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Documenting Kirman Ceiling Ornamentation in Traditional Bayburt Houses: The Case of Akbulut House

* [1] **Seval Akbulut** , [2] **İlke Ciritci**
[1] Department of Architecture, Institute of Graduate Studies, Istanbul Gelisim University, Istanbul, Turkiye
[2] Department of Architecture, Faculty of Architecture and Design, Istanbul Aydın University, Istanbul, Turkiye
[1] E-mail: seval.akbulut@ogr.gelisim.edu.tr, [2] E-mail: ilkeciritci@aydin.edu.tr
[1] ORCID: https://orcid.org/0009-0009-0773-5345 , [2] ORCID: https://orcid.org/0000-0002-1492-0727

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A b s t r a c t

Located between the Black Sea and Eastern Anatolia regions of Türkiye, Bayburt possesses a distinctive rural architectural heritage shaped by its historical and cultural setting. A significant part of this heritage survives in traditional houses that remain largely unregistered and insufficiently protected. Among their notable features are locally defined spatial elements and Kirman ceiling ornamentations, which represent an important expression of vernacular craftsmanship. This study aims to document the construction principles, decorative characteristics, and heritage value of Kirman ceilings through on-site survey and architectural recording. By focusing on a rapidly disappearing component of rural domestic architecture, the research contributes to the identification and preservation of Bayburt's local building culture. It argues that systematic documentation is essential for developing holistic conservation strategies and ensuring the transmission of this cultural legacy to future generations.

K e y w o r d s : Bayburt; Rural architectural heritage; Vernacular houses; Kirman ceilings.

1. Introduction

Bayburt is located in northeastern Anatolia, within a transitional zone between the Eastern Black Sea and Eastern Anatolia regions. Its geographical position, situated along historical trade routes connecting Anatolia to the Caucasus and Iran, has contributed to its long-standing strategic and cultural significance (Kuban, 2007; Fletcher, 1996). The region is characterized by a continental climate shaped by its mountainous topography. Winters are long, cold, and snowy, while summers are short and relatively cool. Such climatic conditions have played a decisive role in shaping both settlement patterns and architectural responses in the region (Rapoport, 1969). The cultural identity of Bayburt reflects the broader characteristics of Eastern Anatolian rural life, where strong traditions, oral culture, and collective social structures are prominent. Traditional crafts and communal practices form an essential part of this cultural framework, contributing to the continuity of local identity (Rapoport, 1969; Kuban, 2007). The traditional residential architecture of Bayburt represents a synthesis of the construction traditions of Eastern Anatolia and the Eastern Black Sea region. This hybrid character is reflected in both material use and spatial organization. Typically, houses are constructed using a combination of masonry and timber systems, adapted to local environmental conditions. The spatial organization is generally centred around the tandır house, which functions as the core of domestic life and reflects the continuity of earlier nomadic spatial concepts within a settled architectural context (Karpuz, 1993; Kuban, 2007; Rapoport, 1969).

1.1 Spatial Organization and Construction Techniques in Traditional Bayburt Houses

Bayburt houses embody a multi-layered spatial organization. While the lower floors are constructed with stone, adobe or similar infill techniques are used in the internal partitions; on the upper floors, timber structural systems predominate. The planning principles of Bayburt houses were largely shaped by the harsh climatic conditions, the slope of the terrain, and the need for privacy. In this context, the spatial organization presents an integrated configuration developed around certain primary units (Kuban, 2007; Karpuz, 1993; Rapoport, 1969).

The structural system of traditional Bayburt houses combines stone masonry and timber construction. Exterior walls are built with stone, while interior partitions use lighter materials such as adobe or brick. Roofs are typically formed as earthen flat roofs over timber beams. The kirman (kırlangıç) ceiling system in the tandır house provides both smoke ventilation and natural lighting. It consists of a corbelled timber structure forming a layered geometric composition that converges at a central opening (Kuban, 2007; Erarslan, 2022).

***Tandır House*/ Earthen-Floor Living Space**

The tandır house constitutes the most central and defining space of the dwelling. A substantial part of daily life takes place in this area; various functions such as cooking, sitting, resting, and even receiving guests are accommodated within a single volüme (Figure 1). For this reason, the tandır house serves as the main focal point around which the other rooms are organized. In rural usage, the concept of "house" often refers not to the entire building, but specifically to this primary living space (Karpuz, 1993; Kuban, 2007; Rapoport, 1969).

Figure 1. Components of the tandır system in traditional Bayburt houses: the chimney above the tandır, the tandır with its ventilation system, and the tandır ventilation system, respectively from left to right. (Personal Archive of Seval Akbulut, 2026).

***Sofa* / Interior Courtyard**

The harsh climatic conditions of the region limited the use of open courtyards; instead, smaller-scale, enclosed sofa spaces developed, functioning as transitional areas within the house. The sofa can be defined as an intermediate space that provides circulation between rooms while also serving as a shared communal area.

***Selamlık* and *Başoda* / Main room**

The başoda, which constitutes the most refined space of the house, is generally positioned on the façade oriented towards the view. These spaces, used as the selamlık, are organized more independently from the daily life of the household and serve special occasions such as receiving guests.

1.2 Central Space and Symbolic Elements

The tandır house is not merely a functional space but also a setting that embodies strong cultural meanings. In addition to serving as the center of cooking and daily life, it incorporates symbolic elements such as the gelin direği (bride's post). Furthermore, auxiliary units such as the anbar and kehriz are spatially integrated into this area (Figure 2). This holistic understanding of spatial organization can be interpreted as a settled-life adaptation of a spatial order rooted in nomadic tent culture (Doğan Kuban, 2007; Amos Rapoport, 1969; Sedad Hakkı Eldem, 1984).

Figure 2. Spatial components associated with the tandır house in traditional Bayburt houses: ambar, kehriz, and tandırlık, respectively from left to right (Personal Archive of Seval Akbulut, 2026).

2. The Kirman Ceiling in Traditional Bayburt Houses

The kirman ceiling system and the prevalence of this type of covering in Eastern Anatolia are consistent with studies on traditional Turkish residential architecture. Research focusing particularly on the region indicates that such covering systems were widely used in Erzurum, Bayburt, and their surrounding areas (Karpuz, 1993; Kuban, 2007; Günay, 1998). Within the scope of this study, the examples examined are discussed through the Akbulut House, located in Güneşli Neighbourhood, Demirözü District of Bayburt Province (Figure 3). In addition, it is recommended that the distribution of the examined buildings across different neighbourhoods and villages of Bayburt be evaluated and represented on a map in order to clarify the spatial context.

Figure 3. Location map of the study area (developed by the authors).

The kirman ceiling — also widely known as the kırlangıç ceiling — constitutes one of the most characteristic elements of traditional Bayburt architecture. It is both a technical engineering solution and an upper-covering system that carries profound social meanings. In the Bayburt region, the term *kirman* derives from meanings associated with "skill" and "craftsmanship" and is used synonymously with kırlangıç (karlanguç/kırlanguç) ceiling.

In formal terms, the kırman ceiling system is a distinctive upper-covering solution inspired by the dome form and constructed through traditional timber-building techniques. For this system to be applied, the plan scheme must have a geometry close to a square. The square plan is a fundamental design criterion that enables a balanced, symmetrical, and aesthetically coherent appearance at the apex of the roof structure.

The construction process begins with the formation of the main load-bearing system. In this stage, square stones are placed beneath the principal posts in order to distribute the structural load. Subsequently, four main posts are erected approximately one meter inward from the walls, forming the primary structural frame of the building. These posts are the main elements that transfer the ceiling load directly to the ground and largely undertake the structural function of the upper-covering system. The capitals of the posts are enriched with decorative elements in accordance with traditional aesthetic principles.

In addition to the main posts, two further posts are placed opposite one another to support the load-bearing system, resulting in a structure composed of six posts in total. Within this system, the central element known as the *gelin direği* (the bride's post) has both structural and symbolic significance (Figure 4). The name of the master builder and the year of construction are generally inscribed on the face of this post.

Figure 4. Structural and symbolic elements of the *kirman* ceiling system: the *gelin direği* (bride's post), the post capital, and the main post, respectively from left to right (Personal Archive of Seval Akbulut, 2026).

After the load-bearing system is established, timber elements known as *harami* are placed along the base of the walls. These elements extend horizontally at floor level, preventing the load from being transferred directly to the walls and ensuring that it is carried by the main posts. The *harami* elements are arranged continuously around the perimeter of the structure and are reinforced, where necessary, by support posts embedded within the walls. In this system, the walls do not function as load-bearing components, but rather as enclosing elements; the entire load is carried by the main posts.

The construction of the upper covering of the *kirman* ceiling begins at the corner points and proceeds through a stepped configuration towards the centre. At this stage, the sectional dimensions of the timber elements to be used (such as 10 × 20 cm, 15 × 20 cm, and 20 × 20 cm) are determined, and the elements are positioned so that their smooth surfaces remain visible from below, in line with aesthetic considerations (Figure 5) . Once the central point is determined, the main beams (locally referred to as gont) are joined opposite one another at the upper levels of the walls and placed on top of each other to increase the structural strength of the system. Subsequently, diagonal connections are established between the corners, using the midpoints of these elements as reference points.

Traditional carpentry techniques are employed in the joints of the timber elements. The connecting surfaces are cut so that one side forms a tenon and the other a mortise, allowing the elements to interlock. This interlocking (or fitting) technique contributes to the structural integrity and durability of the building. In the gradually rising system, a directional

order is observed in the placement of the elements: while the lower tiers project outward, the upper tiers change direction, thereby creating a symmetrical whole.

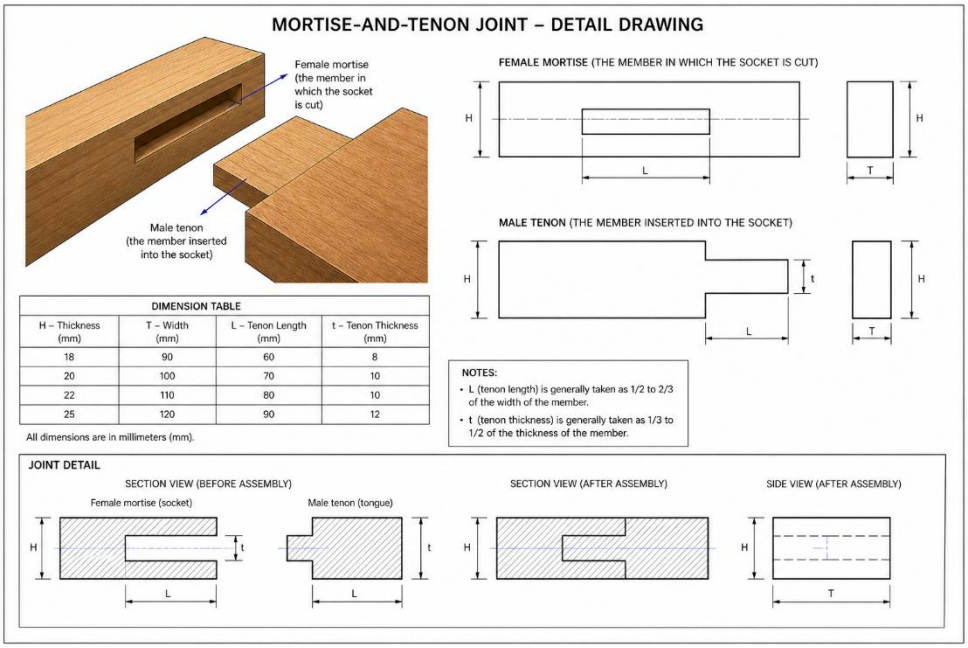

Figure 5. Technical drawing of the mortise-and-tenon joint detail employed in joining the timber elements of the kirman ceiling system (developed by the authors).

Uniformity in the length, width, and height dimensions at all corners, the arrangement of corresponding elements in equal sizes, and the balanced convergence of the system at the centre are all essential requirements. As the construction rises from the base level towards the apex, the dimensions of the elements decrease gradually. The voids that occur are filled with additional timber pieces inserted from the lower levels, thereby ensuring surface continuity. Through the repetition of these operations, the main frame and covering system of the *kirman* ceiling are completed (Figure 6-7).

At the final stage of construction, a sliding window system measuring approximately 1 × 1 meter is installed at the centre of the ceiling. This system operates by means of a cylindrical wooden element positioned along the central axis and a pulley-and-rope mechanism attached to it. Ropes connected to the front and rear parts of the window are passed over this wooden element and allowed to hang downward. When the front rope is pulled, the window opens backwards; when the rear rope is pulled, the window closes. This mechanism constitutes an important component of the *kirman* ceiling, as it serves both ventilation and daylighting functions. After the upper covering is completed, a cladding system using traditional materials is applied in order to ensure waterproofing.

Figure 6. From left to right: plan drawing of the kirman ceiling and the *kirman* ceiling (Personal Archive of Seval Akbulut, 2026).

The traditional construction technique was documented through an oral interview with a local master builder living in the region and was illustrated by the authors. First, vegetal material (grass or similar plant matter) is laid over the timber surface to prevent direct contact between the wood and the mud mortar. Subsequently, a mud mortar prepared by mixing sieved fine earth, straw, and water is applied to the surface as a plaster layer and levelled. After partial drying, straw is spread over the surface once again and compacted by trampling. Following a waiting period of one day, an additional thin layer of earth is applied, and the same process is repeated. Through the integration of these layers, a water-resistant surface is obtained.

In traditional applications, since there is no separate roof covering, the surface is given a certain slope to allow rainwater to flow in a single direction and to be discharged away from the building through a gutter system. This system is designed to withstand environmental effects such as snow load and precipitation. In cases of leakage that may occur over time, straw is again spread over the surface and compacted, thereby reinforcing the waterproofing performance. In this context, the *kirman* ceiling can be regarded as a durable traditional upper-covering system in both structural and functional terms.

Figure 7. Ornamentation detail of the *kirman* ceiling (Personal Archive of Seval Akbulut, 2026).

In Bayburt houses, the exterior façades are generally designed with a plain architectural expression, whereas the kirman ceilings in the interior present a striking aesthetic quality. The placement of timber elements in an overlapping manner, gradually narrowing towards the centre, creates a distinctive geometric order referred to as the *kırlangıç* form. This system provides both structural and visual integrity. In some examples, wood-carved ornaments can be observed, particularly on the posts and load-bearing elements. However, the overall decorative approach is generally restrained; the natural texture of the timber and the manner in which the elements are arranged emerge as aesthetic qualities in their own right.

Today, traditional houses containing kirman ceilings face an increasing risk of disappearance due to neglect and the impact of modern construction. Therefore, the documentation, conservation, and transmission of these buildings to future generations are of great importance. Measured survey and restoration studies to be carried out in this context will contribute to the sustainability of this architectural heritage.

2. Materials and Methods

The study adopts a qualitative architectural documentation method based on field observation, measured survey, photographic recording, oral testimony, and typological comparison. The Akbulut House was selected as the primary case due to the preservation of its kirman ceiling system, its accessible structural details, and the continuity of local knowledge associated with its construction.

The documentation of the ornamentation of *kirman* or *kırlangıç* ceilings, one of the characteristic elements of traditional Bayburt houses, constitutes an important stage in the preservation of the cultural heritage value of these buildings. In this study, the construction system, decorative features, and spatial positioning of kirman ceilings were examined through observation and measurement techniques based on fieldwork.

Within the scope of the study, multiple methods were used together in documenting the examined buildings. First, the plans of the buildings were determined through on-site measurements, and measured survey drawings were produced. This enabled the stepped timber arrangement and geometric form of the kırman ceiling to be technically analysed. Photography was used to record the existing condition of the buildings. This method made it possible to visually document the spatial effect of the ceiling, the texture of the timber, and any existing decorative details. In addition, based on field observations, the positions of the *kirman* ceilings within the buildings were identified and classified according to their areas of use. In this context, ceilings located in different spaces such as the *tandır house*, room, stable, and *merek* (hayloft) were evaluated typologically.

The materials used in the construction of *kirman* ceilings are largely based on local resources. The main load-bearing elements are timber beams, which are arranged in an overlapping system; the upper surface is then covered with earth to provide thermal insulation. The clayey and calcareous soil structure of Bayburt was preferred in this application because it gains strength when compacted and provides insulation. The opening at the centre of the ceiling serves both lighting and ventilation functions, thereby forming the focal point of the space.

3. Results

When evaluated in terms of its plan scheme, load-bearing system, construction technique, and functional characteristics, the *kirman* ceiling presents a holistic and characteristic typology specific to traditional Bayburt residential architecture (Table 1). As an important component of local architectural identity, this system represents a distinctive building tradition that should be preserved in both technical and cultural terms.

Table 1:. Typological classification of the *kirman* ceiling system (developed by the authors).

Classification criterion	Type / feature	Explanation
Plan type	Square plan	The basic geometric configuration that enables the hipped form to rise in a balanced manner at the centre
Upper-covering form	Stepped hipped form / dome-derived form	A covering system derived from the dome form, narrowing and rising from the corners towards the centre
Load-bearing system	Timber system with central posts	The transfer of the load to the ground through the main posts, independently of the walls
Post organization	Four main posts + two intermediate posts — six in total	Main load-bearing system supported by additional structural elements
Special load-bearing element	*Gelin direği* / bride's post	A decorated and symbolically meaningful post located at the centre
Load-transfer system	System supported by *harami* elements	Timber elements placed at floor level that prevent the load from being transferred to the walls
Construction technique	Interlocking mortise-and-tenon timber joint	The joining of timber elements by fitting them into one another
Stepping system	Inward-narrowing modular system	The gradual reduction in the dimensions of the elements as the structure rises towards the upper levels
Principle of symmetry	Equality in four directions	The same dimensions, heights, and rotations are maintained at all corners
Infill system	Timber infill supported from below	The closing of voids with timber elements inserted from the lower levels
Lighting / ventilation	Sliding roof window — approximately 1 × 1 m	A movable opening operated by a rope-and-pulley system
Window mechanism	Rope-and-pulley mechanism	A traditional mechanism that opens and closes according to a pulling principle
Upper cladding	Organic earthen covering	A waterproofing layer formed with a mixture of grass, straw, and mud
Waterproofing	Compacted earth–straw mixture	Water resistance achieved through a layered application
Drainage system	Slope + gutter	Rainwater is directed towards a single side and discharged away from the building
Maintenance system	In-situ repair — straw spreading and trampling	A traditional intervention method applied in cases of leakage
Material characteristics	Timber- and earth-based	Use of local and natural materials
Structural behaviour	System concentrating the load at the centre	The ceiling load is transferred to the ground through the main posts

3.1 Spatial Meaning through the Concepts of Tündük and Centre

In nomadic Turkic culture, the *tündük*, located at the apex of the *yurt,* is defined not merely as a functional opening, but also as a spatial and cosmological centre. While this centre enables the control of light and smoke, it also constitutes the physical expression of the relationship established between earth and sky. In this respect, the *tündük* forms part of a worldview in which human beings perceive the space they inhabit as the centre of the universe (Eliade, 1959; Kuban, 2007).

This approach is explained in the literature of architecture and the history of religions through the concept of axis mundi. The axis mundi is defined in different cultures as "the centre that establishes the connection between heaven and earth," and this centre is often represented by an opening, a column, a mountain, or an axis of smoke (Eliade, 1959).

In this context, the *tündük* should be considered not only as a physical component of the spatial organization of nomadic life, but also as an element that produces meaning (Rapoport, 1969; Kuban, 2007). Therefore, the *tündük* is more than the geometric centre of space; it is the focal point of the relationship between human beings and the universe. This indicates that, in nomadic spatial organization, the concept of centre is produced simultaneously at both functional and symbolic levels (Eliade, 1959; Rapoport, 1969).

The *kirman* ceiling should be considered, in the specific context of Bayburt, not merely as a local construction technique, but as a continuation of the corbelled covering tradition dating back to antiquity. This technique was used in similar forms

across different geographies and, over time, evolved into distinctive architectural forms shaped by local conditions (Kuban, 2007; Rapoport, 1969; Eliade, 1959).
In Bayburt houses, the concentration of the *kirman* ceiling above the *tandır* house indicates that this structure was positioned at the centre of daily life. The relationship between the tandır and the ceiling opening creates a focal point that determines the spatial organization, transforming the covering system from a passive architectural element into a constitutive component of the space (Karpuz, 1993; Kuban, 2007; Erarslan, 2022).
When compared with similar covering systems in the Caucasus and Central Asia, the *kirman* ceiling should not be read as the result of a direct transmission, but rather as a local interpretation of parallel solutions developed in response to similar environmental and cultural conditions. In this respect, it represents both historical continuity and local specificity (Rapoport, 1969; Kuban, 2007). Consequently, the *kirman* ceiling should be evaluated not only as a technical covering system in Bayburt residential architecture, but also as a multi-layered architectural element that shapes spatial organization and gradually acquires cultural meaning over time (Eliade, 1959; Kuban, 2007; T.C. Kültür ve Turizm Bakanlığı, 2020).

3.2 Spatial Transformation of the Kirman Ceiling: From the Tandır house to the Centre of the Courtyard

Geleneksel In traditional Bayburt houses, the earliest area of use for the *kirman* ceiling is the tandır house. This space constitutes the centre of the dwelling, and the covering system is one of the fundamental elements that define this area (Karpuz, 1993; Kuban, 2007). With the development of plan typologies over time, it is observed that the *kirman* ceiling was not limited solely to the tandır space, but was also transferred to spaces associated with the sofa, entrance, and courtyard. The use of this covering system particularly at the entrances of living areas indicates that its functional scope expanded (Kuban, 2007; Rapoport, 1969).
In Bayburt houses, the courtyard functions as a primary organizational area that establishes the relationship between different spaces. The use of the *kirman* ceiling in such areas reveals that the system evolved from an element that merely covered enclosed spaces into an upper-covering system that also defines semi-open and circulation areas. In this process, the area of use of the *kirman* ceiling expanded; the concept of spatial centre was no longer confined to the *tandır* house, but extended towards the sofa and the courtyard. Thus, the *kırman* ceiling became not only a functional covering system, but also a holistic architectural element integrated into the overall spatial organization of the dwelling.

Table 2:. Typological classification of the kirman ceiling and similar covering systems.

Typology	Building type / geography	Construction technique	Central opening	Primary function	Symbolic meaning	Relationship to the *kirman* ceiling
Tündük (yurt roof apex)	Central Asian nomadic culture	Wooden ring + tent covering	Yes	Light admission, smoke / smoke ventilation	Cosmic centre, connection with the sky (*axis mundi*)	Conceptual origin, symbolic point of departure
Kirman (*kırlangıç* ceiling)	Anatolia (Bayburt, Eastern Anatolia)	Overlapping timber system	Yes (*tüteklik* / smoke vent)	Covering, thermal control, lighting	Symbolic meaning acquired over time	Local and developed form
Hazarashen / *Darbazi*	Caucasus (Armenia, Georgia)	Overlapping timber covering	Yes	Smoke ventilation, lighting	Limited symbolic meaning	Direct typological similarity
Corbelled dome	Ancient Anatolia, Mediterranean (Mycenae)	Stone corbelling technique	Generally absent / limited	Covering the space	Not symbolic, but structural	Technical origin
Sedentary houses of Central Asia	Central Asia (Tajikistan, Afghanistan)	Timber / adobe corbelling	Yes	Heating, smoke ventilation	Cosmological interpretations in some cases	Transitional form
Hogan (Navajo)	Indigenous culture of North America	Timber + earthen covering	Yes	Shelter, smoke ventilation	Ritual and cosmological meaning	Independent parallel development

The typological classification presented in Table 2 demonstrates that the kirman ceiling is not merely a local building element, but is instead associated with similar covering systems that emerged across different geographies. An examination of the table reveals that two principal common features stand out in the majority of these structures: the corbelled covering technique and the central opening. These two features arise as the result of both structural and functional requirements; however, in certain cultures, they may also acquire symbolic meanings.
When the visual examples of the Hogan and Hazarashen are examined, it becomes clear that these structures display similarities to the *kirman* ceiling in terms of fundamental features such as the corbelled covering system and the central opening (Figure 8-9). This visual comparison supports the argument that these systems, which emerged in different

geographies, should be understood not as the result of a direct process of transmission, but rather as parallel solutions developed in response to similar environmental and functional requirements.

Figure 8. Example of a Hogan dwelling in Navajo culture (Hogan, n.d.).

Figure 9. The Hazarashen covering system. (URL-1, URL-2, URL-3).

The *tündük* stands out among these systems as the earliest example that directly carries cosmological meaning, while the *kirman* ceiling may be considered a transformed form of this understanding within sedentary architecture. By contrast, early examples such as the corbelled dome provide only a technical solution and do not contain symbolic meaning. Intermediate types found in the Caucasus and Central Asia, however, display a transitional character by combining technical features with limited symbolic associations.
The kirman ceiling may be interpreted as a local manifestation of a broader corbelled covering tradition rather than as evidence of direct historical transmission. Thus, the Bayburt example presents a distinctive architectural typology in which different cultural and technical layers intersect.

4. Discussion

In traditional Bayburt houses, the opening located at the centre of the *kirman* or *kırlangıç,* ceiling appears as a fundamental element that provides both daylighting and smoke control. However, unlike the *tündük,* this system developed not primarily as a symbolic element, but in response to structural and climatic requirements. The initial use of the *kirman* ceiling in relation to the *tandır house* indicates that it defined the centre of spatial organization. The vertical relationship established between the *tandır* and the ceiling opening creates a conceptual parallel with the *tündük,* of the nomadic tent. Over time, it is understood that this covering system was no longer limited solely to the *tandır house*, but was also transferred to spaces associated with the sofa and the courtyard. Indeed, it is noted that the entrance to the living area in Bayburt houses was also covered with a *kirman* ceiling. This situation indicates that the spatial centre expanded from a single point towards the overall organization of the dwelling.
In this context, the development of the *kirman* ceiling can be summarized in three stages:

- use centred on the *tandır house*
- expansion into the sofa and transitional spaces
- holistic spatial integration with the courtyard

Consequently, the *kirman* ceiling should be evaluated not merely as a technical covering system, but as a dynamic architectural element that adapted to changing living practices and gradually acquired meaning over time. Traditional residential architecture in Bayburt carries significant cultural heritage value through limited yet distinctive details such as *kirman* ceiling ornamentation. However, the fact that a large proportion of these buildings are not registered and are not included in formal conservation processes has led to the rapid disappearance of these architectural elements. Indeed, the abandonment of unprotected traditional houses and their replacement by new buildings demonstrates that this heritage is gradually being lost.
Although *kirman* ceiling ornamentation constitutes an important element reflecting local craftsmanship knowledge, it is at risk of losing its authenticity due to economic constraints, migration, abandonment, and unconscious interventions. In addition to these factors, the increasing prevalence of reinforced concrete construction, advances in building technologies, and the comfort expectations introduced by modern life have caused traditional buildings to be perceived as functionally inadequate. This situation accelerates either the transformation of existing buildings or their complete removal. As a result, the traditional architectural fabric is progressively weakened, and cultural continuity is interrupted.
In this context, the fundamental step in conservation is the systematic documentation of *kirman* ceiling ornamentation. Recording studies carried out through methods such as photography, measured survey drawings, and material and workmanship analyses constitute the basis of the conservation process. However, physical documentation alone is not sufficient; the knowledge of craftsmanship must also be recorded.

5. Conclusions

Within the scope of this study, the ornamentation of *kirman* ceilings in traditional Bayburt houses was documented and evaluated in terms of their structural characteristics, spatial positions, and cultural meanings. The findings reveal that the kirman ceiling is not merely a covering system, but also an architectural element that defines the centre of space and acquires meaning depending on patterns of use.

The fact that the use of the *kirman* ceiling, which began particularly in the *tandır house*, gradually extended to spaces such as the sofa and the courtyard indicates that this element is not a static building component. Rather, it assumed different roles within the spatial organization by adapting to changing practices of daily life. This demonstrates that, in traditional Bayburt houses, the concept of the spatial centre is not confined to a single point, but instead presents a dynamic structure that extends throughout the dwelling. Indeed, the literature also notes that the entrances to living areas were covered with kirman ceilings and that this system was used in different spaces.

During the research process, it became evident that the *kirman* ceiling should be understood not as a direct continuation of the tündük in nomadic culture, but rather as a transformative structure that reproduces a similar spatial axis. While the tündük constitutes a centre with direct symbolic and cosmological meaning, the kırman ceiling emerged from structural and climatic requirements, yet gradually acquired meaning through spatial use and cultural practices. In this context, the kirman ceiling should be regarded as an architectural element that produces meaning through function.

On the other hand, although the ornamentation of the *kirman* ceilings examined within the scope of the study was found in a limited number of examples, it was determined that these details carry significant cultural value by reflecting local craftsmanship knowledge. Today, however, these values are under serious threat of disappearance due to rapid construction, economic insufficiencies, migration, and abandonment. In particular, the widespread use of modern construction techniques and a comfort-oriented understanding of daily life have caused traditional buildings to be perceived as functionally inadequate, leading to the construction of new buildings in their place. Similarly, the literature clearly emphasizes that traditional residential fabrics have not been adequately preserved and are gradually disappearing under the pressure of new construction.

In this context, the most fundamental requirement for the conservation of kirman ceiling ornamentation is the systematic documentation of existing examples through scientific methods. The documentation process should not be limited to physical measurements and drawings; decorative details, material characteristics, and craftsmanship knowledge should also be recorded. In addition, for the conservation of traditional buildings to be sustainable, these structures must be adapted to contemporary needs and kept in active use.

In conclusion, although kirman ceiling ornamentation is encountered in a limited number of examples within Bayburt's traditional residential architecture, it provides important evidence for understanding both spatial organization and cultural continuity. Therefore, the documentation, conservation, and transmission of these architectural elements to future generations should be regarded as an important responsibility not only in the local context, but also within the broader field of architectural history.

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