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# Reviving the Practices of Transhumance in a Forgotten Settlement in Mainland Greece

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**Abstract:** The aim of this research project is the investigation of the forgotten landscape of transhumance in mainland Greece, focusing on areas that have been abandoned by modern society and their historical significance. The goal is to make these lands functional again by preserving their cultural heritage and developing a sustainable community that meets the needs of people, livestock, and the environment. The investigation employs a dual approach: examining transhumance as a cultural and natural practice while analyzing vernacular architecture to preserve collective memory. This involves extensive historical research and a simultaneous analysis of spatial, social, symbolic, and architectural elements. This study identifies points of convergence between cultural practices and architectural heritage, applying these insights to contemporary redevelopment scenarios. Findings reveal a significant interplay between transhumance practices and the region's anonymous architecture. Key characteristics of the landscape and its spatial identity are documented, providing insights into effective preservation and redevelopment strategies. Specific case studies validate these strategies, demonstrating their relevance to current and future efforts. This study concludes that understanding the historical context and spatial identity of transhumance landscapes is crucial for sustainable redevelopment. By preserving cultural practices and architectural heritage, this project provides a framework for revitalizing these landscapes, ensuring a balanced coexistence of people, livestock, and the environment.

Keywords: transhumance; anonymous architecture; local identity; biodiversity; mainland Greece



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## 1. Introduction

Transhumance, the seasonal movement of people and their livestock between geographical or climatic regions, is a practice with deep historical roots and significant cultural, environmental, and socio-economic implications. Annually, herders organize and manage the movement of thousands of animals along well-established grazing paths, migrating to higher pastures in the summer and returning to lower valleys in the winter. While "transhumance" generally refers to this seasonal journey, it is occasionally used to describe nomadic pastoralism, which involves longer-distance migrations of both people and livestock.

Understanding transhumance is crucial, as it is closely connected to various aspects of human and environmental systems. According to Evans [1], transhumance and nomadism, although similar, diverge in their cultural contexts and social structures. Transhumance involves regular seasonal and altitudinal movements to and from a permanent settlement, whereas nomadic movements are less predictable and do not depend on a fixed base [1].

From an environmental perspective, transhumance is crucial in shaping landscapes, preventing forest fires, and creating ecological corridors. This practice significantly contributes to biodiversity preservation and climate change mitigation through sustainable resource management [2]. Socio-culturally, transhumance promotes the development of cultural identities, strengthens inter-community bonds, and supports rural economies by

providing high-quality products such as cheese, meat, wool, and leather [3]. This economic benefit is especially important in addressing rural depopulation [4].

In recognition of its importance, UNESCO declared transhumance an "Intangible Cultural Heritage" in 2019, and on 5 December 2023, it was officially designated an Intangible Cultural Heritage of Humanity at the 18th session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage in Botswana [5]. This recognition emphasizes the importance of the practice in preserving environmental knowledge and cultural traditions.

In Greece, transhumance is firmly established in the country's rugged landscape and historical context. The geomorphology and the traditional production system in lowland areas facilitated the development of transhumance stock farming [6]. Greece's diverse topographical features, including expansive plains, fertile valleys, and mountainous regions, are essential to this practice. These areas offer crucial grazing lands and cooler temperatures in the summer, while rivers contribute to the ecological balance and fertility of the landscape [7].

The Greek countryside presents an environment where the distinction between "inside" and "outside" spaces harmoniously blends, reflecting a unique spatial arrangement [8]. The architecture and practices associated with transhumance are shaped by climatic, social, economic, and cultural factors. This phenomenon establishes a unique character for the landscape by combining human and natural elements [9]. The Mediterranean tradition of mountain nomadism is evident in Greece, characterized by a Mediterranean climate found in high mountain regions and landscapes shaped by the mobile husbandry of goats and sheep [10].

The Greek pastoral landscapes can be categorized into three main zones:

- (a) The area surrounding settlements extending to the forest edges;
- (b) The high-altitude summer pastures;
- (c) The routes connecting these zones that are used for herding and transportation [11].

These landscapes, defined by the European Landscape Convention as areas perceived through the interaction of natural and human elements [12], are rich in cultural heritage and feature pathways, bridges, monasteries, and other historical elements.

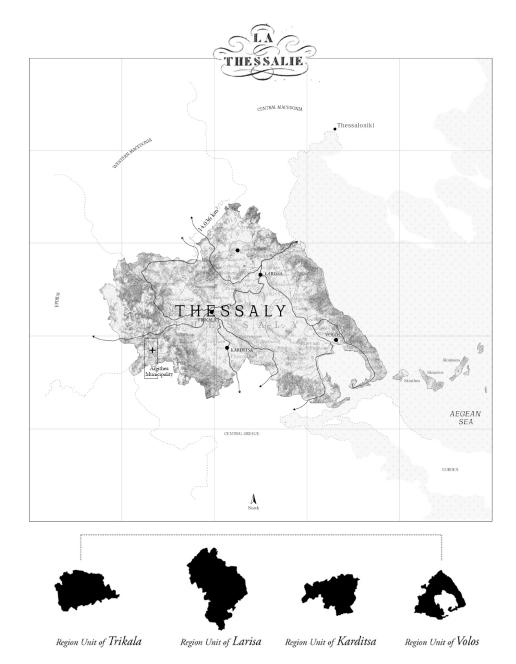
Despite their lasting significance, transhumance routes encounter difficulties due to abandonment and modification. The ecological and cultural values of these routes are significant, yet they are threatened by socio-economic and political influences [13]. Research highlights the critical role of transhumance in maintaining biodiversity and landscape integrity [14]. However, there is increasing concern about the impacts of modern practices and abandonment on traditional systems [15].

The main aim of this study is to explore the various impacts of transhumance on landscapes, biodiversity, and cultural heritage in Greece. This study emphasizes the necessity of preserving transhumance systems because of their ecological and cultural benefits and highlights the need for further research to understand and mitigate the effects of socio-economic changes on these traditional practices [13,16].

# 2. Materials and Methods

#### 2.1. Study Area

Patlia, a traditional settlement located in the Thessaly Region of Greece (Figure 1), is the focal point of this study because of its unique characteristics and historical context of transhumance. Nestled among the hills of Thessaly, next to Petrochori village, Patlia is situated on a cliff surrounded by evergreen and deciduous trees, shrubs, and grasses. The settlement is subjected to harsh sunlight and strong winds, which contribute to its remote and rugged character. Historically, Patlia's isolation led its inhabitants to abandon summer transhumance and leave nearby settlements. The qualities of remoteness and beauty together make Patlia a significant site for studying the balance between human activity and the natural environment (Table 1).



**Figure 1.** Municipality of Thessaly. The study area is in the Regional Unit of West Karditsa. (Figure created by the authors) [17].

**Table 1.** The table indicates the evolution of the permanent population of Petrochori village. Petrochori is the nearest village to the settlement of Patlia and the main source of transhumance (census 1991–2011, https://panorama.statistics.gr/ accessed on 6 February 2024).

Year	Population	Variation
1991	59	-47.46
2001		variation 91-01
	31	264.52
		variation 01-11
2011	113	91.53
		variation 91-11

# 2.1.1. Geographical and Geological Context

Established in the 18th century, Patlia consists of 14 stone and wooden houses arranged in a way that reflects the traditional architectural style of the region. The settlement's integration with the hillside emphasizes the mutual relationship between human habitation and the land. The Thessaly Region covers an area of 14,036 square kilometers (approximately 11% of Greece's total land area) and features a diverse landscape characterized by vast agricultural expanses and varied terrain. About 50% of the region is mountainous or semi-mountainous, with the other 50% consisting of plains, including the Thessalian Plain, which is the largest plain and wheat-producing area in Greece. This plain is traversed by the Peneios River, Greece's third-largest river [18].

Patlia is located within the Municipality of Argithea, which extends to the western edge of the Karditsa Regional Unit. It is bordered by the Regional Units of Arta, Aetolia-Acarnania, Evrytania, and Trikala and by the Municipalities of Mouzaki and Plastira Lake in the Karditsa Regional Unit. The seat of the municipality, Anthiro, is located 71.8 km from Karditsa and 44.7 km from Mouzaki. This inland mountainous area has elevations ranging from approximately 400 m to 2200 m, with an average altitude of 1015 m. The region's geological composition includes rocks from the Olonos Zone of Pindus, which form parallel folds of metamorphic and alpine formations. The resulting soils are well drained, moderately or sufficiently enriched with organic matter, and exhibit a pH range from acidic to neutral [18,19].

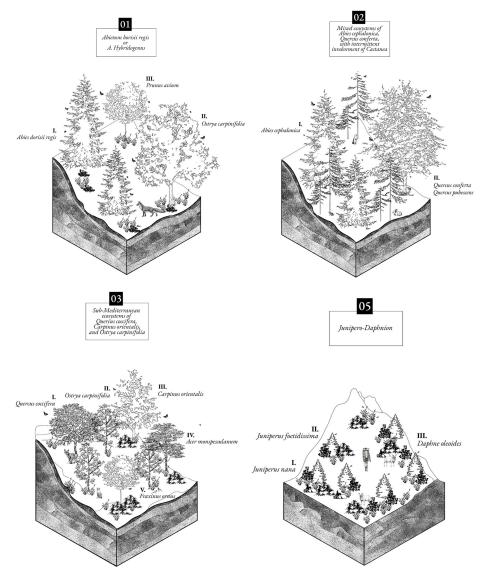
The land use distribution in the Municipal District of Ano Argithea, according to the 1991 census by the Hellenic Statistical Authority (E. $\Sigma$ . $\Upsilon$ .E.), shows that the area covers 135,300 acres. These lands are categorized as follows: 3.6% cultivated areas, 22.5% forests, 67.6% pastures (of which 64.6% are communal and 3% private), 1.3% water bodies, and 1% settlements, with the remaining 4% classified as miscellaneous areas. In the Municipality of Petrochori, which covers 9100 acres, pastures account for 78%, forests for 12.1%, cultivated areas for 2.2%, settlements for 1.1%, and miscellaneous areas for 6.6% [17].

The study area has several distinct ecosystems (Figure 2):

- 1. Abietum borisii regis or A. Hybridogenus developing at elevations of 900 to 1600 m. They display a variety of characteristics in location, structure, and organization. The fir species is characterized by polymorphism, a broad ecological range, significant economic benefits, and dominance at higher elevations of the study area. The ecosystems of hybridogenetic fir include species like beech, wild cherry, bitter chestnut, hop hornbeam, and oak, while typical accompanying herbaceous species are Luzula forsteri, Lathyrus laxiflorus, Aremonia agrimonoides, Potentilla micrantha, Helleborus cyclophyllus, et al. [20]
- 2. Mixed ecosystems of *Abies cephalonica*, *Quercus conferta*, with intermittent *involvement of Castanea*, developing in the transition zones between the oak and fir zones. These transitional systems, if not disturbed by extreme weather, can change to forests, predominantly featuring fir species in favorable locations. At lower elevations, the mix and prevalence of oak or fir depend on microclimate and soil conditions. In many cases, chestnut accompanies oak, with or without fir, and the accompanying forest and shrub species are the same as those in oak and fir ecosystems, appearing in various combinations.
- 3. Sub-Mediterranean ecosystems of *Quercus coccifera*, *Carpinus orientalis*, and *Ostrya carpinifolia* developing in specific locations and patches within the zone of mountainous Mediterranean conifers. These locations are rocky and degraded, usually found on ridges and slopes with a steep inclination and a west–southwest orientation. Dominant species include *Quercus coccifera*, *Carpinus orientalis*, and *Ostrya carpinifolia*, accompanied by *Fraxinus ornus* and *Acer monsesulanum* [20].
- 4. Fagetum moesiacae is found in small areas at higher elevations. The sensitive beech species has limited presence in the wider Argithea region compared to other forest species, primarily due to human interventions. A significant beech habitat extends over an area of approximately 3000 hectares in the Kazarma region, on the border between the Municipal Unit of North Argithea and the neighboring Municipality of Mouzaki. This is

the Agios Nikolaos beech forest, which, in addition to its ecological value, provides various opportunities for recreation and environmental tourism.

- 5. *Junipero-Daphnion* (sub-alpine ecosystems) develops above the limits (mostly anthropogenic) of the forests, including shrubby and bushy vegetation with species such as *Juniperus nana*, *Juniperus foetidissima*, *Daphne oleoides*, and others. Overall, all pseudo-alpine systems developing on the mountain tops of the study area are notable for the landscape diversity and rare biodiversity.
- 6. Alpine meadows are located in areas designed to survive the extreme weather conditions of high altitudes, featuring small leaves for water conservation and dense foliage for height adaptation. They are recognized for their unique flora, including various grasses, herbs, and flowering plants adapted to survive in the harsh conditions. Plant species in these ecosystems often grow low to withstand the strong winds and extreme temperatures. These ecosystems feature combinations of shrubby and herbaceous vegetation, such as clusters with thorny shrubs (*Astragalus*) and grasses (*Gramineae*), e.g., *Festuca* (perennial tufted grasses), at high altitudes [20].



**Figure 2.** The project area characterized by these distinctive ecosystems: (01) *Abietum borisii regis* or *A. Hybridogenus*, (02) mixed ecosystems of *Abies cephalonica*, *Quercus conferta*, with intermittent involvement of Castanea, (03) sub-Mediterranean ecosystems of *Quercus coccifera*, *Carpinus orientalis*, and *Ostrya carpinifolia*, and (05) Junipero-Daphnion (Figure created by the authors) [17].

#### 2.1.2. Flora and Fauna

The rich flora of the Patlia area is enhanced by a diverse fauna. The mountainous continental Greek region supports a variety of vertebrate species, including Roe Deer (Capreolus capreolus), European Hare (Lepus europaeus), Wild Boar (Sus scrofa), Badger (Meles meles), and occasionally Brown Bear (Ursus arctos), Eurasian Lynx (Lynx lynx), and the rare Wildcat (Felis silvestris). The avifauna includes 67 recorded bird species, with rare raptors such as the Bearded Vulture (Gypaetus barbatus) and the Golden Eagle (Aquila chrysaetos) inhabiting the high peaks. Reptiles found in the area include the Slowworm (*Anguis fragilis*), Snake-eyed Skink (Ablepharus kitaibelii), and various lizard species, such as Common Wall Lizard (Podarcis muralis) and the Chameleon (Chamaeleo chamaeleon). Lower altitudes host species such as Four-lined Snake (Elaphe quatuorlineata), Grass Snake (Natrix natrix), Green Lizard (Lacerta viridis), Viper (Vipera ammodytes), European Pond Turtle (Emys orbicularis), and Caspian Turtle (Mauremys caspica). Prominent amphibians in the region include the Fire Salamander (Salamandra salamandra), Yellow-bellied Toad (Bombina variegata), Smooth Newt (Lissotriton vulgaris), Alpine Newt (Ichthyosaura alpestris), Green Toad (Bufotes viridis), Common Toad (Bufo bufo), and several frog species such as the European Tree Frog (Hyla arborea) and Marsh Frog (Pelophylax ridibundus) [19].

### 2.1.3. Tangible and Intangible Elements

The area of Patlia, which was once isolated and uninhabited, became active and populated due to the transhumance and the movements of the local shepherds and the herds. As mentioned, in 1982, the first link was established, and the families from Petrochori, engaged in livestock farming, began to build their stone hunts to accommodate their families and herds from April to October [18]. The process of transhumance required significant preparations for both the families and the animals, and the journey could last up to a month [19]. Typically, the men of the family had to move there first to repair any damage to the huts, prepare the site for the arrival of families and animals, and provide water and lighting. The winters in the mountains were exceptionally harsh, causing damage to the roofs of buildings, particularly the wooden components.

The movement of the herds to the mountains was one of the most significant events for the habitants of the village. During winter, some shepherds stayed in Petrochori, while others moved to the lowlands for warmer climate conditions. As a result, it was a return trip for them to reunite with their families before departing for the settlement of Patlia [18].

The passage through the village consisted of an ephemeral stop to supply the herd with food and to prepare their equipment for the ascent into the mountains. The trip from Petrochori to the settlement of Patlia was short, lasting approximately 1 to 2 days, including several stops of the herds and the families.

Upon arriving at the settlement, all the residents, including women and children, had to work together to organize their daily routines for the upcoming months. The days started early in the morning with feeding of the herds, timber harvesting for lighting and cooking provision, cleaning and preparing the space for processing animal products, and general household chores. The main occupations in the settlement were cheese processing and production. Twice a day, at sunrise and sunset, the shepherds sheared the sheep and collected the milk into wooden buckets. The women transferred the milk to small spaces beside the houses specifically used for the cheese production and storage. The milk was used to produce various nutritious products, such as cheese, butter, or yogurt, keeping families with livestock, especially sheep, occupied with food supplies (Figure 3).

While examining the equipment and the tools owned by the families, it is possible to identify the loom used for processing wool. From the shearing of the sheep, the amount of the wool was separated by color and size and was cleaned with water. After that, they had to untangle the wool and align it properly for the loom. That was an important aspect of each family's intangible heritage, passed down through generations, providing households with clothing, blankets, rugs, fabrics, and traditional shepherd attire. Due to the high altitude of the mountains, the weather conditions were harsh even during the summer

months. The shepherds wore a woolen cloak to protect themselves from the rain, while the women wore woolen dresses, cloaks, and head covers [18] (Figure 3).



**Figure 3.** The intangible traditional practices include the process of milking, the tools for cheese production, and the practice of wool knitting for the fabric making process. (Figure created by the authors) [18].

#### 2.2. In Situ and Archive Research Methodologies

The methodological approach for this study was designed to effectively assess and reintegrate traditional transhumance practices within the local community, emphasizing environmental sustainability and socio-cultural revitalization. The methods employed aimed to map existing resources, engage community stakeholders, and analyze the historical and ecological context of transhumance.

Application of the Four Trace Concepts (Landing/Grounding/Finding/Founding): The methodological framework, based on Professor Christophe Girot's concepts [21], was applied throughout the research process:

- Landing: The initial phase involved site visits to acknowledge the physical and cultural landscape of the settlement. This facilitated the identification of areas where transhumance practices could be revitalized.
- Grounding: A thorough site analysis was conducted, focusing on the historical and cultural aspects of transhumance in the area. This phase aimed to understand the dynamics of local ecosystems and how they relate to traditional practices.
- Finding: Continuous interactions with local stakeholders and residents throughout the
  research provided critical insights into the unique challenges and potentials of the area.
  This feedback was essential in refining this study's objectives and proposed strategies.
- Founding: The synthesis of insights gained from the previous phases informed the
  development of new frameworks for implementing and supporting transhumance
  practices. This included creating proposals that respect and enhance the cultural and
  ecological heritage of the region.

The process of landing, grounding, finding, and founding was repeated and followed consistently during the research, ensuring that insights were continuously integrated into the planning and design phases. This approach not only underscored the significance of cul-

tural heritage in the area but also fostered a deeper understanding of the interdependencies between local ecosystems and traditional practices.

#### 2.2.1. Historical and Cultural Contextualization

A thorough examination of the historical practices of transhumance in the region was carried out, focusing on various sources to understand how these practices shaped the settlement's cultural identity. This analysis included a detailed review of archival documents, including land records, migration logs, and agricultural accounts, which provided insight into the seasonal movements and grazing patterns of livestock in the area.

Additionally, local histories were consulted, including books and reports written by regional historians and anthropologists. Notable works included "Transhumance, the Seasonal droving of livestock" by UNESCO [3], which examined the cultural narratives associated with these seasonal migrations, and "The Role of Transhumance in Greek Landscapes: Biodiversity, Cultural Heritage, and Future Challenges" by Tsakiris [16], which outlined the socio-economic impact of transhumance on local communities.

Previous studies, such as "Transhumance in Greece Multifunctionality as an Asset for Sustainable Development" conducted by Ragkos [22], were also essential in understanding the evolution of transhumance practices. This research examined the demographic changes in transhumant communities and how these shifts correlated with broader socioeconomic trends.

# 2.2.2. Mapping and Site Analysis

This study began with a detailed mapping of the geographical and ecological features of the settlement, including existing pathways, grazing areas, and water resources. Geographic Information Systems (GISs) were used to create visual representations of the landscape, helping identify key areas for transhumance and their connection to the surrounding environment. The geographical study of transhumance is enhanced by Geographic Information Systems (GISs), which provide tools for collecting, managing, storing, processing, analyzing, and visualizing spatial data in a digital framework [23–25]. The data used in this study include both spatial and descriptive elements. The spatial data include the cartographic background of the GISs and the specific locations of various objects and their attributes, including the migration routes used for transhumance.

Descriptive data, on the other hand, are derived from oral histories and personal narratives, detailing the characteristics of relevant objects, regardless of their geographical locations. This descriptive information becomes geographically relevant when integrated into a suitable coordinate system and digital mapping. To accurately represent the routes and the wider region associated with seasonal migrations, a specialized GIS framework was developed using Q-GIS software version 3.16.16. This framework records and analyzes the residential and transportation networks of Thessaly.

The cartographic foundation is based on maps that not only illustrate transhumance routes but also highlight geomorphological features and other relevant structures in the area. A Digital Terrain Model (DTM) was created to represent the area's geomorphology. The raster-type DTM was obtained from the NASA ASTER GDEM website, where terrain data for Greece were extracted. This model enabled the creation of color-shaded relief maps that offer a three-dimensional perspective of the landscape, along with slope and elevation maps.

Additionally, a shapefile was used to represent land use in Greece during the years 1999–2000. These data were accessed through the open database available at <a href="http://geodata.gov.gr">http://geodata.gov.gr</a> and the CORINE LAND COVER Land Use Database for the year 2000 (https://land.copernicus.eu/en/products/corine-land-cover, accessed on 6 February 2024).

## 2.2.3. In Situ Methodologies

The in situ methodologies used in this research involved a detailed and systematic investigation of the site. The research team conducted multiple site visits, performing

detailed observations and measurements of the landscape, built structures, and spatial relationships. Specialized tools for architectural fieldwork, including laser distance meters, total stations, and GPS devices, were employed to ensure accuracy in capturing dimensions and spatial configurations of the area.

Once the data were collected, the research team carefully documented the findings by creating architectural plans. These plans were developed using AutoCAD version 2021, a professional design software that enables detailed 2D drafting and spatial analysis. The AutoCAD plans accurately depicted the topographical, structural, and pathway elements of the site, ensuring that all relevant architectural features were thoroughly documented.

To enhance the analysis and provide a more comprehensive depiction of the spatial relationships on-site, the research team also generated 3D models of the area. These models provided a three-dimensional representation of the settlement's features, which helped visualize the interplay between the natural landscape and the built environment. The 3D models not only improved the clarity of the documentation but also supported the planning and design phases of the project, offering a complete perspective of the site's characteristics. This holistic approach enabled a deeper analysis of the interaction between the settlement's structures and its surrounding environment.

# 2.2.4. In-Depth Interviews as a Complementary Urban Analysis Tool

As part of our research methodology, we conducted a series of in-depth interviews with key stakeholders to gain insights into both Patlia and the practice of transhumance (Table 2). These interviews utilized semi-structured and unstructured formats, qualitative research methods designed to develop a deep, nuanced understanding rather than merely collecting factual data. This approach was particularly valuable during the Finding phase of our research, allowing us to identify and examine the unique qualities and characteristics of the site and the transhumance tradition.

**Table 2.** This table indicates the stakeholders' in-depth interviews during the project area visit. Additionally with the different characteristics indicated, a summary of their comments is provided.

Interviewee	Characteristics	Comments
Vasilis Kissas	Patlia, Thessaly, 83 years old, dedicated his life to breeding.	"The initial years posed challenges, as all necessities had to be transported from Mouzaki, a 45 klm journey on foot, accompanied with animals.", "The milk produced here characterized by its quality and abundant quantity."
Nikos Siafarikas	Avdella, Western Macedonia, 25 years old, facing challenges in transhumance.	"A founded program for transhumance could also provide the motivation we need to continue stockbreedingthe lack of support from the State has been a hindrance. If there were assistance, I would certainly consider continue this profession."

In total, we conducted interviews with two participants: Vasilis Kissas, an 83-year-old from Patlia, Thessaly, who has dedicated his life to livestock breeding, and Nikos Siafarikas, a 25-year-old from Avdella, Western Macedonia, who is currently facing challenges related to transhumance. These individuals provided perspectives from different generations and regions, enriching our understanding of the practice's evolution and contemporary issues.

The interviews focused on collecting qualitative and experiential data, emphasizing local knowledge and perceptions. This method was essential for validating or challenging the outcomes of our previous research phases, namely Landing and Grounding. By collecting and comparing diverse perspectives on Patlia's and the transhumance practice's past, present, and future development, the research team could tailor their study to the grounded needs and perceptions of the community.

The relation between the methodology and results was integral to the research design. The qualitative nature of the interviews enhanced our previous research phases by deepening our insight into the social and cultural dimensions of transhumance. While the Landing and Grounding phases identify key themes, the interview process validated these themes through firsthand accounts. Furthermore, the interviews served to connect theoretical research and the actual experiences of the local community, thereby directly linking the findings to both tangible and intangible heritage aspects. The insights gained through this methodology informed the interpretation and analysis of data, anchoring the study in the actual conditions and aspirations of the people practicing transhumance today.

In conducting these interviews, we considered both tangible and intangible aspects of the area's heritage, recognizing their significant roles in shaping the local identity. Interviews were conducted either face-to-face or through phone and video calls. The format of the interviews was flexible, with semi-structured or unstructured discussions taking place either on-site or in locations familiar to the interviewees. This method ensured a comprehensive capture of various viewpoints, contributing to a holistic understanding of Patlia's unique landscape, heritage, and the practice of transhumance.

The specific questions used during the interviews will be shared as an appendix (Appendix A) to provide full transparency of the data collection process and to ensure the reproducibility of our methodology.

#### 3. Results

#### 3.1. Cartographic Depiction of Study Area

The following maps provide a detailed cartographic depiction of the Prefecture of Karditsa, focusing on its natural, agricultural, and protected landscapes, as well as the historical routes associated with transhumance. These maps are essential for comprehending the unique characteristics of the region and how they shape the movement of herds from mountain settlements to winter pastures. The phenomenon of transhumance, deeply connected with the region's geography, relies on the natural environment, and these maps illustrate how the landscape influences and supports this traditional practice.

# 1. Hydrographic System Map of the Prefecture of Karditsa (Figure 4)

This map highlights the rivers, lakes, and other water bodies within the region. The hydrographic network plays a significant role in shaping the movement of herds, as water sources are essential for both the animals and the herders during their journeys. The presence of rivers and streams can establish obstacles or determine preferred paths for transhumant routes, influencing deviations from the main routes as herds seek access to water.

## 2. Forest and Semi-Natural Area Map of the Prefecture of Karditsa (Figure 5)

The forested and semi-natural landscapes provide critical grazing areas, particularly during seasonal migrations. This map displays the distribution of such areas, showing where herds might pause or alter their routes to make use of available grazing land. The dense forest zones may also impact the transhumant paths by creating natural constraints or offering refuge from harsh weather conditions, guiding the herders along specific trajectories based on the availability of shelter and food for the animals.

# 3. Agricultural Area Map of the Prefecture of Karditsa (Figure 6)

This map presents the agricultural zones of the region, which are often intertwined with transhumant routes. Agricultural lands can both support and hinder the movement of herds, depending on their proximity to grazing areas and settlements. The seasonal rotation of crops and land use might impact the routes taken by the herds, with deviations occurring to avoid cultivated lands or to access post-harvest fields suitable for grazing.

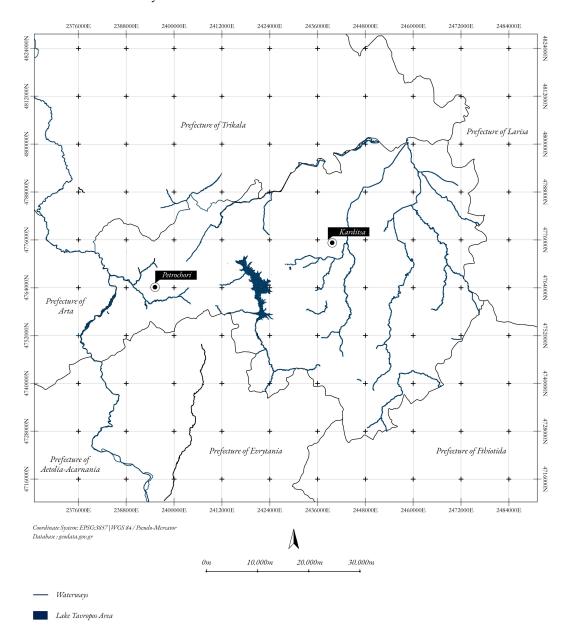
#### 4. Protected Area Map of the Prefecture of Karditsa (Figure 7)

The protected area map focuses on the regions that are designated for conservation due to their ecological significance. These areas often include sensitive habitats that could be

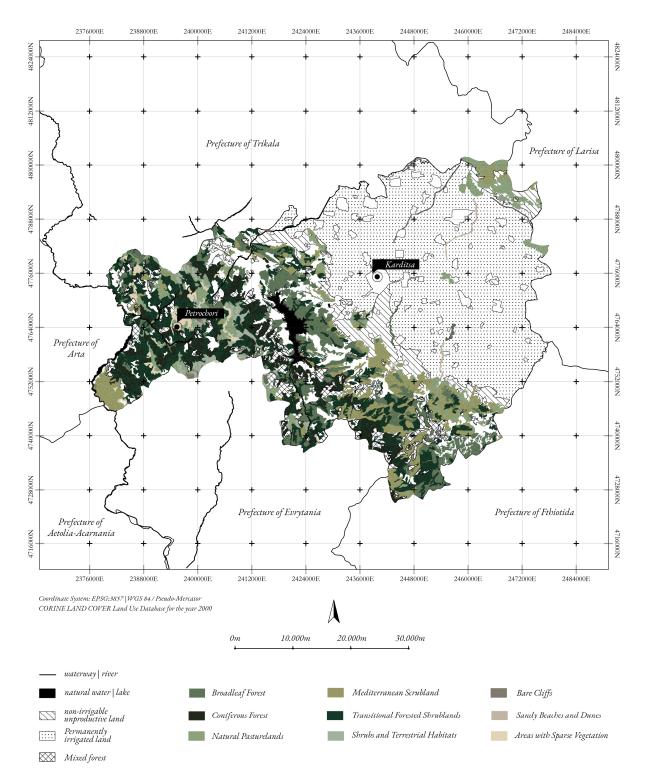
impacted by human or animal activity. Understanding these zones is vital for the herders, as they must navigate their flocks around or through these areas while adhering to environmental regulations. The relationship between transhumance and conservation efforts underscores the necessity of balancing traditional practices with ecological preservation.

# 5. The Movement of Herds from Petrochori to the Settlement of Patlia (Figure 8)

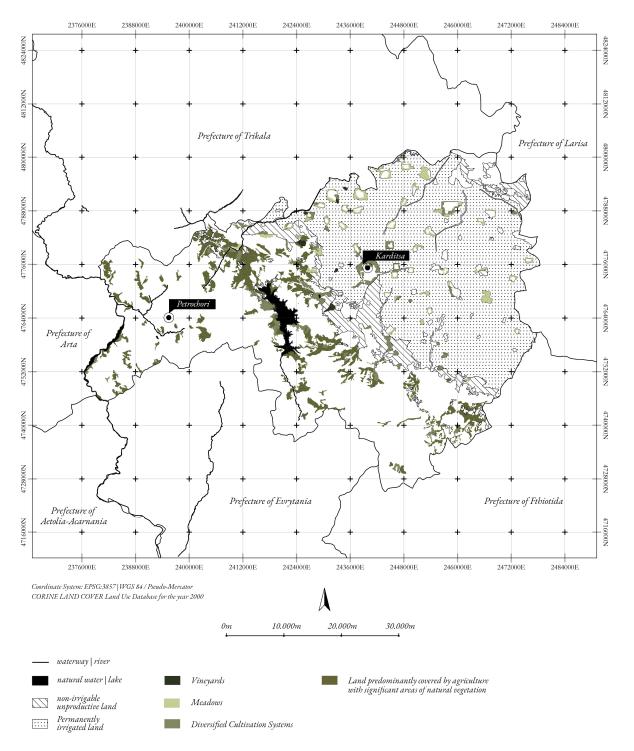
This map traces the traditional movement of herds from the mountainous settlement of Petrochori to the lowland settlement of Patlia. Unlike modern road networks, the herds do not take a predetermined route but adapt to environmental conditions such as the presence of water, grazing areas, and shelter. The map emphasizes how natural features such as rivers, forests, and elevation changes influence the herders' choices. It also highlights the flexibility of transhumance routes, which were often altered based on historical, social, and environmental factors, including the road networks and settlements encountered along the way.



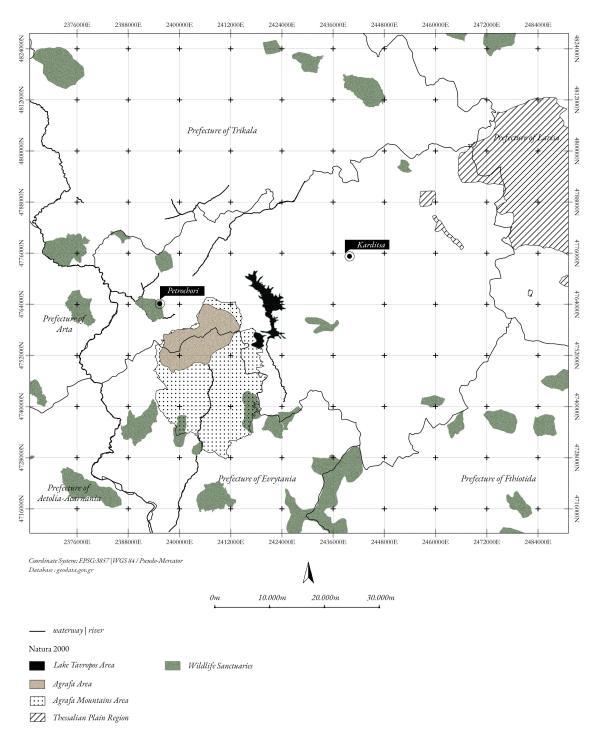
**Figure 4.** Hydrographic system map of the Prefecture of Karditsa. [Coordinate system: EPSG:3857\WGS 84/Pseudo-Mercator] (database: geodata.gov.gr).



**Figure 5.** Forest and semi-natural area map of the Prefecture of Karditsa. [Coordinate system: EPSG:3857\WGS 84/Pseudo-Mercator] (database: CORINE LAND COVER Land Use Database for the year 2000).

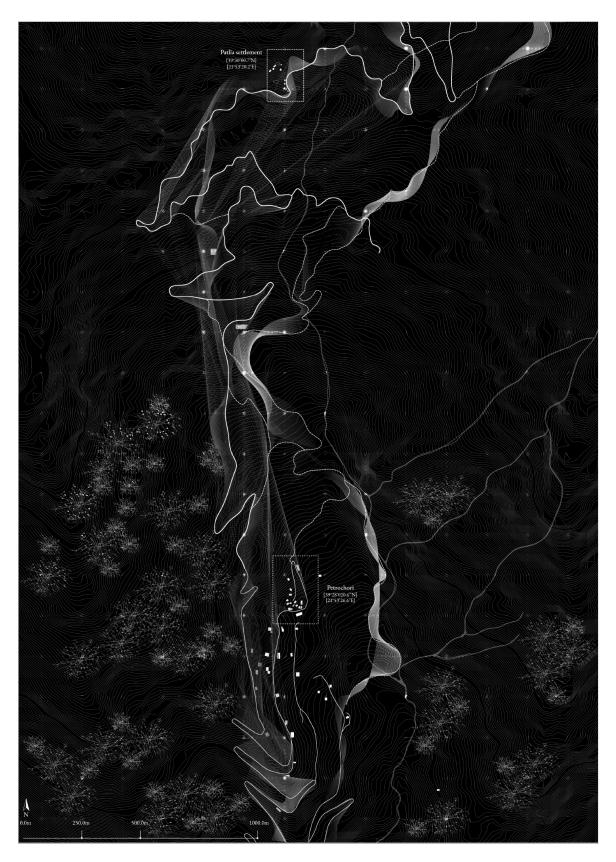


**Figure 6.** Agricultural area map of the Prefecture of Karditsa. [Coordinate system: EPSG:3857\WGS 84/Pseudo-Mercator] (database: CORINE LAND COVER Land Use Database for the year 2000).



**Figure 7.** Protected area map of the Prefecture of Karditsa. [Coordinate system: EPSG:3857\WGS 84/Pseudo-Mercator] (database: geodata.gov.gr).

These maps collectively provide a comprehensive view of the study area, illustrating how the region's natural and human landscapes are closely linked to the practice of transhumance. The unique characteristics of Karditsa—its water systems, forests, agricultural lands, and protected zones—significantly influence the routes taken by herds, reflecting a dynamic relationship between geography and traditional pastoral practices. Understanding these interconnections allows us to appreciate the historical significance and ongoing relevance of transhumance in the region.

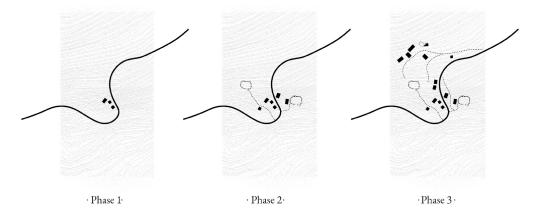


**Figure 8.** The movement of the herds from Petrochori to the settlement of Patlia. Sheep follow no specific path but move along with the natural elements and environmental conditions. Created by the authors using NASA's ASTER Global Digital Elevation Model and enriched by oral histories, it highlights terrain features and local pastoral knowledge.

# 3.2. Organization of the Settlement

Field observations began in Petrochori, where several old stone dwellings were identified along a 7 km path. These structures, remnants of vernacular architecture, were originally used for the temporary accommodation of herds during their seasonal movements. Integrated into the landscape, these "small stone boxes" interrupt the natural continuity and illustrate the tangible heritage of the region.

Archival research and field observations revealed the evolution of these structures over the years. Initially small and made from local stone, they later transformed into more spacious environments to accommodate larger herds. Despite changes in materials, the typological and technical approaches continued to prioritize sustainability, utilizing natural elements for ventilation and interior space organization (Figure 9).



**Figure 9.** Organization of the livestock settlement of Patlia. Phase 1: genesis of settlement. Phase 2: collaborative expansion. Phase 3: organically shaped community. (Diagram created by the authors).

There were no specific routes for the herds' movement up the mountain. Instead, sheep created improvised pathways, some of which are still visible today, offering an alternative perspective on the space, reflecting the memory and history of the region. Sheep traveled closely together, protecting one another while searching for safe grazing areas, resulting in unique shapes and patterns on the terrain.

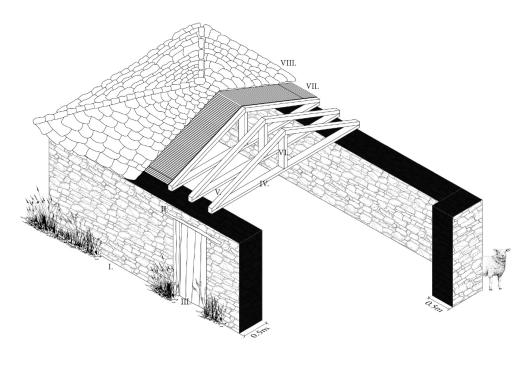
The settlement of Patlia is characterized by closely clustered buildings, creating a small enclosure where the path divides into two parts. Early established families built their houses in proximity for mutual protection and to maintain clear views beyond the settlement. Three outdoor stone enclosures along the path were used for containing animals at night, positioned near the settlement for safety and to facilitate milk production and processing. A small church with a steel cross stand on a hill, distinct from the residential buildings, organizing the settlement like a small village adhering to community design principles.

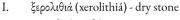
In the 1990s, technological and cultural advancements altered Patlia's isolation. The need for herds to relocate for better grazing diminished, leading many families to leave the area. The remaining shepherds merged their herds and repurposed the structures to optimize animal management and production. Many houses were converted into storage spaces, with some buildings undergoing modifications due to spatial changes and time-induced damage.

In 1982, Patlia began to transform from an isolated area into an organized place, a small autonomous community. Within the settlement, twelve buildings and three enclosures were built. The architecture of Thessaly is influenced by local materials, traditional decorations, and climate conditions. The combination of stone and wood forms simple structures, enhancing functionality and sustainability. The organization of the typologies of the houses followed the design principles of the traditional stone houses of Petrochori.

All the buildings are constructed from stone, sand sourced from local streams, and limestone [18]. The structure of the roof is autonomous and built with wooden beams and

trunks. They are single-story buildings with openings only on the front façade. The thickness of the exterior walls is 0.50 m, and there is a single entrance to the house (Figure 10).





II. ανώφλι (anófli) - transom

III. κατώφλι (katófli) - threshold

IV. ελκυστήρας (elkystíras) - lintel

V. αμείβοντας (amívontas) - gable

VI. ορθοστάτης (orthostátis) - foundation

VII. σανίδωμα (sanídoma) - cladding

VIII. σχιστόλιθοι (schistolíthoi) - slate stones

· Materiality ·



a. Stone

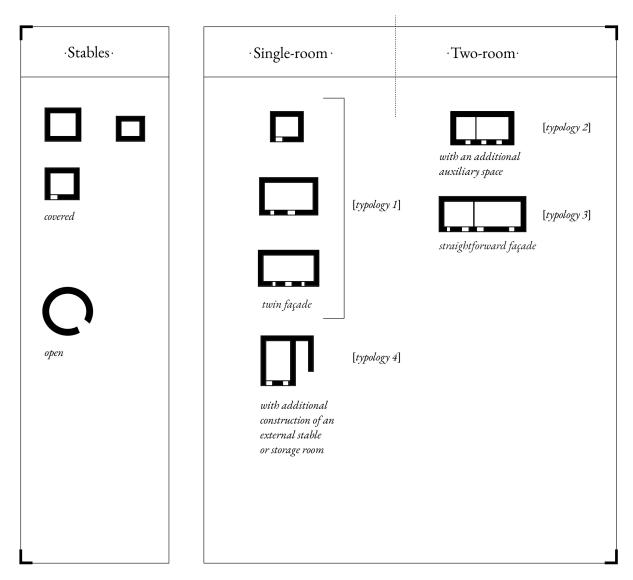


b. Wood

**Figure 10.** A depiction of the construction details of a stone structure. It consists of a single room space of the housing building of typology 3. (Figure created by the authors).

The analysis of the buildings prioritized their characteristics over cadastral classifications. Specifically, a typological examination (Figure 11) enabled the identification of certain structures as residential, others as basic rural storerooms, and some as sheepfolds. This classification may differ from cadastral designations. This approach also serves as a foundation for intervention by considering the volumetric aspects of the houses, envisioning them within common scenarios that promote a cohesive landscape.

Furthermore, this method liberates the design process. The buildings originated spontaneously during the transhumance period, with their use gradually evolving into residential spaces through the addition of volumes. Although the purpose changed informally, this transformation was not officially documented, and all structures are formally recognized as rural shelters. This inconsistency with the actual features of the houses creates a clear contradiction and, more significantly, hinders the development of a local community. Consequently, the village remains uninhabited, as cultivating the land alone is not financially viable to repopulate the dwellings.



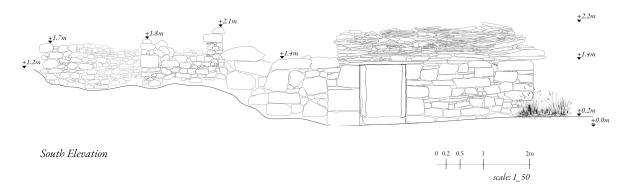
**Figure 11.** Structural typologies in the settlement of Patlia. The stone structures are divided into the buildings, with the basic use of housing and/or warehouses, and the formations of the stables. (Figure created by the authors).

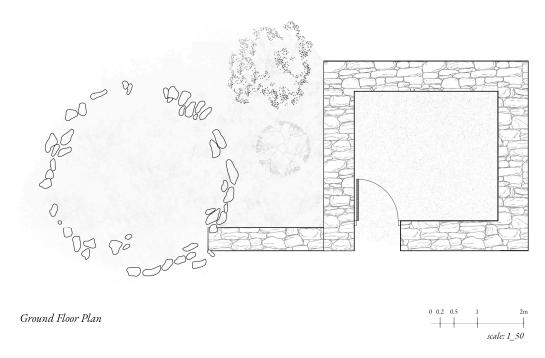
The typological analysis focuses on traditional structures constructed from stone. These buildings exhibit a morphology that reflects both their intended purpose and the topographical features of the landscape, the construction methods used, and the modifications they have undergone. Most of these houses are located on steeply inclined terrain, featuring a simple design, typically consisting of only a single room.

# 3.2.1. Typology 1

Single-story building with a gable/two-sided roof. It is the simplest type of building found in the settlement. They have a very simple structure consisting of a single rectangular room. Typically, they only present one floor, most of the times partially built into the terrain. The space is limited to an open-plan room and is characterized by a modest appearance that utilizes untreated materials. On the façade, the stone components are visible, and there are one or two small, basic windows near the wooden door which provide access, light, and air circulation. There is a fireplace on the rear wall, and sometimes, a small square opening provides additional light and ventilation. The height up to the roof beams is 2.5 m, and the dimensions are approximately 3 to 4 m on each side. These buildings

were mostly constructed primarily to serve and support livestock activities, indicating poor maintenance and, in some cases, abandonment (Figure 12).

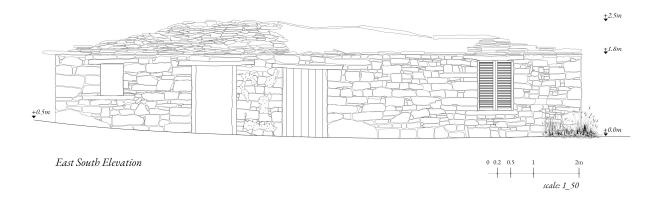




**Figure 12.** Giftogiannis family home, representing typology 1 architecture, with the addition of an external stable. The design reflects traditional rural adaptations, integrating functional extensions for livestock management.

# 3.2.2. Typology 2

Single-story building with a four-sided roof. This typology includes buildings with a mixed use, serving both livestock activities and temporary residency. They feature a simple layout organized around a two-room rectangular plan, measuring approximately 6 to 7 m on each side. A key feature of this building type is the large front façade, which has two entrances and one or two windows. This type of structure is a possible subsequent arrangement intended to increase the interior space by combining two separated dwellings. The plan is organized in two rooms used for accommodation and a small space for storage (Figure 13).



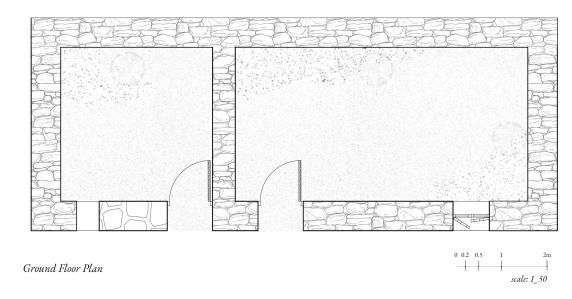
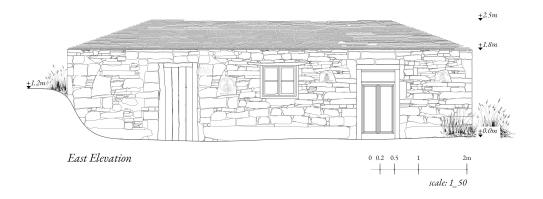
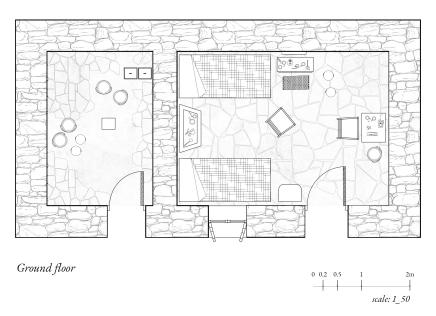


Figure 13. Holevas and Grigoriou family homes, representing typology 2 architecture.

# 3.2.3. Typology 3

It shares characteristics with typology 2 but is adapted to accommodate two temporary residences. On the façade, the stone components are visible. A key feature of this building type is the large, simple front façade, which has a rectangular shape with two entrances and one or two windows. The building has one space for accommodation with a fireplace on the back wall. Attached to this, there is a twin space. The front façade is often more than 10 m long, with an additional space for producing and storing cheese and milk (Figure 14).

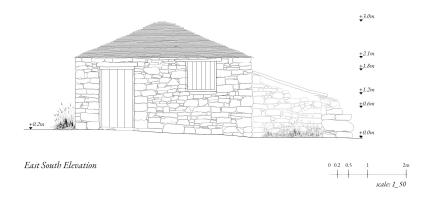




**Figure 14.** Kissas family home, representing typology 3 architecture, and the only building still in use today.

# 3.2.4. Typology 4

Single-story building with a three-sided or two-sided roof. This typology incorporates modern interventions and alterations. These buildings feature a single rectangular space, with an additional area for cheese production and milk storage. They typically have a single floor, often partially built into the terrain. The stone components are visible on the façade, along with one or two small, unclear windows near the main entrance. Inside the building, there is an open-plan space with the fireplace on the back wall. The exclusive use of this typology is for housing (Figure 15).



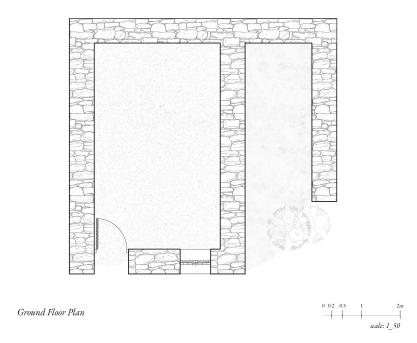


Figure 15. Nasiokas family home, representing typology 4 architecture.

# 3.3. General Strategy

Patlia is in a fragile state, requiring a careful strategy to restore its vitality. Any development plan must avoid economic exploitation, ensuring the village's path to self-sufficiency. This requires a flexible approach that ensures long-term commitment and encourages various stakeholders to obtain advantages that are not solely financial. Embracing the positive impact of rural life, this approach not only enhances the economic value of assets but also situates the strategy within a broader framework, aspiring to revive the entire landscape, along with its history, practices, and traditions.

The uniqueness of Patlia lies in its inseparable connection with the landscape across multiple levels (Figure 16). A sustainable intervention plan must view the development of the settlement and the landscape as an interconnected process. The revival of the transhumant lifestyle and preservation of the built heritage are intertwined aspects crucial for maintaining the delicate balance between humanity and nature. Embracing coexistence with tourists offers residents the chance to live and work in the settlement while fostering cultural exchanges.

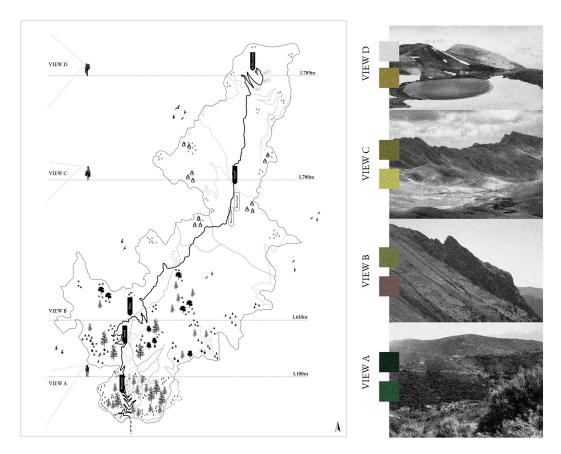


Figure 16. The different ecosystems along with the different altitudes at the study area's viewpoints. Viewpoints at different altitudes show distinct colors, representing the various ecosystems found along the route, illustrating how altitude influences ecological diversity. (Figure created by the authors) [17].

Isolated and detached from the hustle of modern life, Patlia is an ideal refuge for those seeking tranquility. It offers a place for various forms of slow tourism, where visitors can immerse themselves in traditional skills like cheese making, woolen textile crafting, animal care, drystone wall building, and restoring old houses through hands-on workshops. Families and retirees looking to escape urban life can find a peaceful retreat for a short stay. For remote workers, Patlia provides a productive workspace and a chance to meditate and reconnect with nature. These individuals can contribute to the regeneration of the village's agriculture, engage in rural tasks, exchange cultures, and immerse themselves in the holistic experience of Patlia.

This development is the concept of the experience economy, where products and services are crafted to provide customers with not just a commodity but an enriched encounter filled with adventure, learning, and unique experiences. This demand drives the creation of products and services within the framework of the experience economy. Coined by B. Joseph Pine II and James H. Gilmore in 1998, the term "experience economy" emphasizes the additional revenue generated by adding value into a service through a memorable experience. When a service is purchased, it involves intangible actions carried out for the buyer. In contrast, investing in an experience means paying for the opportunity to immerse oneself in a sequence of events. The experience economy extends beyond retail, encompassing sectors like tourism in developed economies [26].

Following these methods, tourists engage short or long-term in the slow tourism program to learn about traditional products and their production methods and participate in workshops related to tasting and creating recipes inspired by the region's products and techniques. They benefit from a location that offers a truly authentic experience. In

this way, they immerse themselves in the settlement, including hikes along the region's mountain trails.

For this reason, they are key to the development of this economic model, as they can rent houses and actively participate in community activities. Living in a remote settlement comes with practical considerations and sustainability guidelines, balanced by the rewards of its unique location and the benefits of isolation. They are encouraged to respect the environment and participate in the life of the community.

#### 3.4. Guidelines

In the realm of landscape preservation, three primary criteria have been established:

- 1. Preserving panoramic views. Tracing the routes is followed by identifying key landmarks. These include geographical features like streams and pastures, as well as notable landmarks such as the stone water trough and nearby communities. These elements create an unofficial network of herds' stops, characterized by resting and grazing areas, highlighting the key viewpoints in the landscape.
- Maintaining the integrity of settlements and their traditional features. Through the transhumance, Patlia's settlement can revive the traditional practices and attract a variety of land users.
- 3. Upholding the rural character of the landscape. Sheep's compression of the movements and grazing ability on the mountains are capable of maintaining perpetual ecology succession. The size of the sheep allows them to constantly graze into the root system, causing soil erosion and creating fire break areas [27].

Considering these factors, the preferred approach for intervention supports limited action. This approach aims not only to protect the original elements but also to maintain the intangible values that contribute to the authenticity of the artifact. Best practices for rural structures encompass the following:

- 1. Upholding the original constructional idea by following the traditional floor plan. In spite of the new uses of the buildings, the indoor arrangement follows the typologies of the existing traditional structures, typically featuring one or two rooms.
- 2. Reusing construction materials to create new formations. Wooden components are utilized to build small structures that support traditional farming techniques and expand the space for indoor everyday needs.
- 3. Preserving the construction systems through sustainable ways by using wood and stone sources from nearby streams. By imitating the traditional practices, humans can reinforce the structural framework and maintain the original form.
- 4. Integrating modern materials and techniques in harmony with traditional ones. The settlement's guidelines emphasize sustainability and low-impact intervention. Using a bioclimatic sustainable system, take advantage of the natural elements, such as natural ventilation, water harvesting, and solar energy.

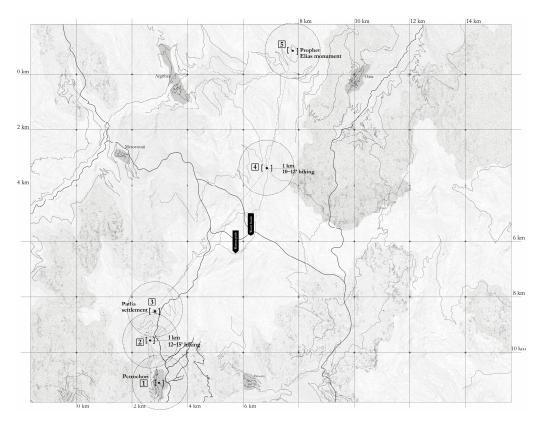
These principles provide a framework to determine which interventions are compatible, incompatible, or viable with caution.

#### 3.5. Landscape Strategy

Human intervention can be both remarkable and ephemeral: without paths, Patlia would be completely inaccessible, and the landscape would be uninhabitable. Architecture complements and refines everything that nature has left incomplete. Humans primarily complete landscapes that nature has not organized to meet human desires for comfort, beauty, and pleasure [28]. Consequently, the relationship between human actions and the landscape is characterized by a significant yet delicate connection. Factors such as the steepness of cliffs, the gentleness of slopes, the widening of trails, and the presence of water all serve as guiding elements for the path. Man's action is always shaped over the features of the landscape, integrating and completing it. Those who practiced transhumance traditionally undertook long journeys, following specific routes closely tied to the landscape,

water sources, and climate. Each stop in their journey held a specific purpose, with its own narrative. As a result, the proposed interventions align with this understanding, respecting the historical connection between human activity and the landscape.

The path (Figure 17) begins in the village of Petrochori, culminating at the summit of Karava, where it intersects with other hiking routes. The project's objective is to enhance the path's accessibility by adding strategically placed stops. The stops are located at significant points where the user perceives a break in the continuity of the landscape: it may be the place where the path becomes tight, where the ancestors created a fountain, where the trekking faces a particularly challenging point, where the village begins, or where the path ends. The stops are thoughtfully positioned considering the path's steepness and difficulty, ensuring individuals find suitable places to rest when fatigue sets in.



**Figure 17.** Masterplan of the landscape strategy. The path's starting point is in Petrochori, crosses the settlement of Patlia, and ends up on Prophet Elias monument at 1.789 m above the sea level. (Figure created by the authors using data from NASA's ASTER Global Digital Elevation Model).

Each stop aligns with the design principles of the area's established human settlements, where orientations follow the contour lines and structures are partially built into the hillside.

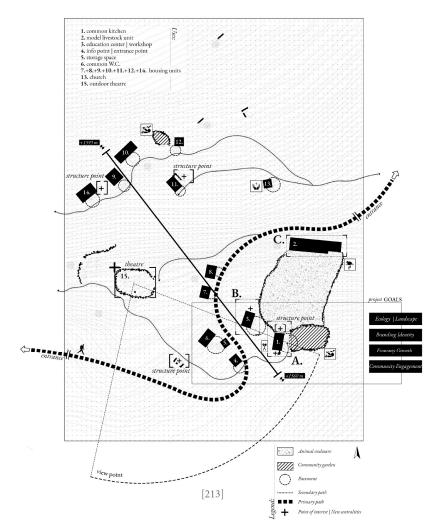
# 3.6. Settlement Strategy (Figure 18)

Our strategic approaches begin with the settlement's purpose: to enhance the practice of transhumance, giving a new identity to the place that reflects the past while using the tools of the present. Recognizing the morphology of the landscape that has been shaped according to the movement of the herbs throughout the years, the goal is to enrich the area with minimal interventions that have a small ecological footprint, allowing nature to be the primary factor of growth. Patlia acquired an autonomous economic system, connected with the shepherds and families from Petrochori, fostering engagement with the local community. The materials used impart a sustainable character to the settlement by preserving the stones walls of the structures and renovating the roofs with recycled wood. The small structures and the equipment provided in the settlement are made with

recycled wood by local carpenters and workers. The main path preserves the traditional character of fixed soil, while the floors inside the houses maintain the existing stone paving that continues outside, creating a small individual front yard. The proposal focuses on the maintenance of the existing structures, giving them a new identity based on alternative housing scenarios. The settlement contains thirteen buildings. The scenario is addressed to people that move with the herbs for a permanent or semi-permanent stay, people who work remotely and wish to learn new practices, hikers passing through the locus, and the families that stay during the summer months and are responsible for the smooth operation of the community.

The organization fosters a sharing community that includes a kitchen, a space for protecting and grazing animals, and a small workshop showcasing local products. At the entrance of the settlement, there is an information point that provides details about accommodation and way of living as well as the hiking paths and routes. Alongside the main path, the houses maintain a private character. The settlement facilities provide to the inhabitants the opportunity to coexist with nature and animals and to experience the agricultural lifestyle, with small cultivation gardens and a place where one can be part of the milking procedure and cheese making.

The main goal is to [re-]create the sense of a communal place with a circular economic system: a sharing community for residents, a gastronomic attractor for the visitors, a refuge for the hikers, and a home for the animals.



**Figure 18.** The settlement strategy guidelines. Prioritizing the role of the natural scenery, the interventions create a low impact on the initial settlement's arrangement. (Figure created by the authors).

#### 4. Discussion

Patlia would not exist without the movement of livestock into the forests and mountains, with families and shepherds shaping its formation. Today, contemporary living motivates the development of new plans for housing, work, and production. The traditional modes of living are evolving, presenting new perspectives. Transhumance sites, deeply connected with historical and cultural backgrounds, hold architectural value that is crucial for characterizing places. Our societies should now recognize the importance of these perspectives [29].

Agricultural production and farming, though practices from the past, have adapted to contemporary conditions without cessation. By introducing younger generations to transhumance, we encourage the revitalization of settlements and grant new identity to existing structures. The movement of livestock enhances the landscape, creating routes for humans and ecosystems for animals.

The similarities between a transhumance site and a modern settlement indicate that Patlia can evolve into a contemporary residential destination. Learning from transhumance is both feasible and essential to exploring new settlement scenarios. Our research shows that Patlia's architecture supplements and refines nature.

By analyzing the spatial and social identity of Patlia, the research has uncovered its rich past while envisioning bold future scenarios. Addressing the challenges of abandonment, the research highlights the interconnectedness between transhumance and vernacular architecture's legacy. It underscores the interdependent relationship between human activity and the natural world, crafting a narrative that celebrates both tradition and innovation.

Patlia is not a static relic but a dynamic landscape with untapped potential. Through strategic design and active community engagement, the research envisions a thriving future for the settlement, transforming it into a hub of cultural exchange and environmental stewardship.

This research journey has been one of discovery and transformation, challenging traditional notions of progress and development. As Patlia enters a new chapter, the research acts as a source of motivation, demonstrating how creative strategies can reshape landscapes and revive forgotten settlements as centers of cultural and ecological diversity.

Moreover, Patlia can serve as a model for similar scenarios and places, offering valuable insights for future revitalization projects. By applying the principles and strategies developed here, other settlements facing similar challenges can embark on a path toward sustainable development and cultural preservation.

#### 5. Conclusions

Patlia's delicate state necessitates a strategy to restore its vitality. This research contributes to the analysis and promotion of traditional transhumance practices, emphasizing the preservation of intangible and built heritage as a way to balance between humanity and nature.

According to the literature background, transhumance serves multifaceted social and environmental functions [1]. From the environmental perspective, it actively contributes to landscape shaping and significantly aids in the preservation of biodiversity. On the socio-cultural front, transhumance enhances the long-term engagement, as the livestock's movements among areas act as a catalyst for the development of cultural identities and inter-community bonds.

The concept of the experience economy, which is central to this development, increases economic value by providing significant experiences. Slow tourism programs enable people to engage in traditional practices and workshops, promoting the enrichment of the ecosystems and contributing to the local economy through a sustainable way. In the scenario of applying our findings to a different location, a similar methodology would be implemented based on the characteristics of the specific area. The strategic plan would prioritize the symbiosis between the landscape and the human presence, thus enhancing the relation between innovation and tradition.

In the present day, the contemporary urban way of living leads humans to create new scenarios of housing, work, and production. The traditional model of living is evolving, offering new perspectives. Concurrently, the places of transhumance provide obsolete spaces for local producers and farmers that can be used to revitalize the settlement, give new opportunities to the younger generation, and support local food production and the sustainability of biodiversity. The services and products will be promoted, and the lifestyles of the families and shepherds will be improved [30]. These strategies require a thorough analysis of their implementation to be sufficient. As far as the landscape's strategy is concerned, a detailed agricultural plan is necessitated to guarantee the revitalization of the environment and the ecology succession through the movements of the livestock. The study of the interventions, along the routes and within the settlement, also consists of a pivotal element for the identity of the place. The exact location of the structures, along with their functions and materials, should be presented in depth, integrating the different types of users across the seasons.

Transhumance is one of the most sustainable and efficient ways to farm livestock, according to UNESCO (2019) [5]. As the research unfolded, it became increasingly clear that Patlia is not a static relic of the past but a dynamic landscape teeming with untapped potential. It serves a valuable model for planners and policymakers that with a defined approach can be applied to the abandoned transhumance settlements and agricultural dwellings in the Mediterranean countryside.

As we proceed with the implementation of the proposed solutions, it would be an oversight not to conduct detailed and in-depth planning under the guidance of rural and urban experts. Transhumance is a vital aspect of this research; thus, the perspective of and communication with the ones who practice this way of life are of utmost importance. Future research should explore further integration to enhance sustainable development and community engagement.

Through a meticulous investigation of the spatial and social identity of Patlia, this research analyzes the architectural and cultural heritage of the loci while envisioning bold new scenarios for its future. It acknowledges the symbiotic relationship between human activity and the environment, highlighting the challenges following the progress and development. This strategy defines a way to revitalize the abandoned settlement of Patlia through sustainability and innovation.

**Author Contributions:** The authors contributed equally to this work. Conceptualization, J.N.T., S.T. and S.K.; methodology, J.N.T., S.T. and S.K.; software, S.T. and S.K.; formal analysis, J.N.T. and S.K.; investigation, J.N.T. and S.T.; resources, J.N.T. and S.T.; data curation, J.N.T. and S.K.; writing—original draft preparation, J.N.T., S.T. and S.K.; writing—review and editing, J.N.T.; visualization, S.T.; supervision, J.N.T.; project administration, J.N.T.; funding acquisition, J.N.T. All authors have read and agreed to the published version of the manuscript.

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## Appendix A

Interview with Kissas Vassilios

Interview Details:

Interviewee: Kissas Vassilios Location: Patlia, Thessaly, Greece Subject: Life as a Cattle Breeder in Patlia

Please share some information about yourself.

I am Kissas Vassilios. I was born in 1940, 83 years old. I have dedicated my entire life to breeding. During the summers, I reside in Patlia, and in the winters, I stay in Volos. There is where I have my home, my children, and my wife.

# Could you provide information about the structures in Patlia?

Patlia comprises fifteen buildings in the settlement, although there used to be more, with several having been demolished. Personally, I reside in and manage my daily affairs from my own hut. However, I am familiar with all the others, which are foreign properties. I have arranged my dwelling meticulously to ensure nothing is lacking. It features a dedicated kitchenette, refrigerator, fireplace, and bed. Additionally, it is equipped with electricity generated from solar panels (photovoltaics).

## How was life in Patlia during your youth?

Similar to the families in the surrounding villages, Patlia was home to numerous families. During that time, everyone, from children to grandparents, was involved in various agricultural and pastoral activities, as there were limited alternative occupations. However, as time passed, a significant number of young individuals decided to leave for opportunities abroad. The village's primary focus was on agriculture and animal husbandry, with each family often having sizable households of up to ten children. Each of them had a large family, up to ten children and all of them were engaged in animal husbandry and they all lived well. They're all gone though. In Patlia, we ascended in May and descended in October, a practice driven not only by the weather but also by the customs and principles of livestock farming. This timeframe is crucial as it aligns with the period when sheep need to be enclosed for lambing. Given the elevated location, the weather becomes harsh. Sheep have an innate understanding of weather patterns; they act as adept weather forecasters and sense when it's time to move. They consume as much as they can during the night, anticipating the arrival of winter the following day. They know that winter is coming.

Engaging in animal husbandry and living in Patlia demands constant presence throughout the day for animal care. However, the unique aspect of the milk produced here sets it apart, characterized by its quality and abundant quantity. The initial years posed challenges, as all necessities had to be transported from Mouzaki, a journey of forty-five kilometers on foot, accompanied by the animals and not by car. Despite the hardships, we also celebrated various events such as feasts, festivals, baptisms, and gatherings—all held right here in this mountainous region.

## What has anchored you in this place for all these years?

I dwelt upon these heights, both as a solitary monk and in companionship, for a man craves company. I do not trade this existence, not for a gift of gold; here everything is better! Even amidst the urban bustle of Volos, nothing compares to the tranquility found here.

Interview with Siafarikas Nikos

Interview Details:

Interviewee: Siafarikas Nikos Location: Andella, Grevena, Greece

Subject: Facing Challenges in Transhumance

#### Could you please introduce yourself?

Hello, I'm Nikos Siafarikas, 25 years old, and I hail from Avdella, Grevena. I pursued a degree in business administration. Since my graduation two years ago, I've been unable to secure a job in my field. Consequently, I've become involved in my father's stockbreeding business.

Can you tell us about the challenges of your work in stockbreeding?

Certainly. Stockbreeding is an arduous task that demands constant attention. Whether it's tending to the herd during the ten-day transfer from the valley to the mountain or managing daily operations up here, it's a tough job. Milking, especially outdoors in the rain, is a regular part of our routine. The mountainous terrain requires us to be with the herd all day, ensuring they graze properly.

Are there specific improvements or support you would like to see in your line of work?

Absolutely. If there were initiatives to enhance the quality of our sheep through funded programs or if we had better and more organized facilities, including milking machines, our work would be significantly less strenuous. A funded program for transhumance could also provide the motivation we need to continue stockbreeding. Unfortunately, the lack of support from the State has been a hindrance. If there were increased assistance, I would certainly consider continuing this profession, as our goal is to produce better quality milk, cheese, and meat up here in the upland meadow.

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