Ratcliffe, Stubbs 2021]. Providing diverse accommodation options and amenities like swimming pools, sports facilities, and wellness centers is crucial [Zhuravlova et al. 2023; Suess et al. 2024]. Inclusive design ensures accessibility for all visitors, with safety protocols including emergency response plans and health services [Rasoolimanesh et al. 2020; Hall et al. 2023]. Sustainable tourism principles are essential for reusing historic locations, focusing on environmental, economic, and social sustainability to balance development with site conservation [Elkington, 1997]. Urban regeneration theories offer insights into revitalizing historic locations, with compatible reuse involving repurposing old buildings while preserving historical features [Bullen, Love 2011]. Historic sites contribute to local identity and community development, ad-

vocating for their integration into modern urban life through thoughtful reuse [Roberts, Sykes 2000].

Related literature

Rudan [2023] suggests that marketing initiatives should focus on distinctive heritage, combining traditional and modern elements to stimulate visitor interest. Multi-sensory channels can create a nostalgic atmosphere, linking authenticity to a nostalgic experience. Ariffin et al. [2019] note that implementing compatible reuse in buildings is gradual, preserving historical treasures while catalyzing tourism development and generating community income. Studies show that tourists generally view this practice positively, leading to increased appreciation and visitation. Yatsenko et al. [2024] identify location, orientation, room size, ventilation, and natural light access as primary factors influencing reuse compatibility, recommending their consideration in strategy development. Cultural identity and architectural innovation are also crucial. The decision to assign a new function to a building depends on socio-economic factors, urban planning, and architectural considerations.

Munshed and Ashour [2024] conclude that each building has an assumed lifespan requiring compatible reuse through horizontal and vertical expansion, with the appropriate strategy selected based on function, age, social significance, and available space. Abdul-Jabbar and Alwehab [2022] emphasize the impact of compatible reuse on tourism development, stating that the tourism sector is the primary beneficiary. Successful adaptation requires observing various conditions, respecting cultural factors, aligning with physical characteristics, and providing service systems to enhance efficiency. Vardopoulos et al. [2023] explore sustainable tourism through compatible reuse, highlighting examples like the S. Marcos Hotel in Portugal and the Ned Hotel in England. Doshi and Devi [2016] identify three forms of compatible reuse: retaining the original use, adapting to a new use, or implementing Facadism.

Tarrad and Husban [2021] emphasize the importance of the new use being compatible with the building's distinctive features, considering its nature and

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Study	Environmental Aspects			Accessibility				Cultural				Value			Compatibility			Sustainability			
	Orientation	Access To Natural Lighting	Ventilation	Integration With Site	Location Of The Building	Size Of The Interior Spaces	Connectivity	Function Age	Physical Age	Identity	Historic Value	Styles	Social Significant	Nostalgic Atmosphere	Structure Stability	Size	Function Of Old One	Spatial Characteristic	Economic	Environment	Social
Rudan, 2023	✓		✓					✓	✓	✓		✓				✓		✓			
Ariffin, et al., 2019	✓				✓				✓						✓		✓			✓	
Yatsenko & et al., 2024						✓	✓					✓				✓					✓
Munshed & Ashour, 2024		✓		✓	✓			✓		✓	✓		✓		✓					✓	
Abdul-Jabbar & Alwehab, 2022	✓					✓			✓			✓				✓		✓			
Vardopoulos1, et al., 2023		✓						✓						✓		✓				✓	
Doshi and Devi, 2016		✓			✓		✓		✓			✓			✓		✓				✓
Tarrad and Husban, 2021						✓				✓			✓						✓	✓	
Ratcliffe and Stubbs, 2021		✓		✓		✓			✓			✓			✓						
Penner, 2012				✓					✓							✓					
Torkildsen, 2012							✓			✓								✓			
Hall, et al., 2023		✓				✓						✓							✓		

Table 1. Considerations and indicators of compatible reuse of historic site derived from the literature; source: by the authors.

Tabela 1. Uwarunkowania i wskaźniki kompatybilnej adaptacji i zmiany sposobu użytkowania obiektu zabytkowego według literatury; źródło: autorzy.

Locations	Compatibility	Environment	Cultural Aspect	Value	Sustainability
- Accessibility	- Accommodation	- Ventilation of Spaces	- Identity	- Popularity of Place	- Economic Aspect
- Connectivity	- Services Area	- Good View	- Historic Aspects	- Attraction Point	- Social Aspect
- Integration	- Restaurant	- Building Openings	- Place Attachment		- Environmental Aspect
- Terrain	- Green Spaces		+		
	- Recreational Zones				
	- Spaces Size (Hotel Room)				
	- Safety & Security				

Table 2. Tourism complexes requirements related to compatible reuse considerations and indicators; source: by the authors.

Tabela 2. Wymagania względem zespołów turystycznych w kontekście rozważań i wskaźników kompatybilnej zmiany sposobu użytkowania; źródło: autorzy.

needs without significantly affecting its characteristics. Malaika and Raswol [2014] emphasize reusing Akre city's historic sites to enhance heritage tourism, revitalizing the local economy and promoting cultural, historical, and religious tourism. Irfan and Sardar [2021] note Akre district's geotourism potential, with challenges like lack of investment hindering its full realization. Nechirvan et al. [2024] highlight the need for improved infrastructure and tourism services to enhance visitor experiences. Mustafa [2023] focused on the adaptive reuse potential of Qishla Castle in Koya, Erbil, suggesting it could serve as a tourist destination due to its historical and cultural significance.

Compatible reuse vs requirements for tourism complexes

By following the specifications set forth in the functional requirements and needs, designers and planners can construct a tourism complex that is not only functional and aesthetically pleasing, but also sustainable and economically viable. The preceding discussion allows for the formulation of a summary of the considerations and indicators of compatible reuse, as presented in Table 1. The fundamental requirements for the development of tourism complexes can be identified and categorized as shown in Table 2.

This research aims to address the knowledge gap in balancing preservation efforts with commercial development interests in transforming historic sites into tourist destinations. It aims to identify effective strategies for the compatible reuse of historic sites while preserving their cultural and historical integrity. The study aims to examine the viability and efficacy of repurposing the Qishla of Akre as a tourist destination, analyzing social, cultural, economic, and environmental factors that influence its potential for compatible reuse. By examining the historical context, current conditions, and potential tourism offerings in Akre, the research will provide insights and recommendations for leveraging the site's heritage assets to promote tourism development, community revitalization, and cultural preservation.

Methodology

The mixed methodology involves a literature review, site analysis, stakeholder interviews, and data analysis to evaluate the potential and limitations of the site. It aims to establish a theoretical framework for understanding the relationship between heritage preservation and modern tourism requirements. The site analysis examines the Qishla of Akre site's architectural features, structural integrity, and spatial configuration. An environmental assessment evaluates the site's natural environment. Semi-structured interviews with key stakeholders help determine the site's potential and constraints.

In details, the methodology of this study is meticulously structured into two distinct phases, each designed to systematically address the research objectives through a combination of theoretical and empirical approaches. In Phase One, a comprehensive literature review is conducted to establish a robust theoretical framework. This framework is essential for understanding the intricate relationship between heritage preservation and modern tourism. By synthesizing existing research and theoretical perspectives, this phase lays the groundwork for identifying key variables and conceptual models that inform subsequent empirical investigations. Phase Two employs a mixed-methods approach, integrating both qualitative and quantitative methodologies to evaluate and assess various dimensions of the research problem. This phase is subdivided into specific criteria and indicators focused on the safeguarding of historic buildings and sites, as well as the functional requirements of tourist complexes.

The qualitative method involves stakeholder semi-structured interviews, which provide in-depth insights and subjective assessments from individuals directly involved or affected by heritage preservation and tourism development. Concurrently, an architectural survey, observation, and checklist are utilized to gather detailed empirical data on the physical and functional attributes of the sites under investigation. On the quantitative front, a site analysis and environmental assessment are performed to collect measurable data that

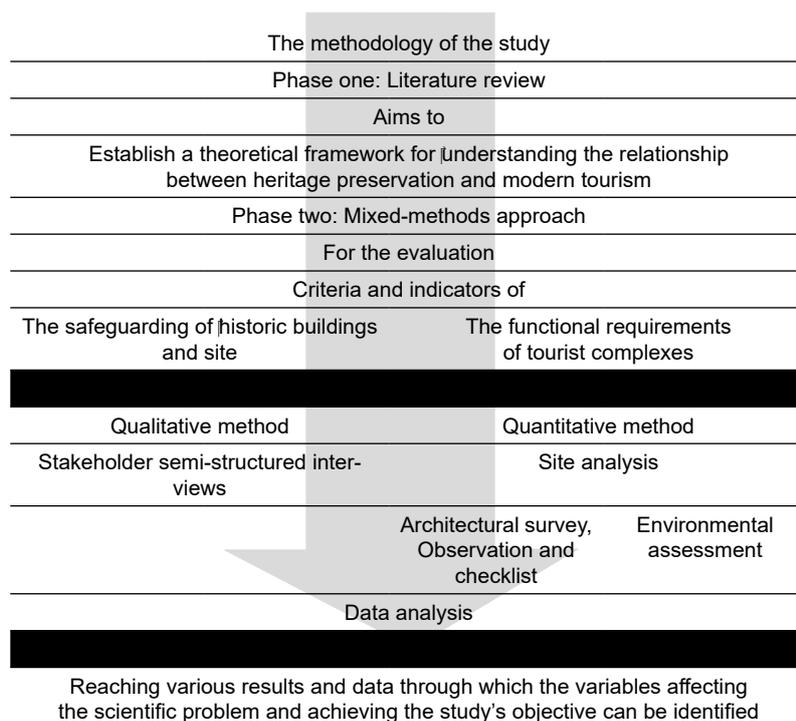


Fig. 1. The methodology of the current study; source: by the authors.

Ryc. 1. Metodologia badań; źródło: autorzy.

can be statistically analyzed. This dual approach ensures a holistic evaluation of the potential, limitations, and challenges inherent to the sites. The data analysis component of this phase is crucial for identifying the variables affecting the scientific problem and achieving the study's objectives. The goal is to transform the Qishla of Akre into a vibrant tourist attraction, preserving its historical and cultural significance.

By triangulating data from both qualitative and quantitative sources, the study aims to produce comprehensive results that are both valid and reliable, thereby offering a nuanced understanding of the interplay between heritage preservation and modern tourism. See Figure 1.

The semi-structured interview method employed in this study is a qualitative research technique designed to elicit detailed and nuanced insights from stakeholders involved in heritage preservation and tourism development. This approach combines the flexibility of open-ended conversations with the focus of predetermined themes or questions, allowing the interviewer to explore specific topics in depth while also adapting to the interviewee's responses. In practice, the semi-structured interviews are conducted with a diverse range of stakeholders, including heritage site managers, tourism officials, local community representatives, and conservation experts. The interview guide consists of core questions that address key aspects of the research, such as the challenges and opportunities in preserving historic sites, the functional requirements of tourist complexes, and the perceived impact of tourism on heritage conservation.

This method facilitates a comprehensive understanding of the stakeholders' perspectives, experiences, and priorities, thereby enriching the data collected through other quantitative methods. By capturing subjective insights and contextual details, semi-structured interviews help identify underlying factors and variables that influence the relationship between heritage preservation and modern tourism. The data gathered from these interviews are then systematically analyzed to identify common themes, patterns, and discrepancies, contributing to a holistic assessment of the research problem.

Akre Qishla site

Background

Akre, is a historically significant city located in the northern part of Iraq. The city is nestled within the Kurdistan Region and is celebrated for its cultural, commercial, and administrative importance. It is renowned for its breathtaking landscapes and serene environment, which attract visitors seeking both natural beauty and historical depth. The city's historical significance is underscored by landmarks such as the Akre Castle and the bustling Akre Bazaar, which reflect its rich heritage and cultural charm [Khider, Khudhur 2023; Ismael, Hasan 2023]. Historically, Akre was established around 580 B.C. and has since been a focal point of various cultural and military developments.

The city has witnessed numerous transitions in governance, including periods under the control of the Soran Emirate and the Ottoman Empire, which high-

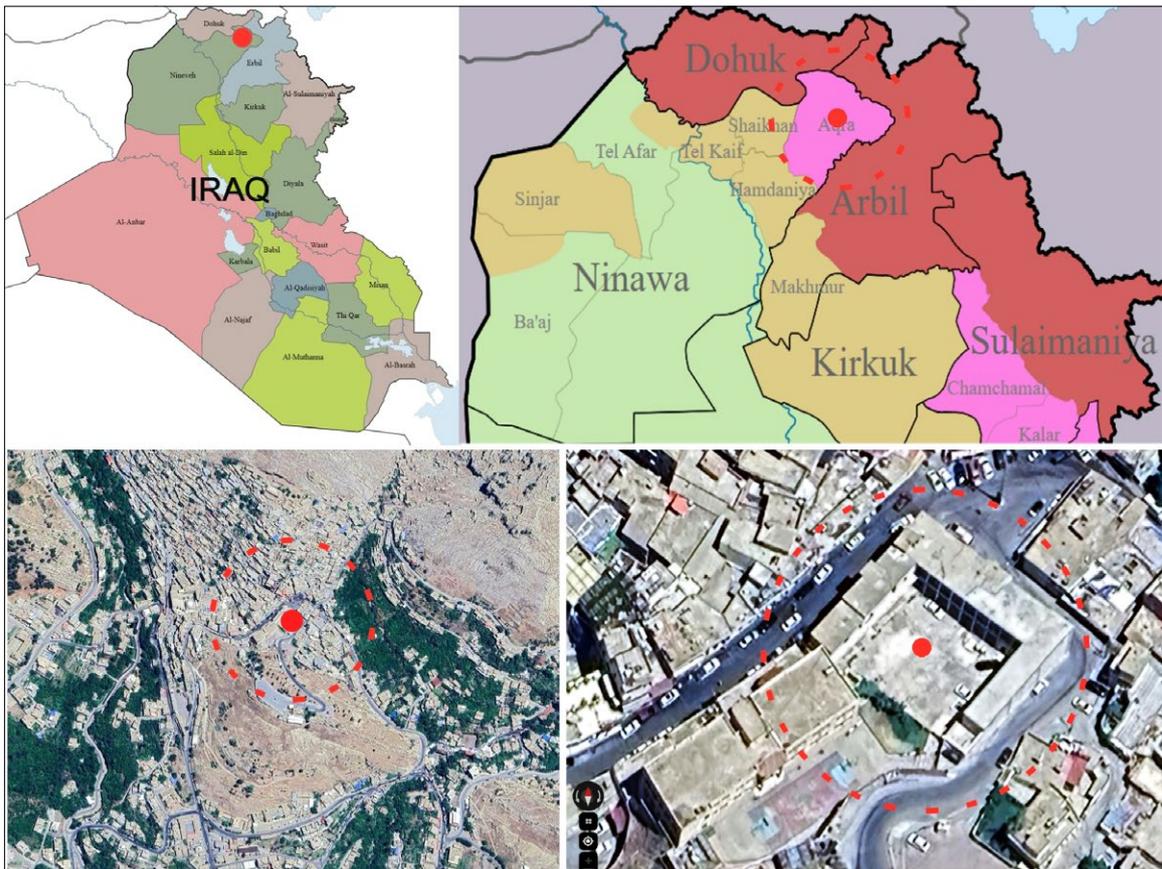


Fig. 2. Site of the Qishla of Akre: a) location of the site in Iraq, b) location of the site in Ninawa Governorate, c) location of the site in Akre city, d) aerial photo of Qishla site; source: Google Maps.

Ryc. 2. Lokalizacja Kiszli w Akrze: a) lokalizacja w obrębie Iraku, b) lokalizacja w obrębie muhafazy Niniwa, c) lokalizacja w obrębie Akry, d) zdjęcie lotnicze Kiszli; źródło: Google Maps.



Fig. 3. Building of the Qishla of Akre: a) the building, its main entrance, and the building's surroundings, b) the courtyard, view from the northeast, c) the courtyard, view from the southwest, d) photo from the first-floor arcade to the courtyard, view the southeast; by the authors, 2023.

Ryc. 3. Budynek Kiszli w Akrze: a) budynek, główne wejście, otoczenie obiektu, b) dziedziniec, widok od strony północno-wschodniej, c) dziedziniec, widok od strony południowo-zachodniej, d) zdjęcie z podcienia na pierwszym piętrze z widokiem na dziedziniec, widok od strony południowo-wschodniej; zdj. autorzy, 2023.

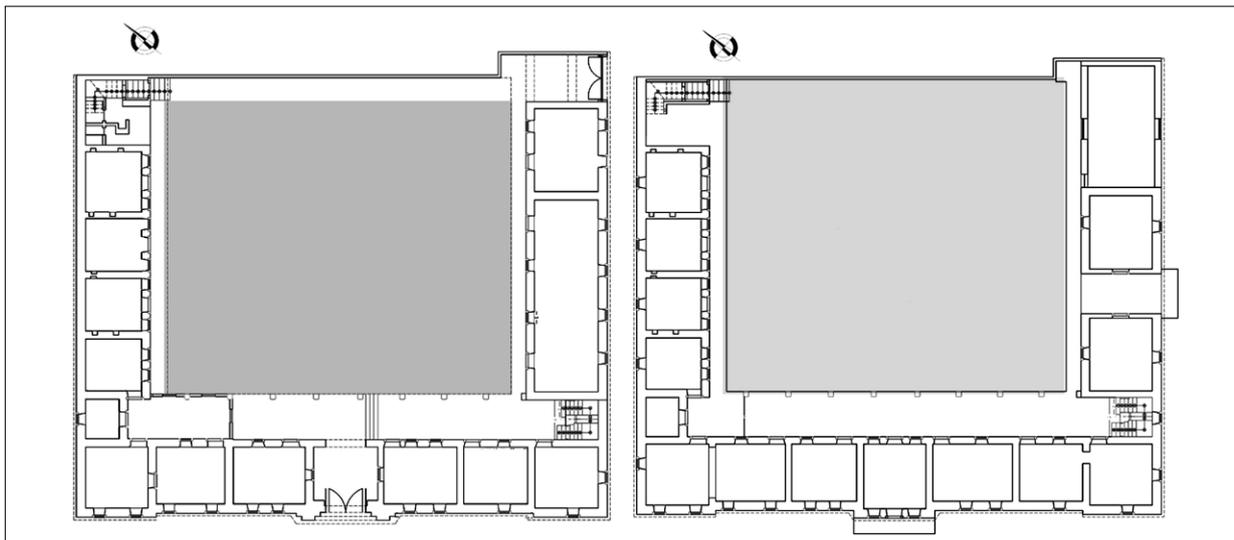


Fig. 4. Qishla of Akre floor plans, a) ground floor plan, b) first floor plan; 2024, by the authors.

Ryc. 4. Rzuty Kiszli w Akrze, a) rzut parteru, b) rzut pierwszego piętra; 2024, opracowanie własne.

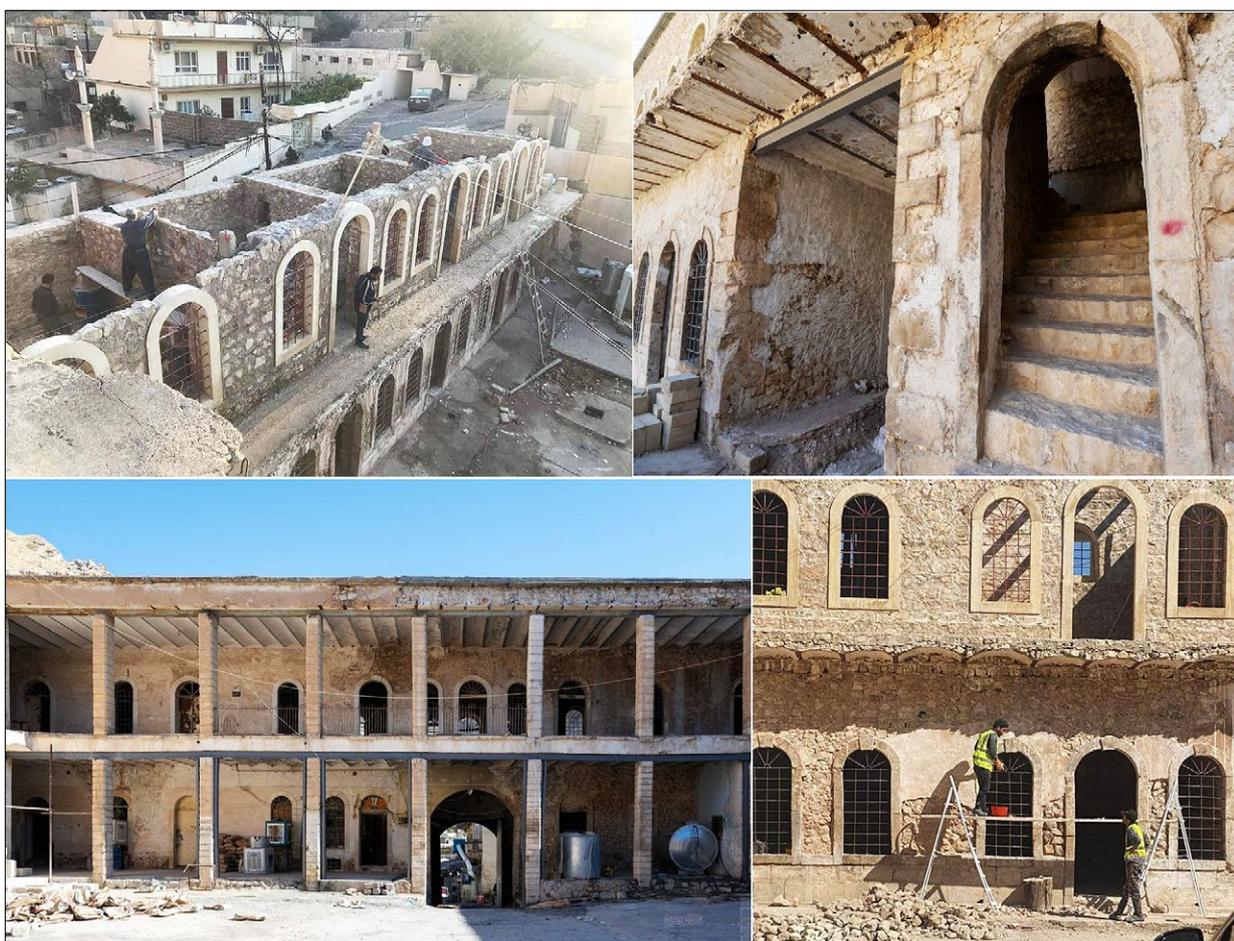


Fig. 5. Preservation work on the Qishla of Akre: a) reconstruction of the first floor walls using traditional materials; source: [pukmedia.com 2022], b) cleaning the original walls, removing the damaged cladding materials, and cleaning the iron beams to prepare them for maintenance work; source: [rudaw.net/ 2023], c) the main entrance facade from the courtyards, showing the scraping of the damaged finishing materials and preparation for restoration work; source: [rudaw.net/ 2023], d) repair work on the walls using tools that are harmless to the original structure; source: [pukmedia.com 2022].

Ryc. 5. Prace konserwatorskie na obiekcie Kiszli w Akrze: a) odbudowa ścian pierwszego piętra przy użyciu tradycyjnych materiałów; źródło: [pukmedia.com 2022], b) oczyszczanie pierwotnych ścian, usuwanie zniszczonych materiałów okładzinowych i oczyszczanie żelaznych belek przygotowujące do prac remontowych; źródło: [rudaw.net/ 2023], c) elewacja głównego wejścia od strony dziedzińca, ukazująca usuwanie zniszczonych materiałów wykończeniowych i przygotowania do prac renowacyjnych; źródło: [rudaw.net/ 2023], d) prace naprawcze murów przy użyciu narzędzi w sposób niepowodujący uszkodzeń pierwotnej struktury; źródło: [pukmedia.com 2022].

light its strategic importance throughout history. Akre's unique blend of historical architecture and vibrant local culture makes it a compelling destination for those interested in exploring the rich tapestry of Kurdish heritage. The city's labyrinthine streets and panoramic views offer a glimpse into its storied past and its ongoing significance as a cultural hub in the Kurdistan Region [Mohammed, Baker 2024; Fatah, Mzuri 2025].

The Qishla of Akre (ancient fortress of Akre) is a significant heritage site in northern Kurdistan, built in 1858. Covering 1,490 m², it features over 30 rooms across two stories with sturdy walls. The term "Qishla" originates from the Ottoman word *Qashlagh*, meaning a military base or winter shelter. The fort served British and Iraqi governments, and was used as a base, jail, and government offices until 2003. In 2005, Akre's antiquities office opened. The building was renovated in 1933, but efforts were halted by military conflicts in 2017 and a financial crisis. The local government continues to use and maintain the fort. See Figures 2–5.

Semi-structured interview with key stakeholders

The director of antiquities of Dohuk, Doctor Hassan Ahmed Qasim, has announced that his department is working on the restoration and maintenance of several significant archaeological sites in the province. The Directorate of Dohuk Antiquities has allocated a budget of over two billion dinars (over \$1.5 million) for the restoration of these sites. Doctor Qasim emphasized the need for large-scale excavations to understand the characteristics of the ancient civilization in the region. He also urged the government to pay greater attention to the restoration of archaeological sites, as they represent symbols of the country's identity and antiquity.

The director of tourism in Akre announced that the ministry of municipalities and tourism in the Kurdistan regional government has completed the restoration of the Qishla of Akre, which has allayed concerns about the structural integrity of the 200-year-old edifice. The project, which began in 2021, has a budget of 166 million dinars (about \$130,000.00) and has progressed well in accordance with the restoration instructions. An architect from the directorate stated that the work was carried out in accordance with the restoration instructions and using materials similar to those used in construction. In conclusion, the restoration of archaeological sites is a time-consuming process that requires the use of materials similar to those used in construction.

Field work

A checklist was developed to assess the potential and limitations of the Qishla site through field visits and on-site observations. A variety of shortcomings were identified to determine necessary actions to ensure the site meets the tourism complex's requirements. Each feature, attribute, or capability was assigned a full score, while elements and objects that only partially fulfill the criteria were assigned a lower score of half a score.

Any element or component that did not achieve the required value was assigned a zero score. Table 3 illustrates the values assigned during the analysis of the site and its contents.

Location

The Qishla building is located in a strategic city area, surrounded by a commercial area with excellent accessibility. It integrates with its surroundings through various roads and connections to nearby commercial and residential areas. However, the area lacks open and green spaces, gardens, and attractive outdoor elements. The city's mountainous terrain offers tourists a unique opportunity to explore and appreciate the natural environment. The urban fabric at the foot of the mountain provides a striking visual backdrop, contributing to the distinctive appeal of the Qishla site. The site's integration with its surrounding context is notable due to numerous pathways, high intersection density, and strategic location.

Compatibility

The Qishla building, despite its smaller size, meets international and local standards for rooms and spaces, with 20–24 m². Its services and movement system include two staircases in two corners, providing ample access points. However, it lacks a fire escape system and requires external stairs for emergency evacuation. The building also needs typical tourist complex services, including a restaurant and recreational spaces. Overall, the building meets the required standards.

Environmental aspect

The majority of the building spaces have an outlook onto the exterior and feature substantial glazed openings and windows with varying orientations. The majority of these spaces receive an adequate amount of sunlight, thereby avoiding any issues related to natural lighting or ventilation.

Cultural aspect

In response to the question of which landmarks in the city are of the greatest significance, the majority of experts and tourists interviewed identified the Qishla and the Grand Mosque as the most important historical sites, which collectively represent the most significant tourist destinations in the city.

Value

The Qishla site is a significant historical and social site, having been used for over two centuries for various purposes. It served as a military barracks, government offices, prison, and a center for the city's Directorate of Antiquities and Heritage. The site and building have architectural and aesthetic values due to their unique location, era-specific design, and compositional features. The construction techniques employed are uncommon in the present era, making the Qishla building a rare and unique example. It is considered a structur-

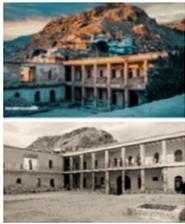
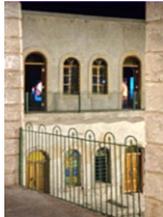
Consideration of adaptive reuse	Requirement of tourist complexes	Alignment degree	Case study: Qishla of Akre
			
2. Compatibility	<ul style="list-style-type: none"> - Accommodation - Services area - Restaurant - Green spaces - Recreational zones - Rooms size (hotel room) - Safety & security 	<ul style="list-style-type: none"> 1 0 0 0 0 0 0 	
			
4. Cultural aspects	<ul style="list-style-type: none"> - Identity - Historic aspects - Place attachment 	<ul style="list-style-type: none"> 1 1 1 	
			
6. sustainability	<ul style="list-style-type: none"> - Environment - Social - Economic 	<ul style="list-style-type: none"> 1 1 1 	

Table 3. Alignment between adaptive reuse consideration and requirements of tourism complexes; source: by the authors.

Tabela 3. Zgodność pomiędzy rozważaniem zmiany sposobu użytkowania i wymaganiami zespołów zabytkowych; źródło: autorzy.

al and historical reference point for this significant architectural style, prevalent across the Middle East. However, the authenticity and integrity of the Qishla building have been altered due to serious damage and exposure to deterioration. Despite this, rehabilitation and reconstruction operations have restored a significant proportion of its original value, allowing it to be reused for various events.

Sustainability

The sustainable process of adaptive and compatible reuse offers economic, environmental, and social benefits. It preserves financial resources, reduces waste and debris, and protects local identity and cultural heritage. The Qishla building, a tourist destination, is crucial for protection due to its significant cultural and historical value. It is also recognized as a regionally registered

landmark and national registration, enhancing economic and community recovery. Protecting this building is essential for its long-term sustainability.

Results and discussion

The Qishla in Akre, Kurdistan, Iraq, is a historic site with potential for tourism. However, it lacks essential services and facilities, such as attractive landscapes and outdoor spaces, which detract from the visitor experience. The castle requires emergency escape staircases and could benefit from additional amenities like a restaurant, open spaces, and leisure activities. To address this, a comprehensive landscaping project can transform unused spaces into vibrant gardens and recreational areas with native plantings, benches, and covered and uncovered walkways. The incorporation of emergency escape staircases in a visually integrated design can enhance safety while maintaining the historic aesthetic of the building. The construction of a rooftop garden café would provide an additional dining facility and green space, offering visitors a unique experience without compromising the building's integrity.

Incorporating modern elements without imitating heritage elements is crucial for maintaining the site's historical integrity. Contemporary architectural styles, such as a sleek glass-walled restaurant, can create a striking contrast that highlights the kasbah's historical features without overshadowing them. Integrating interactive historical exhibitions, augmented reality tours, and cultural events can further enhance the site, providing educational and interactive experiences. These additions must be meticulously designed to complement the historical setting while unambiguously indicating their modern provenance, ensuring the authenticity of heritage elements.

Advocate for sustainable practices through the use of environmentally benign materials and construction

methodologies in renovations and new additions. Facilitate cultural engagement by partnering with local artists, historians, and cultural organizations to organize exhibitions, workshops, and events celebrating Akre's cultural heritage. Ensuring accessibility for all visitors, including those with disabilities, is essential for the site's long-term viability.

Conclusions

This study examines the potential of the Qishla of Akre, a historic building in Kurdistan, Iraq, for tourism and economic development. It uses a mixed-methods approach to evaluate and compare the criteria for safeguarding historic buildings and functional requirements of tourist complexes. The proposed methodology effectively combines a thorough literature review with a mixed-methods approach to bridge heritage preservation and modern tourism. By integrating qualitative and quantitative analyses, it ensures a comprehensive evaluation of historic sites and tourist complexes. The dual approach facilitates a nuanced understanding, balancing subjective insights with objective data. It provides actionable insights for preserving heritage while fostering tourism development.

Despite the Qishla's location, essential procedures are needed for compatibility and effective tourist operation. It lacks essential services and facilities, such as attractive landscapes and outdoor spaces. To address these shortcomings, a comprehensive landscaping project can transform unused spaces into gardens and recreational areas. Contemporary architectural styles can enhance safety while maintaining historical integrity. A rooftop garden café can provide a unique dining experience. Sustainable tourism practices and accessibility for all visitors are also crucial. This approach ensures the adaptive reuse of the Qishla while preserving its heritage and promoting economic growth.

References / Bibliografia

- Secondary Sources / Opracowania**
- Abdul-Jabbar Sally Nazar, Abdelwehab Abdelwehab A., *Employing Compatible Reuse in the Tourism Development of Historical Sites*, "Journal Of Algebraic Statistics" 2022, vol. 13 no. 2.
- Abdulrahman Raghad, Ismaeel Emad Hani, *Interactive Reconstruction of Damaged Historic Landmarks – Al-Qattanin Mosque in Mosul Old City as a Case Study*, "Al-Rafidain Engineering Journal" 2023, vol. 28 iss. 1.
- Al-A'abachi Mahmood, AlAlaf, Emad Hani, *A Comparison of Assessment Systems for Sustainable Transport in the Urban Fabric: Standards and Requirements*, "Al-Rafidain Engineering Journal" 2023, vol. 28 iss. 1.
- Alabaachi Mahmood Kh.M., Alalaf, Emad Hani, *Impacts of Sustainable Transportation on the Development of Historic Cities: A Case Study of the Historic City of Mosul*, "International Journal of Sustainable Development and Planning" 2023, vol. 18, no. 10.
- Al-Sakkaf Abobakr, Bagchi Ashutosh, Zayed Tarek, *A Review of Definition and Classification of Heritage Buildings and Framework for their Evaluation*, 2nd International Conference on New Horizons in Green Civil Engineering (NHICE-02), Victoria, BC, Canada, August 24–27, 2020.
- Antonić Branislav, Djukić Aleksandra, Marić Jelena, *Cultural Tourism Prospects Examined By Space Syntax: The Case Of The Historic Core of Sombor, Serbia*, "Sustainable Development, Culture, Traditions" 2024, vol. 4c.
- Ariffin Adlin, Zahari Mohd Salehuddin Mohd, Hanafiah Mohd Hafiz, *Adaptive Reuse of Historic Buildings: Connecting the Links Between Tourist Appreciation and Visitation*, "Property Management" 2020, vol. 38 no. 4.

- Bakayeva Natalia, Simakova Polina, *Model Of Spatial Organization Of Tourism Clusters In Small Historic Cities Of Russia*, "Biosphere Compatibility: Man, Region, Technology" 2023.
- Bullen Peter A., Love Peter E.D., *Adaptive Reuse of Heritage Buildings*, "Structural Survey" 2011, vol. 29 no. 5.
- Cerreta Maria, La Rocca Ludovica, *Urban Regeneration Processes and Social Impact: A Literature Review to Explore the Role of Evaluation*, [in:] *Computational Science and Its Applications – ICCSA 2021, Lecture Notes in Computer Science*, ed. O. Gervasi, et al., vol. 12954, Cham 2021.
- Chan Jacky, Bachmann Chris, Haas Carl, *Potential Economic and Energy Impacts of Substituting Adaptive Reuse for New Building Construction: A Case Study of Ontario*, "Journal of Cleaner Production" 2020, vol. 259.
- Doshi Sakshi, Devi Thoudam Sudha, *Adaptive Reuse of Historic Building*, "International Journal For Multidisciplinary Research" 2023, vol. 5, iss. 3.
- Elkington John, *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Oxford 1997.
- Fajarwati Ade Ariyani Sari, Fajarwati Sari, Hendrassukma Dila, Andangsari Esther Widhi, *Compatible Reuse the Old House into Restaurant: Space, Nostalgic, and Economic Value*, [in:] *Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management*, 2022.
- Fatah Kaiwan Kareemkhan, Mzuri Rebar T., *Geoinformatics-Based Automated Landform Classification and Analysis of Their Relationship with Landslide Susceptibility in Akre District, Kurdistan Region, Iraq*, "Iraqi Bulletin of Geology and Mining" 2025, vol. 21.
- Haidar Laila, Talib Anuar, *Compatible Reuse Practice in Tower Houses of Old City Sana'a Yemen*, ASEAN-Turkey ASLI Conference on Quality of Life, 2014.
- Hall C. Michael, Timothy Dallen J., Duval David Timothy, *Safety and Security in Tourism: Relationships, Management and Marketing*, New York 2004.
- Hall Colin Michael, Safonov Alexander, Naderi Koupaei Sara, *Resilience in Hospitality and Tourism: Issues, Synthesis and Agenda*, "International Journal of Contemporary Hospitality Management" 2023, vol. 35 no. 1.
- Hamad, A., Ismaeel, E., *Integrative Conservation for the Reconstruction of the Historic Urban Fabric: The Riverfront of Mosul Old City as a Case Study*, "Al-Rafidain Engineering Journal" 2023, vol. 28 iss. 1.
- Hamad Ammar, Ismaeel Emad Hani, *Integrative Conservation for Recovering the Riverfront of Mosul Town*, "International Journal of Sustainable Development and Planning" 2023, vol. 18, no. 1.
- Ismaeel Emad Hani, *D&C Technique as an MCDM Tool for Managing the Heritage Value Assessment of Historic Buildings in Post-War Cities: Mosul Old City as a Case Study*, "Journal of Cultural Heritage Management and Sustainable Development" 2025, vol. 15 no. 3.
- Ismael Shireen Younus, Hasan Bekas Jamaluddin, *The Role of Collaboration in Survey and Documentation of Historic Buildings: Case Study: Akre Historic Area in Kurdistan Region of Iraq*, "Academic Journal of Nawroz University" 2023, vol. 12.
- Jasim, S., Ismaeel, E.H., *Criteria and Indicators Affecting the Most Appropriate Reuse of Heritage Buildings in Old Cities: Mosul Old City as a Case Study*, "Al-Qadisiyah Journal for Engineering Sciences" 2025, vol. 18 iss. 1.
- Jasim Suroor, Ismaeel Emad Hani, *The Most Appropriate Reuse of Historic Buildings*, "International Journal of Sustainable Development and Planning" 2023, vol. 18, no. 6.
- Jokilehto Jukka, *A History of Architectural Conservation*, Milton Park 2018.
- Joshi Chaitali Trivedi, Motiwala Ishrat Shaukat, *State of Heritage Structure in Dwarka City: Evaluation with Tourism Perspective*, "Journal of Structural Engineering and Management" 2022, vol. 9, no. 2.
- Khider Aras Isamel, Khudhur Jange Zrar, *Sahaba Mosque (Akre) and its Role in the Development of National Tourism Archaeological*, "Journal of Kurdistan for Strategic Studies" 2023.
- Lo Faro Alessandro, Mondello Attilio, Salemi Angelo, *Compatible Reuse of the Single Hall Churches in Catania (IT): Thinking and Proposals*, "VITRUVIO – International Journal of Architectural Technology and Sustainability" 2018, vol. 3 iss. 2.
- Malaika Maha J., Raswol Layla, *Activating Heritage Tourism in Akre City by Applying Sustainable Ecotourism Approaches*, "European Scientific Journal" 2024, vol. 10 iss. 7.
- Mazzetto Silvia, *Comparing the Sustainable Reuse of Historical Buildings*, "Ekistics and The New Habitat" 2022, vol. 81 iss. 2.
- Mazzetto Silvia, *Sustainable Reuse of Heritage in the Middle East Constrained Environments*, [in:] *Tropical Constrained Environments and Sustainable Adaptations*, ed. Azzali, S., Thirumaran, K., Singapore 2021.
- Mohammed, O., Baker, S., *The Climate Elements Impact upon the Expansion the Stages Morphology of Akre City*, "Journal of University of Raparin" 2024, vol. 11.
- Munshed Zainab Abbas, Ashour Ammar Saleh, *Adaptive Reuse (AR) of Historical and Heritage Buildings Through Concepts of Addition and Expansion*, Fifth International Scientific Conference of Alkafeel University, Iraq 2024.
- Mustafa Faris Ali, *Adaptive Reuse of Historical Buildings Using ARP Model: The Case of Qishla Castle in Koya City*, "SAGE Open" 2023, vol. 13 iss. 3.
- Nechirvan Kh. Abdulhadi, Luqman Weso Omer, Nawshirwan Dawd Ali, *A Geographical Assessment of The Historical And Tourist Relics of The Akre District and How They Developed*, "Qalaai Zanist Scientific Journal" 2024, vol. 9 iss. 4.
- Pinto Maria Rita, De Medici Stefania, Senia Carla, Fabbriatti Katia, De Toro Pasquale, *Building Reuse: Multi-Criteria Assessment for Compatible Design*, "International Journal of Design Sciences and Technology" 2017, vol. 22 no. 2.
- Purnomo Agus, Laksitarini N., Lase L.C., *Adaptive Reuse Strategy at Maison Teraskita Hotel Bandung*, [in:]

- Sustainable Development in Creative Industries: Embracing Digital Culture for Humanities*, ed. A.D. Purnomo, N. Laksitarini, L.C. Lase, New York 2023.
- Rasoolimanesh S. Mostafa, Ramakrishna Sundari, Hall C. Michael, Esfandiar Kourosh, Seyfi Siamak, *A Systematic Scoping Review of Sustainable Tourism Indicators in Relation to the Sustainable Development Goals*, "Journal of Sustainable Tourism" 2020, vol. 31, iss. 7.
- Rudan Elena, *Circular Economy of Cultural Heritage—Possibility to Create a New Tourism Product through Adaptive Reuse*, "Journal of Risk and Financial Management" 2023, vol. 16 iss. 3.
- Salemi Angelo, Mondello Attilio, Lo Faro Alessandro, *Metadesign Strategies for Compatible Reuse: The Case of the Single Hall Churches in Catania*, "TeMA: Tempo, Materia, Architettura" 2016, vol. 2, no. 2.
- Shen Xijuan, Chen Meng, Hsu Wei-Ling, Dong Zuorong, Lan Keran, Luo Haitao, Lin Sean TeHsun, *Multi-Criteria Decision-Making Framework for Evaluating Historic Sites in Huai'an Ancient Cities*, "Buildings" 2023, vol. 13 iss. 6.
- Suess Courtney, Legendre Tiffany S., Hanks Lydia, *Biophilic Urban Hotel Design and Restorative Experiences*, "Journal of Hospitality & Tourism Research" 2024, vol. 45, iss. 8.
- Tarrad Mohannad, Husban Salam Mtawea, *The Creation of Guidelines for Compatible Reuse of Heritage Buildings in Jordan: Case Study Palace of the Ali Alkaid Basha*, "UDC/УДК 719:72.025.5(569.5)" 2021.
- Taymourtash Sara, Hanachi Pirouz, Talebian Mohammad Hasan, Sarzaem Ali, *Economic Assessment of World Heritage Inscription on Tourism Development: A Case Comparison of Tivo Historic Cities, Yazd and Hamedan*, "Journal of Fine Arts: Architecture & Urban Planning" 2023, vol. 28 iss. 1.
- Torkildsen George, *Leisure and Recreation Management*, New York 2005.
- Vardopoulos Ioannis, Giannopoulos Konstantinos, Papaefthymiou Effimia, Temponera Eleni, *Urban Buildings Sustainable Adaptive Reuse into Tourism Accommodation Establishments: A SOAR Analysis*, "Discover Sustainability" 2023, vol. 4, iss. 50.
- Wahab Lilawati Ab, Mustafa Syed Abdul Haris Syed, Azmi Wan Faida Wan, Hanid Mahanim, *Adaptive Reuse of Heritage Buildings as Hotel in George Town UNESCO World Heritage Site: Tourism Industry Perspectives*, "International Journal Of Business And Technology Management" 2023, vol. 5 iss. S2.
- Yatsenko Victor, Osychenko Halyna, Tyshkevych Olga, Toporkov Volodymyr, *Adaptive Reuse Of Historic Rural School Buildings In Ukraine In The Poltava Region*, "International Journal Of Conservation Science" 2024, vol. 15, spec. iss. 1.
- Zhao Bing, Han Weicheng, *Research on Measuring Methods and Influencing Factors of Spatial Damage Degree of Historic Sites: A Case Study of Three Ancient Cities in Shanxi, China*, "Buildings" 2023, vol. 13 iss. 12.
- Zhuravlova, A., Boieva, A., Merzhiiivska, N., *Features Of Hotel Design*, "Regional Problems of Architecture and Town Planning" 2023, vol. 17.

Electronic Sources / Źródła elektroniczne

- Kurdistan24, <https://www.kurdistan24.net> (accessed: 11.07.2024).
- Pukmedia, <https://pukmedia.com> (accessed: 10.07.2024).
- Rudaw, <https://www.rudaw.net> (accessed: 12.07.2024).

Abstract

The study explores the potential for compatible reuse of a historic building in the context of enhancing the tourism sector and economic development. It uses a mixed-methods approach to compare the safeguarding of historic buildings constraints and the functional requirements of tourist complexes. The methodology includes literature review, site analysis, stakeholder interviews, and data analysis to assess the potential, limitations, and challenges of the site. The findings show that despite the Qishla building's advantageous location, a series of essential procedures must be undertaken to achieve compatibility and ensure its effective operation as a tourist destination. The most significant requirements include location, landscape design, safety standards, fire escape systems, and the necessity to feature various functional program spaces. The study presents a procedure for analyzing similar cases to determine the possibility of compatible reuse of historical sites with a focus on tourism.

Streszczenie

W artykule omówiono potencjał kompatybilnej adaptacji i ponownego wykorzystania zabytkowego budynku w kontekście wzmocnienia sektora turystycznego i gospodarki. Wykorzystano mieszane metody, aby porównać sposoby pogodzenia ograniczeń związanych z zabytkami z wymaganiami dotyczącymi kompleksów turystycznych. Artykuł zawiera przegląd literatury, analizę obiektu, wywiady z interesariuszami oraz analizę danych w celu oceny potencjału, ograniczeń obiektu i możliwych trudności. Wyniki pokazują, że mimo dogodnej lokalizacji obiekt wymaga serii zabiegów, aby uzyskać zgodność z nową funkcją i zapewnić mu efektywne funkcjonowanie jako atrakcji turystycznej. Najważniejsze wymagania to m.in. lokalizacja, projekt zagospodarowania, standardy bezpieczeństwa, systemy ewakuacji w razie pożaru i zapewnienie szeregu pomieszczeń związanych z programem funkcjonalnym. W artykule przedstawiono procedurę analizowania podobnych przypadków w celu sprawdzenia możliwości kompatybilnej adaptacji i zmiany sposobu użytkowania zabytków przeznaczonych na cele turystyczne.