

An Analytic Evaluation of the Transformation of Konya's Mevlana Square, Considering the Context of Urban Morphology

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ABSTRACT

This study aims to evaluate the transformation and expansion processes of Mevlana Square, one of the most significant public spaces in Konya, through the Analytic Hierarchy Process (AHP) within the context of urban identity, authenticity, and morphological continuity. Although the interventions carried out around the Mevlana Complex have strengthened the area's role as a major urban focal point, certain planning approaches adopted during its development have not fully achieved morphological coherence with the historical urban fabric. This situation highlights the need to reconsider the square's relationship with traditional spatial patterns, pedestrian mobility, and the surrounding historical axes. Accordingly, four main criteria—urban authenticity, historical-cultural value, spatial integrity, functionality, and accessibility—were defined, and an AHP model was constructed based on expert assessments. The analysis results indicate that historical-cultural value and urban authenticity hold the highest levels of importance in future design and planning decisions for Mevlana Square. The findings demonstrate that the square occupies a strategic position in terms of Konya's cultural memory and the morphological continuity of its historic core, and that multi-criteria decision support systems offer a valuable framework for promoting more holistic, balanced, and sustainable planning approaches in culturally significant urban areas.

Keywords: Urban Morphology; Konya; Mevlana Square; Analytic Hierarchy Process (AHP)

Konya Mevlana Meydanının Değişimine Yönelik Kent Biçimi Bağlamında Analitik Bir Değerlendirme

ÖZET

Bu çalışma, Konya kentinin en belirleyici kamusal alanlarından biri olan Mevlâna Meydanı'nın geçmişte yürütülen dönüşüm ve genişletme süreçlerini, kent kimliği, özgünlük ve morfolojik süreklilik bağlamında Analitik Hiyerarşi Süreci (AHP) yöntemiyle değerlendirmeyi amaçlamaktadır. Mevlâna Külliyesi'nin çevresinde gerçekleştirilen düzenlemeler, alanın kentsel ölçekte önemli bir odak noktası haline gelmesini sağlamış olmakla birlikte, meydanın gelişiminde kullanılan bazı planlama yaklaşımlarının kent morfolojisiyle tam uyumlu bir bütünlük oluşturamadığı görülmektedir. Bu durum, meydanın geleneksel kentsel doku, yaya hareketliliği ve çevresindeki tarihsel akslarla ilişkisini yeniden ele alma gereksinimini ortaya koymaktadır. Bu doğrultuda çalışma kapsamında kentsel özgünlük, tarihi-kültürel değer, mekânsal bütünlük, işlevsellik ve erişilebilirlik olmak üzere dört temel kriter tanımlanmış ve uzman görüşlerine dayalı bir AHP modeli oluşturulmuştur. Analiz sonuçları, Mevlâna Meydanı'nın gelecekteki tasarım ve düzenleme kararlarında tarihi-kültürel değer ile kentsel özgünlüğün en yüksek önem düzeyine sahip kriterler olduğunu ortaya koymaktadır. Elde edilen bulgular, meydanın hem Konya'nın kültürel hafızası hem de tarihsel merkezinin morfolojik sürekliliği açısından stratejik bir konuma sahip olduğunu; çok kriterli karar destek sistemlerinin bu tür

alanlarda daha bütüncül, dengeli ve sürdürülebilir planlama yaklaşımlarını destekleyici bir araç niteliği taşıdığını göstermektedir.

Anahtar Kelimeler: Kent Biçimi, Konya; Mevlana Meydanı, Analitik Hiyerarşi Süreci (AHP)

1. INTRODUCTION

Public open spaces are important components that shape public life. They are places where social interactions are organized and cultural identities are reproduced. They are also physical spaces within cities (Qi et al., 2024). In particular, squares play a central role in shaping the urban fabric, spatializing social memory and forming urban identity throughout historical processes. Urban form analysis in urban morphology literature considers spatial integrity, structure-void relationships, integration with the transport system and public usage dynamics (Carmona et al., 2010). In this context, Mevlana Square is a significant spatial feature located in the historic center of Konya, serving as a focal point for religious and cultural activities and as an area of intense public use.

The transformation processes around the Mevlana Complex raise new issues in terms of urban morphology, public accessibility, and identity, as exemplified by Mevlana Square in Konya. The urban design project for the square, as presented in Oral's (2017) study, aimed to integrate the area with the existing urban recreation structure and ensure compatibility with the green fabric and tram route. However, it was also found that decisions to expand were made without sufficiently evaluating the level of integration with the urban fabric of the city center during the transformation process (Bala & Alkan, 2014). This indicates that the square may not fully convey its potential in terms of urban identity and morphological continuity.

From an urban morphology perspective, analyzing squares requires examining the relationships between structures and voids, access networks and spatial connections (Carmona et al., 2010). For instance, Ley (2025) emphasizes that the elements constituting the unique spatial character of cities are not only physical structures, but also a combination of usage and social dynamics. In the case of Mevlana Square, the space must be evaluated in terms of both design scale and urban memory and identity. In this context, the square should be considered not as a subject to change, but as a public space with continuity.

The social function of public spaces and their impact on urban identity are important topics in the literature. A systematic review by Qi et al. (2024) has shown that the physical characteristics of public spaces (e.g. accessibility, multifunctionality, diversity of landscape elements) directly affect social interaction and integration. Within this framework, interventions in Mevlana Square must be evaluated in terms of both spatial arrangement and user experience, cultural memory and urban identity. Indeed, local studies of the area also support this finding. Ünal (2022) states in his study that spaces containing large, square-shaped voids in the center of Konya are not sufficiently integrated into the existing urban fabric, which weakens the perception of the square.

This study highlights the need for a more systematic, transparent and multi-criteria evaluation method in decision-making processes related to Mevlana Square. To this end, the Analytical Hierarchy Process (AHP) method was chosen as it is one of the decision support systems. The AHP method allows both quantitative and qualitative criteria to be evaluated together, transforming expert opinions into a hierarchical structure. It has been defined as a tool that supports decision-making processes in complex urban areas. In this context, the current status of Mevlana Square and its future transformation requirements were reassessed using the AHP method based on four fundamental criteria: urban uniqueness, historical and cultural value, spatial integrity, functionality and accessibility.

The analysis results show that preserving cultural identity and ensuring morphological continuity are dimensions that should be prioritized for Mevlana Square. This requires a design approach that considers the city's identity axis, going beyond physical spatial planning. The main objective of the study is to inform the transformation decisions for Mevlana Square in the context of urban identity and uniqueness by using AHP prioritization to adopt a conscious approach. The findings demonstrate that multi-criteria decision support methods can guide the development of strategies for the sustainable, identity-focused planning of public spaces.

2.THE THEORETICAL BASIS OF MULTI-CRITERIA DECISION-MAKING (MCDM) IN URBAN PLANNING

2.1. General Description of AHP (Analytic Hierarchy Process)

The Analytic Hierarchy Process (AHP) is a powerful method for solving multi-criteria decision-making (MCDM) problems. It converts comparative judgments into a mathematical model and provides decision-makers with a structured evaluation process. AHP's importance stems from its ability to integrate qualitative and quantitative components of complex decision-making problems within the same analytical framework. Contemporary urban planning studies require the simultaneous evaluation of multidimensional variables, such as environmental impacts, sustainability goals, cultural heritage preservation, economic priorities, and social requirements. Thus, AHP is an important tool, especially in situations requiring the participation of different stakeholders, the evaluation of expert opinions, and the systematic comparison of multi-layered criteria (Vaidya & Kumar, 2006).

The theoretical foundations of AHP are based on comparative judgment logic developed by Myers and Alpert in the 1960s. However, Thomas L. Saaty transformed the method into a comprehensive mathematical model in the 1970s, making it operationally applicable. Saaty's hierarchical structure enables decision problems to be broken down into subcomponents according to the proposed objective, allowing each component to be systematically compared with the others. Thus, the decision maker's intuitive assessments are converted into analytical form, and personal judgments are converted into numerical weight values (Saaty, 1987; Forman & Gass, 2001). In this respect, AHP offers a hybrid approach that integrates the rational and intuitive thinking of decision makers.

AHP is based on three fundamental principles:

- 1) hierarchical modeling,
- 2) pairwise comparisons,
- 3) prioritization-consistency analysis.

Hierarchical modeling divides the problem into layers of objectives, criteria, sub-criteria, and alternatives. This structure enables complex problems to be broken down into comprehensible components. Pairwise comparisons determine the relative importance of criteria using the 1–9 scale proposed by Saaty. At this stage, the expertise and experience of the decision maker are reflected directly in the process. Consistency analysis tests the internal logic of the decision maker's assessments. The consistency ratio (CR) should be below 0.10. The CR is an important indicator of whether the decision maker's assessments are rational (Saaty & Vargas, 2012).

AHP is widely used today in many disciplines and application areas (Ishizaka & Labib, 2011). Countless applications have been developed in areas such as urban planning, sustainable transportation, landscape management, energy planning, cultural heritage preservation, risk assessment, environmental impact analysis, and strategic management. The multidisciplinary nature of the method has facilitated its adoption in public and private sector decision-making processes. For instance, using AHP in cultural heritage areas enables the joint evaluation of spatial values, historical significance, and

conservation priorities. This contributes to the development of objective conservation decisions.

The literature defines the application process of the method in specific stages. First, the objective of the decision problem is clearly defined. Then, criteria, sub-criteria, and alternatives are defined to create a hierarchical structure. Next, pairwise comparison matrices are prepared and the relative importance weights of the criteria are calculated using these matrices. The weight values obtained in this stage constitute the quantitative components of the decision-making process. Next, the consistency ratio is calculated to test the reliability of the evaluations. Finally, the criteria weights and alternative scores are combined to produce the final decision (Ho, 2008). This systematic approach provides decision-makers with a rational, transparent, and reproducible method for evaluating complex planning problems.

One of the most important advantages of AHP is its ability to evaluate many different types of data within the same framework. In this respect, the method enables the inclusion of qualitative values that are difficult to measure in the analytical process. Thus, decision-makers' intuition and expertise are quantified and integrated into the method's mathematical structure. Consequently, AHP is emphasized as an important tool that enhances decision quality, particularly in spatial planning and design processes (Saaty & Vargas, 2012).

AHP offers significant advantages, especially in areas with multiple criteria and stakeholders, such as urban planning, sustainability, and cultural heritage management. Urban planning is complex and requires the simultaneous consideration of economic, environmental, social, and cultural dimensions. Therefore, decision-makers often face conflicting criteria. In this complex environment, AHP can objectively weigh criteria, systematically analyze expert opinions, make scenarios comparable, and incorporate sustainable planning principles into decision-making processes. AHP has a broad range of applications in cultural heritage areas, including repurposing structures, balancing conservation and use, risk analysis, prioritizing sustainability criteria, and comparing planning alternatives. AHP's systematic approach provides decision-makers with a scientific basis for defining unique values and determining intervention priorities (Fiore et al., 2020). AHP is an effective multi-criteria decision-making (MCDM) method for urban planning and cultural heritage management because it integrates qualitative and quantitative criteria, converts experts' intuitive assessments into mathematical structures, and brings transparency to decision-making processes (Ferretti et al., 2014). In this context, an AHP model integrated with the decision-making theory and MCDM approaches discussed in previous sections significantly contributes to the scientific development of sustainable decisions, especially in historic city centers.

3. THE CONCEPT OF URBAN MORPHOLOGY

Urban morphology is an interdisciplinary field examining the physical form of cities, their spatial structure, and the transformation processes and socio-economic dynamics influencing them over time. The field's primary aim is to study the formation patterns of urban fabrics and the characteristics of building blocks, street networks, open spaces, parcel layouts, and building typologies within historical and analytical frameworks (Conzen, 1960). This approach allows us to understand the city through the "form-process-time" relationship, providing a solid theoretical foundation for explaining how cities evolve (Whitehand, 1987). Urban morphology not only analyzes physical form, but also evaluates the effects of social structures, economic policies, cultural practices, and forms of governance that shape it (Moudon, 1997).

Conzen, one of the pioneers of morphological research, developed a "town-plan analysis" approach that examines urban form through three fundamental components: parcel structure, building form, and street layout (Conzen, 1960). Together, these three

components provide an important analytical framework for understanding the historical development of city centers. Studies following the Conzenian approach have produced extensive research on morphological continuity, cultural landscapes, and conservation decisions in European cities (Whitehand, 2001).

Another important school of thought in urban morphology is the "typological-morphological" approach developed by Muratori and Caniggia. This approach argues that urban form should be interpreted through building typologies and views the transformation of the city as an "evolutionary" process (Muratori, 1960; Caniggia & Maffei, 1979). Within this framework, the emphasis is placed on the fact that the changes undergone by building types are linked to the transformation of the entire urban structure. Morphological typology is considered an important method, particularly for the textural analysis of Mediterranean cities (Cataldi, 1998).

Today, urban morphology is a critical analytical tool in urban planning in areas such as sustainability, identity, the compact city model, pedestrian mobility, and holistic conservation. For instance, morphological analyses play a decisive role in addressing issues such as the pressures of transformation concentrated in city centers, the quality of public spaces, the continuity of historical fabrics, and the transformation of the building stock (Oliveira, 2016). In this context, morphological studies contribute to balancing planning decisions between historical continuity and contemporary requirements.

Current research shows that urban morphology explains not only the physical space, but is also directly related to concepts such as urban quality of life, social interaction, spatial justice, and sustainability (Marshall, 2005). The permeability of street networks, the quality of public spaces, the continuity of pedestrian mobility, and the relationship between different types of use directly determine morphological character (Hillier, 1996). Consequently, social integration and spatial accessibility are achieved at a much higher level in cities that provide strong morphological continuity (Karimi, 2012).

The development of Geographic Information Systems (GIS), spatial synthesis methods, 3D city models, and spatial statistical tools in recent years has ushered in a new era of morphological analysis (Fonte et al., 2018). These digital tools can quantitatively model urban form, analyze urban density, measure the topology of street networks, and temporally match morphological changes. Thus, morphology has become a multidisciplinary field of study at the intersection of historical, quantitative, and visual analyses (Dibble et al., 2019).

Consequently, urban morphology provides an indispensable analytical framework for understanding the physical fabric of the city, informing future planning decisions, and preserving historical continuity. Decoding the formal characteristics of the urban fabric requires a spatial and socio-cultural reading. Therefore, morphology is increasingly important as a multi-layered method in academic research and applied planning studies.

3.1. The Concept of Conservation and the Concept of Morphology

Urban morphology is a fundamental analytical framework for understanding the relationship between architecture and urban conservation. The parcel layouts, street networks, building typologies, and public spaces of historic city centers form a unique morphological integrity that has developed over centuries. This integrity reflects the physical fabric as well as cultural identity, social memory, and ways of life (Bandarin & van Oers, 2012). Architecture produces at the scale of individual buildings, whereas urban conservation aims for large-scale continuity encompassing the entire urban system (Jokilehto, 1999).

Morphological analyses provide scientific answers to questions such as "Which elements have intrinsic value?" and "Which relationships need to be preserved?" in the

conservation process. For instance, the integrity of the parcel fabric, the continuity of the street network, and the rhythm of building heights are critical determinants in conservation plans (Kropf, 2009). When these elements are compromised, urban identity can be damaged irreversibly.

One of the most controversial issues in the relationship between morphology, architecture, and conservation is the question of the compatibility of new development with the historic environment. Morphological approaches allow for the evaluation of aesthetic, formal, and functional compatibility (Tiesdell et al., 1996). Accordingly, new structures added to historical fabrics should be designed according to the rhythm of existing forms, relationships between spaces and volumes, height ratios, and street character. This approach is consistent with the "Historic Urban Landscape" framework of UNESCO (2011).

Furthermore, considering building-parcel-block relationships in urban conservation decisions is a widely accepted prerequisite for sustainable design in historic centers (Gauthier & Gilliland, 2006). These relationships play a decisive role in spatial memory, pedestrian mobility, diversity of use, and micro-scale public life.

Ultimately, urban morphology provides a comprehensive framework for the relationship between architectural design and urban conservation. This holistic approach transforms conservation practices, considering not only the scale of individual buildings, but also the meaning, identity, and continuity of the entire historic environment. Morphology enables conservation decisions to be based on scientific principles and facilitates the development of a sustainable conservation strategy rooted in spatial continuity.

4. FIELD STUDY: KONYA MEVLANA SQUARE

4.1. History of Mevlana Square

One of the oldest continuously inhabited settlements in Anatolia, Konya has developed throughout history as an important cultural, religious, and political center during the Seljuk, Karamanid, and Ottoman periods. The historical morphology of Konya has been shaped around two main focal points: Alaeddin Hill and the Mevlana Dergah. These two centers guided the city's spatial organization during different periods and laid the groundwork for the formation of its multi-centered morphological structure (Önge, 1997). Mevlana Square's historical development began with the settlement of Mevlana Jalaluddin Rumi in Konya in the 13th century and the institutionalization of the Mevlevi order in the city. After Mevlana's death in 1273, the first tomb was built and expanded over time to become a large complex (Gölpınarlı, 1953). Initially located outside the Seljuk walls of Konya, this area was a focal point for religious visits. However, the addition of a mosque, dervish quarters, kitchens, and other structures around the tomb quickly turned the area into Konya's second major attraction. During this period, the Mevlana area did not take the form of a "square." Instead, the area's spatial character was defined by narrow streets with different functions, small courtyards, and traditional commercial structures attached to the dervish lodge (Kafesoğlu, 1965).

During the Ottoman period, the area around the Mevlana Complex continued to develop as an important religious center. The Selimiye Mosque, built by Selim II in the 16th century, further strengthened the area's spatial identity (Uzunçarşılı, 1988). The spatial relationship between the mosque and the complex created a broader area of social interaction. This resulted in the emergence of a dense market area around Mevlana consisting of a bazaar, inns, shops, bakeries, and small workshops (Cantay, 1992). Engravings and archival documents from this period show that narrow streets and traditional commercial units surrounded the tomb (Konyalı, 1964). Contrary to the current perception of a wide, open square, the Mevlana area during the Ottoman period looked more like a densely woven commercial neighborhood. The complex created a

gravitational pull that intensified economic activity in the surrounding area, directly influencing the spatial organization.

Reflections of modernization movements across Turkey in Konya at the beginning of the 20th century triggered the Mevlana area's transformation. During this period, the Konya Municipality carried out various demolitions around the tomb for health and transportation reasons. The goals were to open narrow streets, organize transportation routes, and create new public spaces (Aslanoğlu, 1993). Zoning plans implemented in the 1940s and 1950s proposed removing some buildings to allow the dense fabric around Mevlana to "breathe." The first large-scale demolitions took place during this period (Tekeli, 1998). This process is considered the first step in the region's "square-building" process. The modernist planning approach implemented during the early Republican period prioritized rational transportation and creating open spaces over preserving the historical fabric. This led to the disappearance of part of the traditional commercial area around Mevlana.

The period after 1950 saw rapid urbanization and an increased presence of modern planning in Turkey. The transformation around Mevlana in Konya gained momentum during these years. By the 1970s, large open spaces had formed around the tomb. Aerial photographs clearly show that the area underwent an intense process of demolition and clearing between 1951 and 1975 (Altuntaş, 2019). The expansion projects undertaken to open the front of the Selimiye Mosque and the Mevlana Tomb marked the beginning of the expansive open space known today as "Mevlana Square." These interventions contributed to the square gaining new representational value in urban memory and to the formation of Konya's modern image. Strengthening tourism policies in Turkey after 1980 triggered redesign processes around Mevlana in Konya. The "Mevlana Tourism Area," developed during this period, entailed removing irregular structures around the square, constructing new pedestrian paths, and implementing landscaping (Çamur & Yılmaz, 2006). During this process, the area became a showcase for Konya due to intense interest from international visitors. The square's physical layout was transformed into a spatial design that optimized visitor flow.

In the 2000s, Mevlana Square was reexamined based on the principles of "urban design," "pedestrian-oriented transportation," and "cultural heritage management." Within this scope, the "Mevlana Cultural Valley Project" aimed to open up the area around the tomb completely by demolishing modern structures in the region, such as Altın Çarşı and Mevlana Çarşısı. The final design of Mevlana Square is based on a comprehensive transformation that aims to strengthen the area's historical identity while giving it the function of a contemporary public space. In this context, the square has largely been pedestrianized by removing vehicle traffic, and visitor mobility is supported by a wide, stone-paved, open-space layout. The surrounding market fabric and traditional street character have been renewed through improvements to facades, signage, and stone-paved floors, creating a more harmonious appearance with the historical fabric. The infrastructure systems have been completely renewed, and care has been taken to reorganize transportation axes, especially the tram line, in harmony with historical structures. The density of the surrounding buildings has been reduced to make the Selimiye Mosque and Mevlana Tomb silhouettes more prominent. This creates open viewing areas and wide perspectives. The square has been enhanced with new urban furniture, modern lighting elements, directional signage, and accessibility features, improving the quality of public use. Furthermore, to transform the square beyond its role as a mere transit area, various spatial solutions supporting cultural events, seating zones, and commercial functions have been introduced. These changes have created a more functional, aesthetically pleasing, and culturally harmonious public environment for local and foreign visitors alike.



Figure 1. Mevlana Dergah and the existing historical structure, early 20th century (URL1)



Figure 2. Original residential and commercial buildings that are now roads and tram lines, early 20th century (URL 2)



Figure 3. Historical Morphology and Transformation Processes of Mevlana Square. (URL 3)



Figure 4. Mevlana Boulevard after the opening of Mevlana Street and Square (Ataberk, 1961) (URL 4)

The comprehensive redevelopment work carried out in Mevlana Square in recent years aimed to strengthen the area's historical identity and increase public use of the space. However, the project has been met with significant criticism. The loss of shaded areas and greenery is chief among these criticisms. Users have commented that the traditional square atmosphere, characterized by linden trees, has disappeared, and that the new design has reduced spatial comfort by creating a wide, paved, and shadeless area. These comments align with literature emphasizing that the quality of public spaces relates not only to openness, but also to human-scale elements such as microclimate, shading, and seating areas (Carmona, 2019).

Another point of criticism is that the square has largely transformed into a hard-surfaced, uniform, expansive area. Users describe this situation as a "flat concrete square" and criticize it for reducing spatial diversity and eliminating the permeable, vibrant urban fabric created by traditional urban elements. The urban morphology literature argues that squares should have rich spatial components in terms of identity, function, and social interaction (Moudon, 1997; Marshall, 2005). According to critics, the new arrangement has simplified this diversity, limiting the social dynamism of the area.

The transformation of the traditional commercial fabric around the square is also a significant topic of debate. Some users view the demolition of structures such as Altın Çarşı and Mevlana Çarşı and the creation of a more open space in their place as an intervention that weakens the spatial representation of market culture. Critics emphasize that bazaars are not merely commercial units; they also support social interaction and guide street movement and the continuity of the historical fabric. This criticism coincides with theoretical approaches that argue preserving the parcel fabric and street morphology in historic city centers is crucial to identity (Kropf, 2009; Whitehand, 2001).

Finally, some users have commented that the square has moved away from the traditional "urban focus" structure of Konya, and that the center of gravity of the city center has weakened as commercial and administrative activities have shifted to other areas. These assessments highlight discussions about the area's current design's long-term sustainability in terms of spatial continuity and urban identity. UNESCO's Historic Urban Landscape approach (UNESCO, 2011) emphasizes the need to consider the link between identity and continuity, especially in modern urban design practices.

Overall, the new layout of Mevlana Square enhances the area's aesthetics and tourism appeal. However, critics point out shortcomings in terms of human scale, microclimate, historical continuity, and diversity of public life.



Figure 4 Application made before 2012 and previous version.



Figure 5. Mevlana Square before 2013.

4.1.1. An Evaluation of Konya's Mevlana Square Transformation, considering the Context of Urban Morphology

This study analyzed Mevlana Square and its immediate surroundings in the historical center of Konya using a holistic urban conservation approach. This approach took into account the area's multi-layered spatial character, high visitor profile, religious-cultural focus, and significant transformation processes in recent years. Considering the square's historical development, morphological structure, public usage, and transformation pressures, the area was divided into sub-zones based on existing street axes, parcel organization, building densities, and usage functions. This classification aims to objectively evaluate the square's physical transformation, identify elements carrying historical continuity, and reveal problem areas requiring intervention with scientific data. The period characteristics, architectural qualities, levels of authenticity, and physical conditions of the buildings in each subarea were examined in detail. We analyzed the Ottoman-period market fabric surrounding the square, the spatial effects of the Selimiye Mosque and the Mevlana Dergâhı, the intensity of current commercial functions, pedestrian mobility, and street-road relationships comparatively. This comprehensive assessment reveals traces of historical continuity while making visible the effects of modern planning decisions on the square. In particular, the changes to the area's morphological integrity caused by interventions such as openings after 1950, urban renewal projects in the 2000s, and bazaar block demolition have been evaluated (Altuntaş, 2019).

These analyses led to a comprehensive examination of value-based conservation approaches recommended in the literature, UNESCO's recommendations for urban historic landscapes, ICOMOS's conservation principles for city centers, and multi-criteria

analysis studies on decision-making processes in historic environments, in order to properly evaluate Mevlana Square (Bandarin & van Oers, 2012; Jokilehto, 1999). Considering the area's unique conditions, historical development, spatial character, and current planning issues, four main evaluation criteria that best represent Mevlana Square were selected from numerous possibilities.

Urban authenticity

Urban authenticity is a fundamental criterion for understanding Mevlana Square's place in the historical fabric of Konya and its spatial relationship with its surroundings. The main elements determining the square's authenticity are the symbolic centrality of the Mevlana Tomb, the holistic silhouette formed by the Mevlana Tomb and the Selimiye Mosque, the historical traces of the traditional bazaar, and the square's significance in the city's history. Until the mid-20th century, the square had a narrow, organic structure formed by the street fabric and commercial units. However, the openings, demolitions, and intensive landscape interventions carried out during the modernization period resulted in the loss of much of the original urban fabric. The literature considers this situation a typical example of transformations that lead to the weakening of urban identity and sense of place (Relph, 1976; Lynch, 1960). Nevertheless, Mevlana Square possesses high urban identity potential thanks to its strong symbolic focus, religious-mystical identity, visitor density, and international recognition. Therefore, urban authenticity is critically important in preserving the square's spatial and symbolic existence.

Historical and Cultural Value

Mevlana Square is a nationally significant focal point for both Konya and Turkey's cultural heritage sites. Since the 13th century, the Mevlana Dergah has been a social, religious, and cultural center of attraction; the surrounding structures have evolved around this attraction over the centuries (Gölpınarlı, 1953). The Selimiye Mosque, the dervish lodge buildings, the Ottoman-era commercial units, and the remains of the han/market system in the immediate vicinity are the most concrete indicators of the square's historical layers. UNESCO's cultural landscape approach emphasizes preserving historical continuity in such multilayered areas through individual structures and their spatial relationships with their surroundings (UNESCO, 2011). Demolitions and new arrangements made during recent renovation projects have had positive and controversial effects on the square's historical identity. On the positive side, visibility of the mausoleum and mosque surroundings has increased. On the negative side, disappearance of some traditional commercial units has weakened the integrity of the historical fabric. The historical and cultural value criterion provides a fundamental framework that guides building and area scale in order to protect this multifaceted identity.

Spatial Integrity

Spatial integrity refers to the continuity of the relationships established between the physical components of the square and their surroundings. In this context, we analyzed the street networks, building/parcel ratios, pedestrian movement, locations of public open spaces, and the spatial connection established between the square and the Selimiye-Dergâh axis. Excessive openings after 1950 led to the loss of much of the organic street fabric around the square, thus fragmenting its morphological integrity. Literature on morphology shows that such disruptions lead to a loss of scale, spatial ambiguity, and texture discontinuity in historic centers (Moudon, 1997; Conzen, 1960). While post-2000 regulations have increased visibility and openness, some researchers consider the "void effect" created by wide stone pavements to reduce spatial diversity. Therefore, preserving the square's spatial integrity is possible through an approach focused not only on creating openness, but also on the balanced management of street character, scales, and functional boundaries.

Functionality and accessibility

Mevlana Square is one of the most heavily trafficked public spaces in Konya. In addition to tourist use, religious ceremonies, cultural events, and commercial activities make the square multifunctional throughout the day. In this context, we have analyzed the square's functional integrity through sub-components such as use diversity, visitor flow management, seating and waiting areas, pedestrian safety, disabled access, proximity to public services, and public transportation connections. While the tram line passing close to the square establishes a strong public transportation connection, its intersection with heavy pedestrian traffic at certain points can create mobility issues. Additionally, removing the bazaar/inn fabric resulted in large open spaces, reducing shaded and resting areas. Public space literature emphasizes that comfort, shade, and climatic protection elements directly affect usage intensity (Carmona, 2019). While the square generally offers strong accessibility, there is room for improvement in the balanced distribution of functional diversity and micro-scale comfort elements.

Table 1. AHP evaluation criteria (Lee and Walsh, 2010)

IMPORTANCE VALUE	DEFINITION	EXPLANATION
	Equal Importance	Criteria having equal importance
2, 4, 6, 8	Intermediate values (Compromise values)	Intermediate Values
3	Slightly more important (Slightly superior)	The first criterion is more important than the other
5	Quite important (Significantly superior)	The first criterion is much more important than the other
7	Very important (Very superior)	The first criterion is much more important than the other
9	Extremely important (Definitely superior)	The first criterion has an absolutely superior importance compared to the other.

Table 2. AHP Method Decision Matrix to be filled in by experts - Step 1.

Criteria	K1 – Urban Authenticity	K2 – Historical and Cultural Value	K3 – Spatial Integrity	K4 – Functionality and Accessibility
K1 – Urban Authenticity	1		1-9 rating score	
K2 – Historical and Cultural Value		1		
K3 – Spatial Integrity			1	
K4 – Functionality and Accessibility				1

Table 3. AHP Geometric Mean (=GEOORT (Expert1- Expert10))

Geometric Mean 10 Experts	K1	K2	K3	K4
K1	1	0.594603558	3.080070288	3.464101615
K2	1.681792831	1	3.935979343	5.477225575
K3	0.324667915	0.254066374	1	3.499635512
K4	0.288675135	0.182574186	0.285744043	1
Total	3.295135881	2.031244117	8.301793674	13.4409627

Table 4. AHP Geometric Mean Criteria Weight Section Table

Normalized Values	K1	K2	K3	K4
K1 – Urban Authenticity	0.303477622	0.292728753	0.371012628	0.257727195
K2 – Historical and Cultural Value	0.510386488	0.492309118	0.474111921	0.407502476
K3 – Spatial Integrity	0.098529447	0.125079193	0.120455897	0.260370897
K4 – Functionality and Accessibility	0.087606443	0.089882936	0.034419555	0.074399433
Total	1	1	1	1

Table 5. Consistency Analysis Table

TOTAL/W	LAMDA MAX	TE – Consistency Index	TO – Consistency Ratio (CR)	Criterion
4.244160709	4.144966863	0.081386903	0.090429892	K1
4.188077659	4.144966863	0.062692553	0.069658392	K2
4.107718983	4.144966863	0.035906328	0.03989592	K3
4.0399101	4.144966863	0.013303367	0.014781518	K4

Table 6. Criterion Weight Ranking

CRITERION NAME	CRITERION CODE	WEIGHT SCORE	RANK
K1 – Urban Authenticity	K1	0.306	2
K2 – Historical and Cultural Value	K2	0.471	1
K3 – Spatial Integrity	K3	0.151	3
K4 – Functionality and Accessibility	K5	0.072	4

5. RESULTS

This section summarizes the analytical decision framework developed to preserve, plan for, and sustainably transfer Mevlana Square in the historic center of Konya for future generations, and presents the key findings. Due to the multidimensional and interdisciplinary nature of the decisions to be made in historic urban areas, the Analytic Hierarchy Process (AHP) method was employed for the evaluation; a systematic, measurable analysis based on expert opinions was conducted. The fact that the consistency values obtained in the model are below acceptable limits indicates that the expert evaluations are methodologically reliable and that the developed decision model has scientific validity. This finding aligns with the widespread acceptance in the international literature that the AHP method is an effective tool for complex decision-making processes in historic city centers.

The AHP analysis revealed that, of the four main evaluation criteria determined for Mevlana Square, Historical and Cultural Value was the most dominant. It has been at the center of Konya's religious, cultural, and social life for centuries. With its dervish lodge structures, Selimiye Mosque, and traditional commercial fabric, it has formed a multilayered historical landscape. Therefore, when preserving this area, the physical integrity of the structures and the continuity of the spatial order associated with street traces, courtyard relationships, public space uses, and religious-ceremonial practices that constitute historical memory must be considered. This requirement aligns with the principles of integrity preservation as outlined in UNESCO's "Historic Urban Landscape (HUL)" approach.

Urban authenticity has also emerged as an important criterion with high weight in the analyses. The area's unique urban identity is directly related to preserving the spiritual and symbolic centrality of the Mevlana Dergah, maintaining the silhouette relationship with the Selimiye Mosque, preserving traditional bazaar traces, and strengthening the square's place in Konya's collective memory. Therefore, decision-making processes should adopt a holistic approach that transcends the scale of individual structures and make the preservation of identity elements specific to the space a fundamental principle.

One of the study's key findings is that spatial integrity is a fundamental factor in the area's sustainable planning. Mevlana Square has undergone significant transformations, particularly after 1950 with the openings made, the demolition of market units, the widening of roads, and the urban renewal projects implemented in the 2000s. While these interventions increased the visibility of the tomb and mosque surroundings, they also fragmented the organic street fabric, disrupted the parcel layout, and weakened morphological continuity. Therefore, future planning and design interventions should prioritize solutions that strengthen morphological integrity and enhance the square's harmony with its historical fabric.

Although the functionality and accessibility criterion has a lower weight in the analysis compared to other criteria, it has been found to play a critical role in terms of practical applicability. Mevlana Square is a focal point that attracts high numbers of visitors both nationally and internationally. Therefore, the area requires a spatial arrangement that supports pedestrian mobility, strengthens guidance systems, increases microclimate comfort, and ensures accessibility for different user groups. Recent square designs have been criticized for their extensive stone paving and lack of shaded areas, which negatively impact the user experience. Therefore, new design principles that increase functionality, enhance public comfort, and support disabled access should be integrated into decision-making processes.

In conclusion, this study demonstrates that the AHP-based model developed for the preservation and planning of Mevlana Square is a powerful methodological tool that considers the area's unique conditions and enables decision-making based on scientific criteria. This model can support decisions not only for Mevlana Square, but also for other Anatolian city centers with similar historical and cultural values. Future zoning plan revisions, design projects, and conservation policies should focus on urban uniqueness, historical and cultural value, spatial integrity, and functionality and accessibility. In areas under pressure for transformation, comprehensive and sustainable approaches based on these criteria should be developed. Thus, Mevlana Square will preserve its historical identity and be passed on to future generations as a living urban space.

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Author Contribution and Conflict of Interest Declaration Information

All authors contributed equally to the article. There is a conflict of interest with Şefika Nur TURAN and Mustafa KORUMAZ.

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