



IMMERSIVE LALIBELA

WONDER OF AN AFRICAN KINGDOM

AN INTERNATIONAL TOURING EXHIBITION BY ARCHEOVISION
AND THE ETHIOPIAN MINISTRY OF TOURISM AND CULTURE

H O S T B O O K

ላሊበሌል
LALIBELA



CONTENTS

INTRODUCTION

AN INTERNATIONAL CURATORIAL PROJECT

A major research programme framework

Exhibition partners

Curatorial team

VISITOR EXPERIENCE

EXHIBITION GALLERIES

Living in Lalibela

King Lalibela and his legacy

Excavation of the Churches

Interlude : 3d Virtual Tours

Archaeology, history and geology

Conservation and restoration

TECHNOLOGY AND MEDIA

HOSTING THE EXHIBITION

CONTACT US



INTRODUCTION

IMMERSIVE LALIBELA. WONDER OF AN AFRICAN KINGDOM provides a spectacular immersive and interactive experience at the heart of the monolithic churches of Lalibela, a treasure of World Heritage in Africa.

A gem nestled in the highlands of Ethiopia, Lalibela is a unique site of architecture, history, religion and art in Africa, where 11 monumental churches carved out of rock, below ground, stand as powerful testimonies to the Medieval Kingdom ruled by King Lalibela and unique symbols of Christianity.

Immersive Lalibela brings to light the major World Heritage Site, carved in the rock in the 13th century under the rule of King Lalibela with the purpose to build a “New Jerusalem” in the King’s homeland.

Founded upon an ambitious research project carried out on the site by an international multidisciplinary team, with an exceptional 3D research programme, *Immersive Lalibela* plunges the visitor in the rich and complex history of Lalibela, from the rise of the mysterious churches to today, linking together art, history, archaeology, religion and geology perspectives, for a unique discovery journey.

The immersive experience tells the story of the extraordinary construction of one of the most spectacular pieces of architectures in Africa, and the birth and development of a major place of Ethiopian Christianity, bringing together powerful immersive projections, mixed reality and models, interactives, filmed interviews, and stunning photography.

Visitors travel through time to decipher the construction, enter the hidden monolithic churches, fly through the archaeological site, and walk the labyrinthic paths and streets and meet with the people of ancient and contemporary Lalibela – for an extraordinary exploration of the World Heritage Site of Africa.



INTRODUCTION

AN EXCEPTIONAL ARCHAEOLOGICAL PROJECT

The site of Lalibela is being explored with a very ambitious archaeological programme, where the latest techniques and approaches in archaeology are being deployed by a large multi-disciplinary team of international specialists. The exhibition presents how contemporary scientific research is investigating this exceptional site to understand its origins and discover its history.

A UNIQUE ROCK SITE EXPLORATION

Lalibela is a very unique example of rock site archaeology, made of impressive rock-hewn churches, majestic hypogea and mysterious labyrinthic paths. It is the only rock site in Africa which has been explored with archaeological excavations and whose history is gradually being revealed.

STORIES OF PAST SOCIETIES

The research brought to light the first settlements and the evolution of the site over centuries. The exhibition tells the story of the site, introducing the recent discoveries of settlements preceding the reign of Lalibela, revealing the presence of a powerful and hierarchised society who had created a city on the site, and the gradual development of the churches.

ARCHITECTURES IN DIALOGUE

Lalibela comes from a unique ambition to create a new Jerusalem at the heart of the mountains. It was designed following the topography of the Holy Land, and inspired by the Holy Sepulchre in Jerusalem for the creation of the plans of the Golgotha church and the churches which are connected to it. The constructions are founded upon a vernacular architecture while adapting the architecture of Christian basilicas.



AN INTERNATIONAL CURATORIAL PROJECT

A MAJOR RESEARCH PROGRAMME FRAMEWORK

Immersive Lalibela is a curatorial project developed by a team of Ethiopian and French curators, with archaeologists, historians, digital technology experts and site directors, gathered in the context of a major international research project dedicated to the site of Lalibela.

Immersive Lalibela springs from a major collaboration project, called "Lalibela, archeology of a rock-hewn site" then «Sustainable Lalibela Project», which has been undertaken by national authorities in Ethiopia with French research organisations since 2009.

Bringing together an interdisciplinary team of more than 20 experts from Ethiopia and France, with archaeologists, geologists, historic monument architects, structural engineers, the ambitious programme is aimed at developing an understanding of the long history of Lalibela, as well as protecting and conserving the site, inscribed on the World Heritage List since 1978.

A major component of the programme is the digitization of the site, led by Archeovision. This initiative is designed to provide a very comprehensive 3D review and modelling of the site with the use of the latest technology, in an original collaboration between data scientists and archaeologists.

Immersive Lalibela is the major curatorial development founded upon the unprecedented research project, to share with the wider public the history of Lalibela, revealing the latest findings and unique stories about the site.



AN INTERNATIONAL CURATORIAL PROJECT

EXHIBITION PARTNERS

ARCHEOVISION

Archeovision is a technology platform of the French National Centre for Scientific Research (CNRS), the national interdisciplinary public research institution. Archeovision specialises in 3D technologies applied to heritage and archaeology, fostering the use of 3D and research data to share international heritage with the widest audiences. Its team supports heritage and archaeology professionals for research, scientific mediation, and heritage enhancement with expertise in modelling, digitisation, and visualisation.

By associating a public research laboratory (CNRS/universities) with a private company, subsidiary of the University of Bordeaux, Archeovision provides a unique public/private framework which enables to promote historical heritage with an innovative approach founded upon the highest level of science and scientific ethics.

The Archeovision team brings together researchers from the fields of archaeology, physics, and computer science, as well as 3D engineers, computer graphics designers, architects and scenographers. Each of the projects developed within the platform is carried out in collaboration with leading specialists in the field.

ETHIOPIAN MINISTRY OF CULTURE AND TOURISM

The Ministry of Culture and Tourism is responsible for developing and promoting tourism in Ethiopia, and to boost sustainable socio-economic and political values with popular and stakeholder's participation.

Subordinate bodies include the Ethiopian Heritage Authority (EHA), which is responsible for the preservation of all the collections from the excavations undertaken all over Ethiopia, from paleontological fossils to the historical artefacts.

It is responsible of the Ethiopian **UNESCO** site including Lalibela and the **National Museum of Addis Abeba** which displays a large collection of archeological artefacts as well as the famous **Lucy** fossil.



AN INTERNATIONAL CURATORIAL PROJECT

CURATORIAL TEAM

CURATORS



Kidane Ayalew, Lead curator (Ethiopia)

*CNRS
French Center for Ethiopian Studies*



Marie-Laure Derat, Scientific curator (France)

*CNRS, Research Director
Director of the Historical and Archaeological Mission in Lalibela*



Loïc Espinasse, Technology curator / Touring Exhibition Director (France)

Archeovision, Project Manager

SCIENTIFIC COMMITTEE

Abebaw Ayalew

Professor, Ethiopian Heritage Authority General Director, Ethiopia

Alebachew Belay,

Professor, Debre Bethan University, Ethiopia

Claire Bosc Tiesse

Research Director, CNRS, France

François-Xavier Fauvelle

Professor, Collège de France, France

Marie Bridonneau

Assistant Professor, Nanterre University, France

Mekonen Gebremeskel

Deacon, Manager of Lalibela International relation, Ethiopia

Romain Mensan

Fellow Researcher, French Center for Ethiopian Studies, France

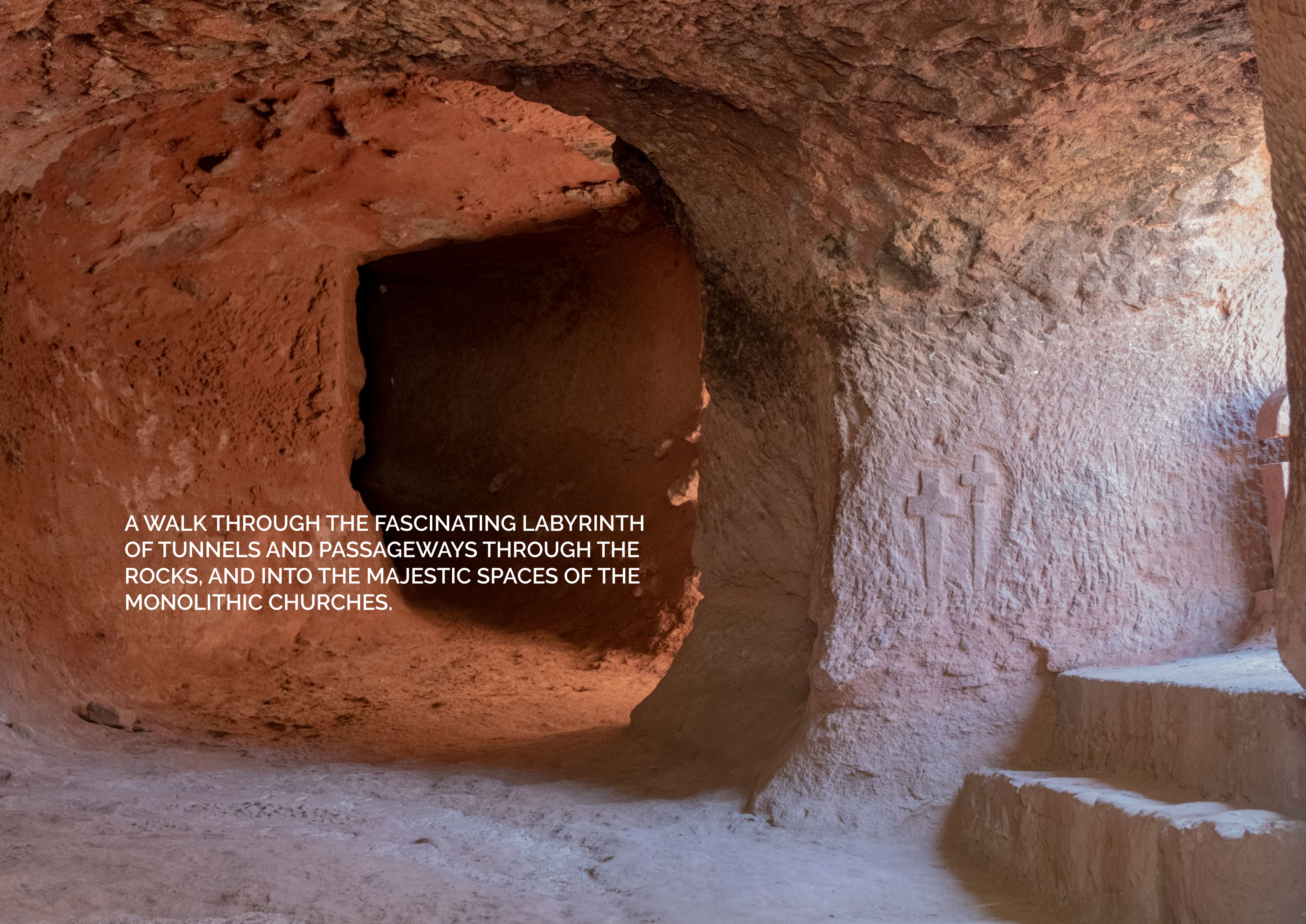


The French National Centre for Scientific Research is among the world's leading research institutions. Its scientists explore the living world, matter, the Universe, and the functioning of human societies in order to meet the major challenges of today and tomorrow.

Internationally recognised for the excellence of its scientific research, the CNRS is a reference in the world of research and development, as well as for the general public. The National Centre for Scientific Research is an interdisciplinary public research organisation under the administrative supervision of the French Ministry of Higher Education and Research.

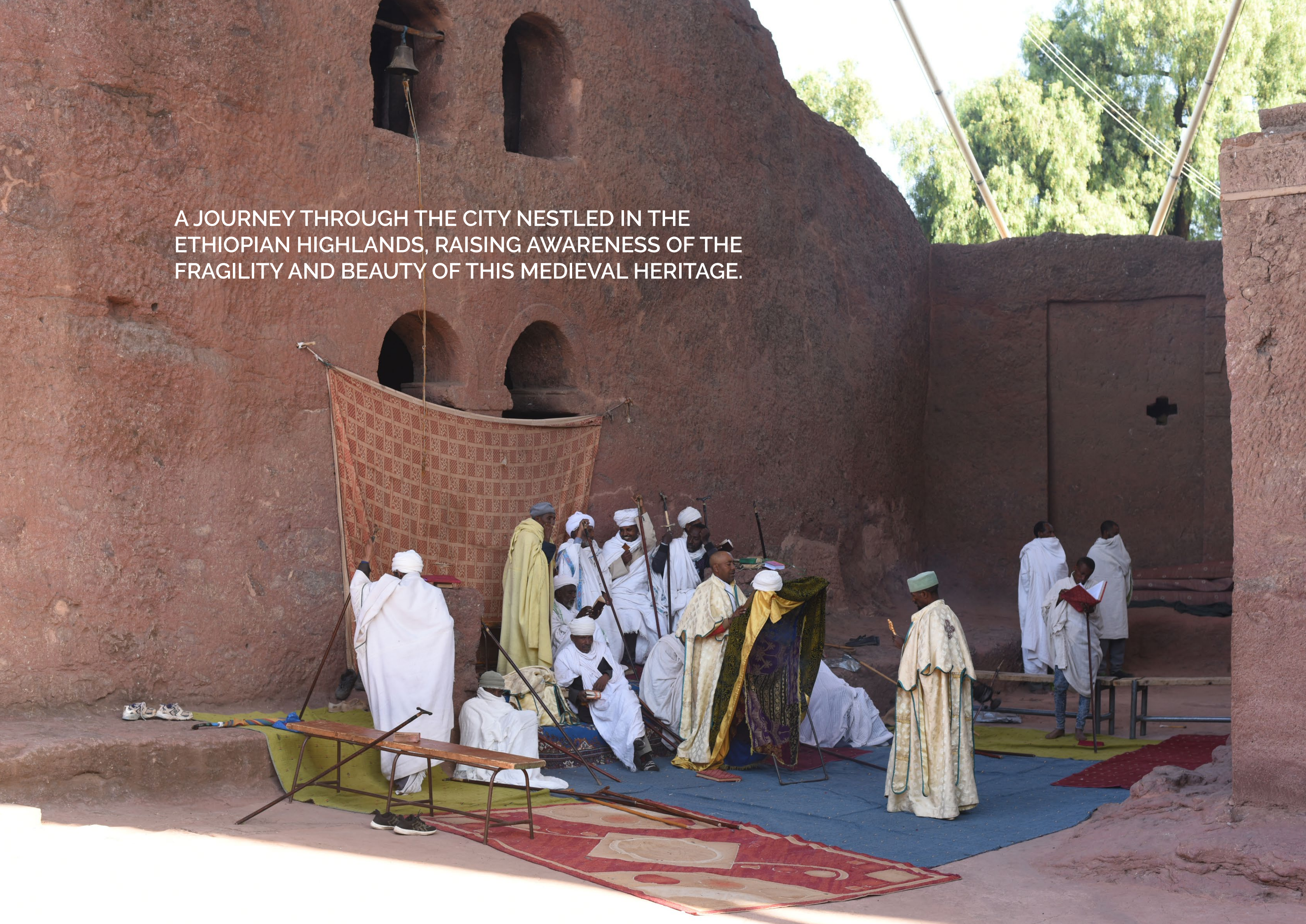
A UNIQUE DISCOVERY OF LALIBELA AND ITS
HISTORICAL, CULTURAL AND ARTISTIC TREASURES.



A photograph of a cave interior. On the left, a large, dark, rectangular opening leads into a deeper part of the cave. The walls are made of reddish-brown rock with a rough, textured surface. On the right wall, a simple cross is carved into the rock. In the foreground on the right, there are several stone steps leading up. The lighting is warm and focused on the opening and the cross.

A WALK THROUGH THE FASCINATING LABYRINTH
OF TUNNELS AND PASSAGEWAYS THROUGH THE
ROCKS, AND INTO THE MAJESTIC SPACES OF THE
MONOLITHIC CHURCHES.

A JOURNEY THROUGH THE CITY NESTLED IN THE ETHIOPIAN HIGHLANDS, RAISING AWARENESS OF THE FRAGILITY AND BEAUTY OF THIS MEDIEVAL HERITAGE.



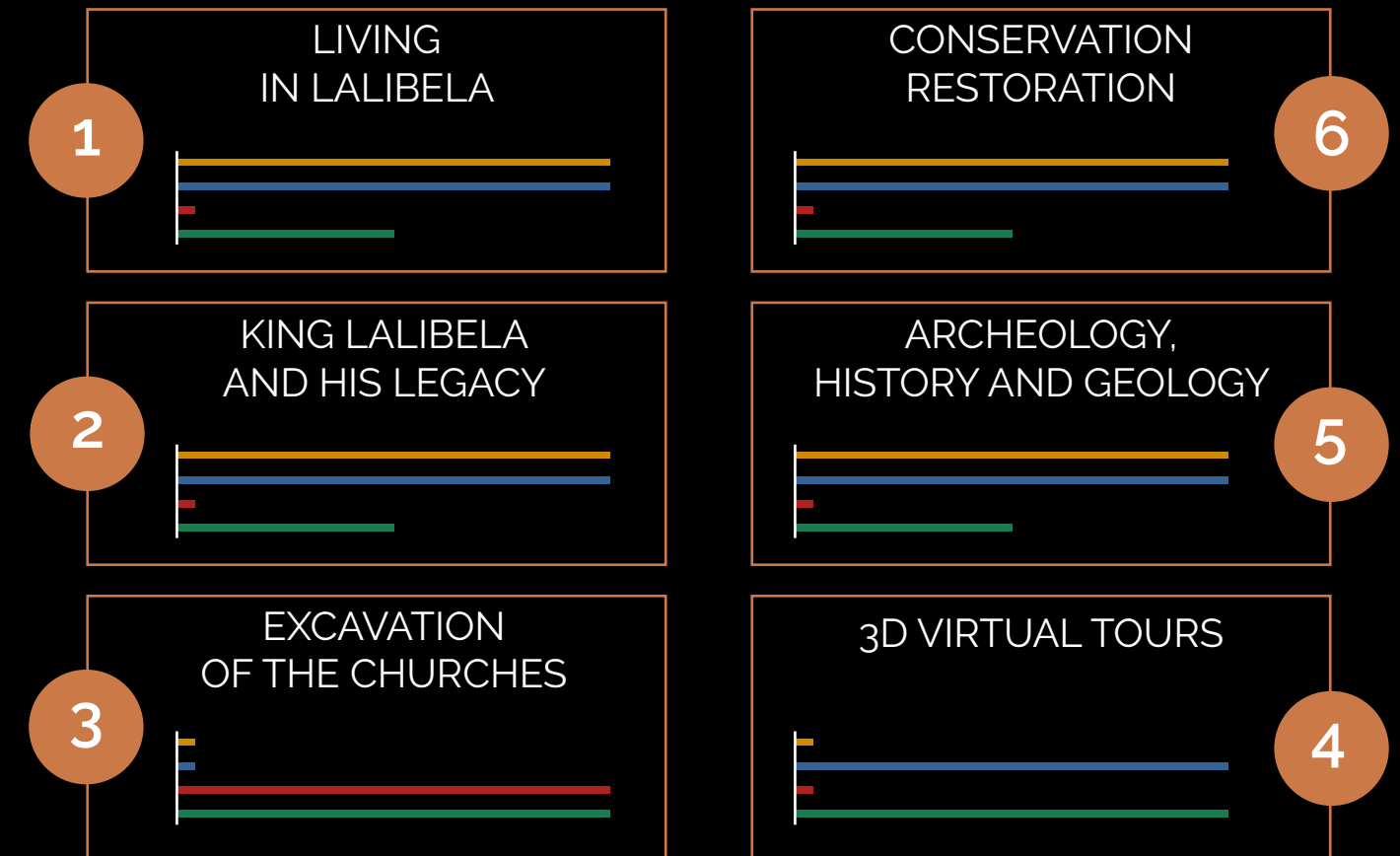
Immersive Lalibela is designed to provide an engaging multi layered discovery experience, where visitors of all ages are transported to the highlands of Ethiopia for a shared moment of wonder, learning and enjoyment.

The immersive discovery takes visitors through 6 galleries, where stunning photography and high-resolution 3D images and large views, combined with panels, totems and scenographic displays provide a warm and immersive aesthetic. Large projections and monumental displays, alternating with smaller spaces and personal encounters, are evocative of the labyrinthic, mysterious and spectacular nature of the site.

The experience is designed to provide opportunities for contemplation, learning and interactivity, with low tech and high tech moments, with climax engagement points and space to reflect and enjoy.

The exhibition has been designed with high technological value throughout the visitor journey, creating an immersive and interactive experience with a variety of curated tech moments, where visitors can engage with stories and content through contemporary technologies, such as projection mapping, holographic mixed reality, virtual reality, video totems, and interactive stations.

EXPERIENCE OVERVIEW



- Thematic text panels
- Films (large-scale projections and/or totems)
- Mixed Reality (HMD) and models
- Large-scale digital graphics, art photographs

EXHIBITION GALLERIES

GALLERY 1 - LIVING IN LALIBELA

Visitors will discover contemporary Lalibela and its extraordinary Rock-Hewn Churches, inscribed on UNESCO's World Heritage List since 1978. Nested in the mountains of Ethiopia, at an altitude of about 2500m, Lalibela is brought to light, as a mysterious and extraordinary site, as a contemporary town, a living religious site, a place of pilgrimage and a touristic location.

KEY LEARNINGS

- Geographical and urban development context.
- Site location, its characteristics, its surrounding landscapes.
- The complex of 11 churches, built in 3 distinct groups.
- The daily life of Lalibela, a religious, secular and touristic place.



EXHIBITION GALLERIES

GALLERY 1 - LIVING IN LALIBELA

IMMERSIVE LALIBELA. WONDER OF AN AFRICAN KINGDOM

HIGHLIGHTS

- Large-scale photography of panoramic landscapes and close ups.
- A 7mn30 movie, poetic projection with striking images.
- Encounter with 4 inhabitants of Lalibela, following them in their daily life and finding out about the relationship they have to the churches and their local heritage.



EXHIBITION GALLERIES

GALLERY 2 - KING LALIBELA AND HIS LEGACY

The genesis of the site is revealed, inviting visitors to discover the story of the King of Lalibela, the eponymous king, legendary founder of the city, and the development of the site as an important Christian site, with a clergy and specific traditional celebrations.

KEY LEARNINGS

- The story of King Lalibela as a legend and patron saint of the city, and the birth of the churches.
- Study of the space and names: Lalibela, a Jerusalem of Africa.
- Organisation of the clergy and the churches, and key celebrations.





EXHIBITION GALLERIES

GALLERY 1 - LIVING IN LALIBELA

HIGHLIGHTS

- A 4mn20 movie of the celebrations in Lalibela, immersing visitors in cultural traditions.
- Encounter with the head of the Orthodox churches in Lalibela, for a perspective on Saint King Lalibela and the creation of the churches.
- Encounter with the Deacon of the Churches of Lalibela, sharing a vision about the importance of the preservation and transmission of this heritage.



EXHIBITION GALLERIES

GALLERY 3 - EXCAVATION OF THE CHURCHES

How did these extraordinary constructions come to life in a medieval context, with the tools and techniques of the time. This section explores the digging processes, and the continuous developments of the site through centuries, leading to today's masterpiece of architecture.

KEY LEARNINGS

- Digging methods and construction techniques.
- Evolution of the site through centuries.
- Royal and Christian dimensions of the emblematic site.



EXHIBITION GALLERIES

GALLERY 3 - EXCAVATION OF THE CHURCHES

HIGHLIGHTS

- 1/100 rare scale models of the 3 church groups.
- Cutting edge Holographic experience, in connection to the models.
- Large screen projections of the experience.



EXHIBITION GALLERIES

IMMERSIVE LALIBELA. WONDER OF AN AFRICAN KINGDOM

GALLERY 4 - INTERLUDE : 3D VIRTUAL TOURS

Spectacular immersive discovery of Lalibela with large-scale projections, transporting visitors to the World Heritage Site for a fly through through the hidden churches, the archaeological site, the labyrinthic paths and the contemporary streets.



EXHIBITION GALLERIES

GALLERY 5 - ARCHAEOLOGY, HISTORY AND GEOLOGY

The story of Lalibela is also a unique story of archaeology and research, which has brought together specialists to study the constructions, the site and its geology, but also manuscripts and paintings, to bring together insights into the past and reveal the story of the mysterious site.

KEY LEARNINGS

- Archaeological methods, surveys and discoveries.
- Geological discovery and quarry experiments.
- Comparison and identification of tools and methods of pruning.
- How manuscripts and paintings can reveal the history of a region.



EXHIBITION GALLERIES

GALLERY 6 - CONSERVATION AND RESTAURATION

Lalibela is a site in danger, which needs to be continuously preserved and protected. Visitors will here discover the main threats the site is exposed to, such as erosion. They will see how the site has been preserved throughout the centuries, how populations have been continuously adapting, and the key work that is currently being developed and to be achieved to ensure the preservation of Lalibela tomorrow.

KEY LEARNINGS

- The realities and challenges of erosion.
- How the Churches have managed to stand since the 13th century.
- The importance of the social, religious and political contexts.



the churches have always been in danger of collapsing.

RESTAURATIO
CONSERVATIO
PATRIMONIALIZATIO



RESTAURATIO
CONSERVATIO
PATRIMONIALIZATIO

RESTAURATIO
CONSERVATIO
PATRIMONIALIZATIO



EXHIBITION GALLERIES

GALLERY 6 - CONSERVATION AND RESTAURATION

HIGHLIGHTS

- Interview of Kidane Ayalew, "Sustainable Lalibela" project manager, explaining the process of degradation of churches and conservation methods through history.
- Large scale images of the churches and their restorations.



አግልግሎትና ቅርስነት
THE SACREDNESS OF THE ROCK
FROM ROCK TO MONUMENT

Hololers // MIXED REALITY EXPERIENCE



LALIBELA
ሳሊቤላ

CARVING FAITH
ጠኩቅ የታነጸ

TECHNOLOGY AND MEDIA

AN HOLOGRAPHIC EXPERIENCE

Visitors discover the site with an original Mixed Reality experience, where they can explore three holographic representations of the monuments with sound and projection on top of scale models of the site. Appearing above the models, holograms tell different stories of the site.

HOLOLENS

The experience is based on Microsoft HoloLens technology, cutting edge mixed reality resource, with untethered mixed reality headsets.



The first hologram experience explores the particularities of the rock that made it possible to excavate the churches, and gives an overview of the different phases of excavation and human presence on the site.



The emblematic church of Giyorgis reveals its secrets in a second experience, with a Virtual Reality moment taking the visitors to the edge of the site for an exceptional view of the outside of the Giyorgis church.



The last model explores the sacred dimension of Lalibela, with a discovery of the churches of Golgotha, where the tomb of the eponymous king is located, and of Maryam, a palatine chapel whose magnificent paintings can be admired with a Virtual Reality tour inside the church.

MODELS

A collection of 3 perfectly accurate 1/100 scale models of the groups of churches of Lalibela are provided with the exhibition.



LARGE INTERACTIVE SCREENS

Each experience is presented in a dedicated space with a large screen as a backdrop, where the holographic experience is projected with large images and a touch screen, making it possible for large audiences to enjoy the content of the experience.



TECHNOLOGY AND MEDIA

DOCUMENTARY FILMS

Throughout the exhibition, large 4k projections immerse the visitor at the heart of Lalibela. The films, presented in loops, provide a unique perspective on the city of Lalibela and its inhabitants today, and give a feel of the vibrant contemporary life in the site, punctuated by ceremonies and activities.

- FILM 1 ● The visitor starts his visit with a poetic projection with striking images, through which he meets 3 active citizens of Lalibela. These three people guide the viewer through the streets of Lalibela and into the labyrinthine trenches around the churches.
- FILM 2 ● A contemplative projection shows images of particularly significant celebrations in Lalibela. The visitor can enter the churches and enjoy the sound and spiritual atmosphere of the ceremonies.
- FILM 3 ● Archaeologist Romain Mensan takes the visitors behind the scenes to find out about the ongoing excavation campaign. He explains how Lalibela can be characterised as an “anti-archaeological site”, and shares the findings of the Ethiopian team.
- FILM 4 ● Kidane Ayalew Woldegiorgis, Sustainable Lalibela Project Manager, a native of Lalibela, reports on the need to cover, protect and conserve churches against the backdrop of the stunning church at Marqorewos.



TECHNOLOGY AND MEDIA

CONTEMPORARY STORIES

Visitors can enjoy unique encounters with the people of Lalibela around the exhibition, hearing their stories and how they live and actively use the site and the meaning it has for them. Filmed interviews are presented on dedicated standing totems, which punctuate the visitor path with special encounters around the different galleries.

- Abba Tsige Selassie, head of the churches of Lalibela, reminds us of the uniqueness of this medieval heritage that is still inhabited and active as a place of worship and pilgrimage.
- A young girl tells visitors about her daily relationship with the churches.
- The guardian and priest of the Giyorgis church shares his attachment for his church and the complex.
- A saleswoman and former teacher tells visitors about the actions she has undertaken to preserve the culture and traditions of her town.
- A weaver explains his connection to the churches through his craft and work.
- The head of the churches of Lalibela shares the clergy's perspective on the symbolism of Lalibela as a privileged place of worship, as well as a testimony on what it is to be Christian in Ethiopia.
- Mekonnen Gebremeskel, deacon and manager of International relations of the churches of Lalibela, explains the need to protect churches to pass them on to future generations.



My name is Astede Tesafaw.

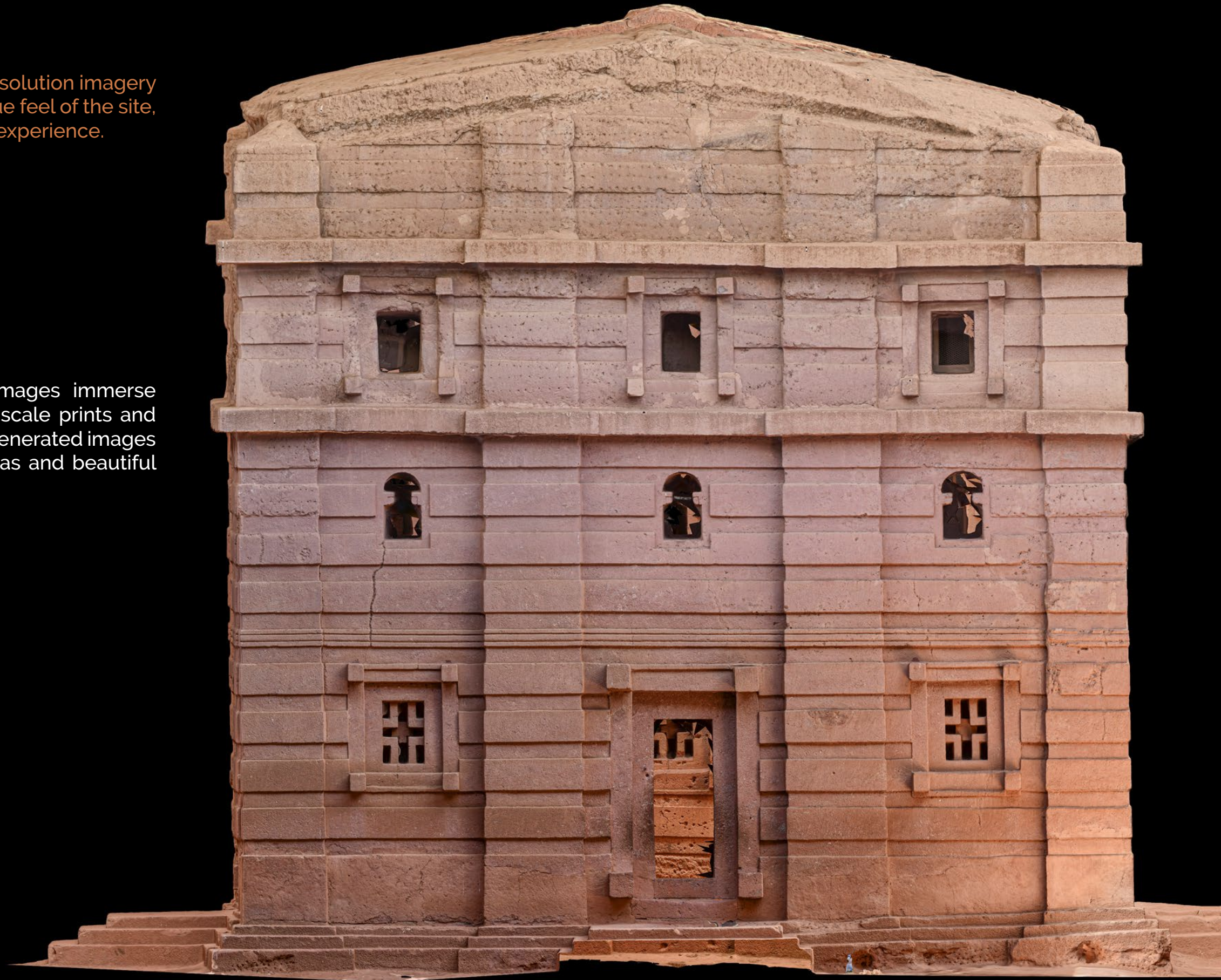
TECHNOLOGY AND MEDIA

STUNNING IMAGERY

The exhibition is designed with large high-resolution imagery throughout the space to provide a very unique feel of the site, and contribute to the immersive and paced experience.

MONUMENTAL IMAGES

Throughout the exhibition, monumental images immerse visitors in the world of Lalibela, with large scale prints and projections at 1:1 scale of digitized facades, generated images from 3D models, large landscape panoramas and beautiful close ups, transporting them to the site.



TECHNOLOGY AND MEDIA

STUNNING IMAGERY

ARTISTIC PHOTOGRAPHY

A unique collection of high-resolution photographs presents contemporary scenes, people, places, moments in daily life and in formal events.



TECHNOLOGY AND MEDIA

STUNNING IMAGERY

OLD PHOTOGRAPHY

A collection of old photographs presents Lalibela at different moments of its history during the 20th century.

OLD MANUSCRIPTS

A collection of digitised manuscripts shares beautiful insights into the story of Lalibela.

MAPS AND DRAWINGS

The exhibition is also supported by a selection of maps and drawings.

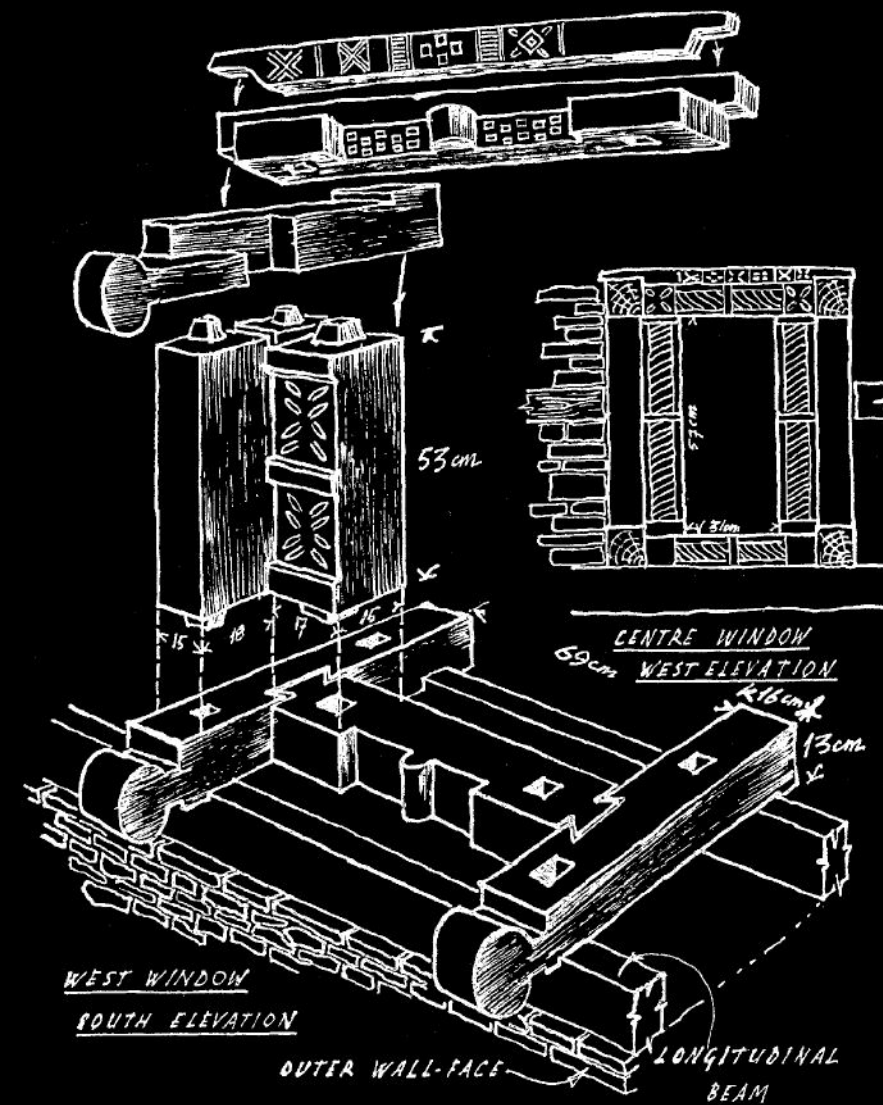


FIG. 4. EXPLODED VIEW OF A WINDOW IN SOUTH WALL SHOWING CONSTRUCTION AND DECORATION, AND ELEVATION OF THE CENTRE WINDOW OF SOUTH ELEVATION



RECONSTRUCTING THE PAST OF LALIBELA ARCHEO-HISTORY የታሪክ ና የአርኪዮሎጂ ስራ በላሊበላ

HOSTING THE EXHIBITION

The exhibition is available with a tailored service, adapted to the requirements of the partner host, with the possibility of an asset-only package all the way to a turnkey delivery. In collaboration with the partner host, the Lalibela exhibition team and project curator will create a unique experience suited to local audiences and display requirements.

LANGUAGES

The exhibition is already available in 3 languages, English, French and Amharic. New languages can be integrated.

SIZE

The project is designed with a very flexible format enabling for different sizes of presentations. The large experience covers 500 to 1000sqm. Smaller adaptations can be produced, ranging from 100 to 500sqm.

SERVICES

3 packages are proposed to partner hosts with:

BLUEPRINT OFFER

- All curatorial content
- All film and movie in 4K format
- 3D files of 1/100^e models
- Hololens experience files
- Collection of images in high res files

SEMI-TURNKEY OFFER

With the following additional services:

- 1/100^e models
- Hololens devices and Mixed Reality management unit

TURNKEY OFFER

With the following additional services:

- Projectors, video displays, totems, speaker systems, media players
- Exhibition panels

/CONTACT

contact@lalibela-exhibition.com

Curator: **Marie-Laure Derat**
marie-laure.derat@cnrs.fr

Touring Exhibition Director: **Loïc Espinasse**
loic.espinasse@archeovision-prod.fr

www.lalibela-exhibition.com

ላሊበኤላ
LALIBELA

IMMERSIVE LALIBELA

WONDER OF AN AFRICAN KINGDOM

AN INTERNATIONAL TOURING EXHIBITION BY ARCHEOVISION
AND THE ETHIOPIAN MINISTRY OF TOURISM AND CULTURE