



# 3D PAST

Guidelines and strategies for  
maintenance of vernacular  
architecture in World Heritage sites

*Directrices y estrategias para el mantenimiento de la arquitectura vernácula en los sitios Patrimonio Mundial*  
*Diretrizes e estratégias para a manutenção da arquitetura vernácula em sítios Patrimônio Mundial*  
*Linee guida e strategie per la manutenzione dell'architettura vernacolare nei siti Patrimonio Mondiale*  
*Lignes directrices et stratégies pour le maintien de l'architecture vernaculaire sur les sites du Patrimoine Mondial*



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# 3D PAST

## Guidelines and strategies for maintenance of vernacular architecture in World Heritage sites

*Directrices y estrategias para el mantenimiento de la arquitectura vernácula en los sitios Patrimonio Mundial*  
*Diretrizes e estratégias para a manutenção da arquitetura vernácula em sítios Patrimônio da Mundial*  
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Project Leader



Partners



Co-funded



Support







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# Historic centres of Berat and Gjirokastra, Albania

Located in central and southern Albania, Berat and Gjirokastra historic centres were added to the UNESCO World Heritage List in 2005, thanks to the valuable presence of several remarkable examples of Ottoman-styled houses and for the integrity of their vernacular urban landscape.

Born for defensive purposes, the architectural typology that characterizes these cities is that of the tower house (*kulla*). The lower floors of the buildings used stone as the main material of the walls, reinforced by wooden elements, the upper floors are made of mixed structures with a wooden frame. In Gjirokastra, the roofs are in stone slabs, and in Berat, they are in roof tiles.

The activities carried out in Gjirokastra and Berat are aimed to analyze the local building culture through the use of the instruments of survey and digital representation, and with the collaboration of students and local experts. The investigation activities were carried out adopting an interdisciplinary approach and using both traditional and advanced data gathering techniques.

## Main strategies

- |  |   |  |   |
|--|---|--|---|
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## Centros históricos de Berat y Gjirokastra, Albania

Situados en el centro y sur de Albania, los centros históricos de Berat y Gjirokastra fueron incluidos en la Lista del Patrimonio Mundial de la UNESCO en 2005 gracias a la presencia significativa de numerosos ejemplos destacados de casas de estilo otomano y a la integridad de su paisaje urbano vernáculo.

Nacido con fines defensivos, el tipo arquitectónico que caracteriza estas ciudades es el de la casa torre (*kulla*). Las plantas inferiores de los edificios utilizan la piedra como material principal en la mampostería reforzada por elementos de madera, mientras que las plantas superiores están hechas con estructuras mixtas con un marco de madera. Los tejados están hechos de losas de piedra en Gjirokastra y de tejas cerámicas en Berat.

Las actividades llevadas a cabo en Gjirokastra y Berat tienen como objetivo analizar la cultura constructiva local a través del uso de herramientas de levantamiento y representación digital con la colaboración de estudiantes y expertos locales. Las actividades de investigación se llevaron a cabo adoptando un enfoque interdisciplinario y utilizando técnicas tradicionales y avanzadas de recopilación de datos.

## Centros históricos de Berat & Gjirokastra, Albânia

Localizados no centro e sul da Albânia, os centros históricos de Berat e Gjirokastra foram adicionados à Lista do Patrimônio Mundial da UNESCO em 2005, graças à valiosa presença de vários exemplos notáveis de casas de estilo otomano, e à integridade da sua paisagem urbana vernácula.

Nascida para fins defensivos, a tipologia arquitetônica que caracteriza estas cidades é a da casa da torre (*kulla*). Os pisos inferiores dos edifícios utilizam pedra como material principal das paredes, reforçados por elementos de madeira. Os pisos superiores são construídos em sistemas mistos de tabique de madeira e alvenarias de pedra. Em Gjirokastra, os telhados são em lajes de pedra; e em Berat, são em telha.

As atividades realizadas em Gjirokastra e Berat destinam-se a analisar a cultura de construção local, através da utilização dos instrumentos de levantamento e representação digital e com a colaboração de estudantes e peritos locais. As atividades de investigação adotaram uma abordagem interdisciplinar, utilizando técnicas tradicionais e técnicas avançadas de recolha de dados.

## Centri storici di Berat e Argirocastro, Albania

Situati nell'Albania centrale e meridionale, i centri storici di Berat e Argirocastro sono stati inseriti nella Lista del Patrimonio Mondiale dell'UNESCO nel 2005 grazie alla rilevante presenza di numerosi esempi notevoli di case in stile ottomano e nell'integrità del loro paesaggio urbano vernacolare.

Nata per scopi difensivi, la tipologia architettonica che caratterizza queste città è quella della casa-torre (*kulla*). I piani più bassi degli edifici utilizzano la pietra come materiale principale delle murature, rafforzate da elementi lignei, i piani più alti sono realizzati in strutture miste con un telaio in legno. I tetti sono in lastre di pietra ad Argirocastro e in coppi di laterizio a Berat.

Le attività svolte a Argirocastro e Berat hanno lo scopo di analizzare la cultura costruttiva locale attraverso l'uso degli strumenti di rilievo e rappresentazione digitale e con la collaborazione di studenti ed esperti locali. Le attività di indagine sono state condotte adottando un approccio interdisciplinare e utilizzando tecniche di raccolta dati tradizionali e avanzate.

## Centres historiques de Berat et de Gjirokastra, Albanie

Situés dans le centre et le sud de l'Albanie, les centres historiques de Berat et de Gjirokastra ont été inscrits sur la Liste du Patrimoine Mondial de l'UNESCO en 2005 grâce à la présence significative de nombreux exemples remarquables de maisons de style ottoman et à l'intégrité de leur paysage urbain vernaculaire.

Conçu à des fins défensives, le type d'architecture qui caractérise ces villes est celui de la maison-tour (*kulla*). Les étages inférieurs des bâtiments utilisent la pierre comme matériau principal de la maçonnerie, renforcée par des éléments en bois, alors que les étages supérieurs sont constitués de structures mixtes avec une ossature en bois. Les toits sont faits de dalles de pierre à Gjirokastra et de tuiles céramiques à Berat.

Les activités réalisées à Gjirokastra et Berat visent à analyser la culture constructive locale grâce à l'utilisation d'outils de levée et de représentation numérique avec la collaboration d'étudiants et d'experts locaux. Les activités de recherche ont été menées selon une approche interdisciplinaire et en utilisant des techniques traditionnelles et avancées de collecte de données.



# 3D PAST

The core idea of the project is to create new perspectives to promote European vernacular heritage listed as UNESCO World Heritage Sites. The work is based on three main dimensions of study: architectural vernacular heritage, historic constructive culture and intangible features. The main tool used in the project is the deep study and the digitalization of these sites, also by creating 3D models. The aim of this is to record and disseminate the information on the heritage of these locations. The wide range of actions carried out for the conservation of heritage involve fields such as training, intervention, research, dissemination, valorization, revitalization of local activities and tourism management. It is essential to coordinate these actions and focus on a single goal following strategies which have been analyzed and proved to be efficient. Detailed analysis of the eight case studies has revealed the strategies carried out by the different stakeholders in the protection and safeguarding of World Heritage Sites. Combined, these strategies have yielded positive results for heritage conservation in the short, mid and long term.