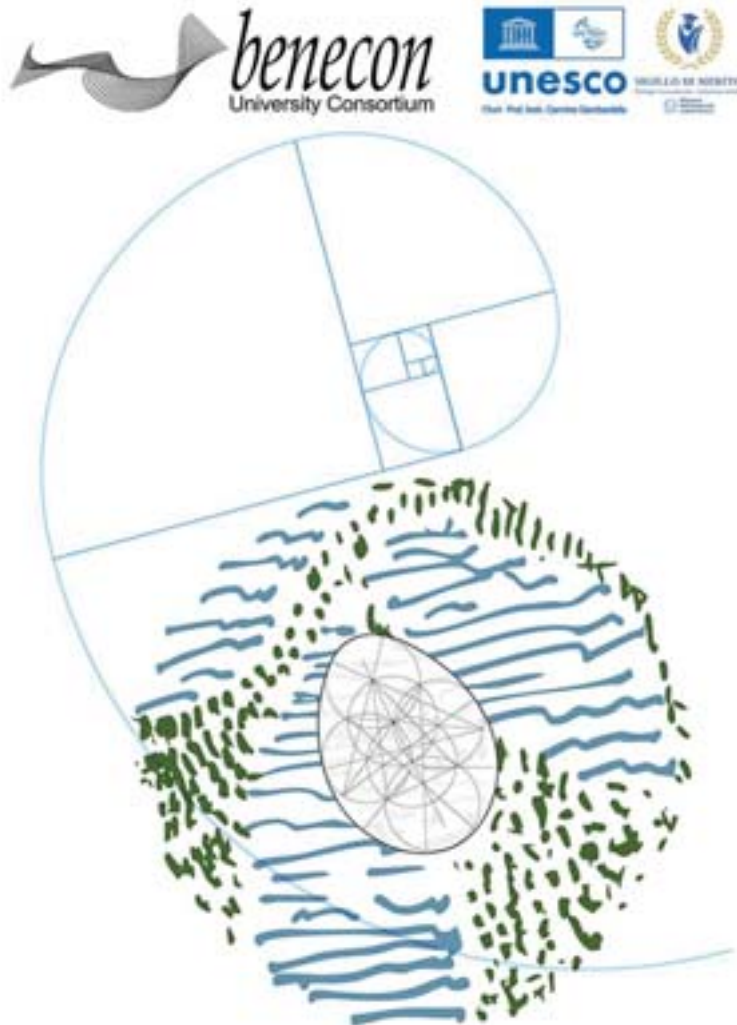


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XXIII INTERNATIONAL FORUM

Le Vie dei
Mercanti



**WORLD HERITAGE
and
FOOD TO FEED**

**XXIII INTERNATIONAL FORUM
NAPLES and CAPRI
20-21 June 2025**



GANGEMI EDITORE[®]
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Carmine Gambardella

WORLD HERITAGE and FOOD TO FEED
Le Vie dei Mercanti
XXIII International Forum

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Peer review

Scholars has been invited to submit researches on theoretical and methodological aspects related to the impact of natural ecological disasters and armed conflicts on Cultural Heritage, and show real applications and experiences carried out on these themes. Based on blind peer review, abstracts have been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report

300 abstracts and 400 authors from 20 countries:

Albania, Algeria, Australia, Belgio, China, France, Germany, Greece, Hungary, Iran, Italy, Japan, Mexico, New York, Portugal, Romani, Serbia, Spain, Turkey, United Kingdom.

From the XXII FORUM WORLD HERITAGE and CITIES IN EMERGENCIES to the XXIII FORUM WORLD HERITAGE and FOOD TO FEED

The theme “World Heritage and Food to Feed” explores the connection between world heritage and food, highlighting how culinary traditions and cultural landscapes can contribute to sustainable nutrition and address global challenges such as food security and climate change. Culinary traditions, like the Mediterranean diet and Japanese washoku, are protected by UNESCO for their cultural value and respect for sustainable agricultural practices. Other examples include agricultural landscapes like the rice terraces of the Philippines and historic olive groves, which promote biodiversity and sustainability.

These agricultural landscapes are also linked to architecture, cities, and historic centers, where architectural design integrates food production and sustainability. Traditional agricultural practices, such as crop rotation and the use of local varieties, can ensure food security without harming the environment. Biodiversity is crucial, with agricultural practices that preserve unique ecosystems and reduce environmental impact.

Architecture plays an important role in reflecting food and cultural values. Designing homes that promote conviviality, sustainability, and a connection to nature, such as traditional Mediterranean houses, Japanese homes, or rural dwellings in developing countries, fosters a connection between food, community, and the environment. Sustainability in architecture can also be seen in contemporary projects that combine tradition and innovation, like modular bamboo homes in Vietnam or urban agriculture projects in Cuba.

Historic Italian buildings, like masserie in Southern Italy, trulli in the Valle d'Itria, courtyard houses in the Po Valley, and the Sassi di Matera, reflect the bond between architecture, food, and landscape. These historical buildings were designed to meet agricultural and food production needs, such as food preservation and production. Italian architectural solutions are examples of sustainability that integrate traditional food practices with the surrounding environment.

Global challenges require an integrated approach to food sustainability. Scientific communities and governments must cooperate to promote agricultural practices that preserve biodiversity and encourage food self-sufficiency. Architecture, therefore, becomes a powerful tool to reflect values related to food and sustainability, creating spaces that celebrate cultural diversity and promote innovative solutions for a more sustainable and connected future.

Finally, architecture and food are closely linked to cultural heritage, and innovative and resilient solutions can inspire global design that respects the environment and promotes equitable access to food. Scholars are called upon to contribute with research and proposals to develop sustainable practices that integrate food with daily life and architectural context, reflecting local traditions and global needs.

Dal XXII FORUM WORLD HERITAGE and CITIES IN EMERGENCIES Al XXIII FORUM WORLD HERITAGE and FOOD TO FEED

Il tema “World Heritage and Food to Feed” esplora il legame tra il patrimonio mondiale e il cibo, evidenziando come le tradizioni alimentari e i paesaggi culturali possano contribuire a un'alimentazione sostenibile e a rispondere alle sfide globali come la sicurezza alimentare e il cambiamento climatico. Le tradizioni culinarie, come la dieta mediterranea e il washoku giapponese, sono protette dall'UNESCO per il loro valore culturale e per il rispetto delle pratiche agricole sostenibili. Altri esempi includono i paesaggi agricoli delle terrazze di riso delle Filippine e gli uliveti storici, che promuovono la biodiversità e la sostenibilità.

Questi paesaggi agricoli sono anche legati all'architettura, alle città e ai centri storici, dove la progettazione architettonica integra la produzione alimentare e la sostenibilità. Le pratiche agricole tradizionali, come la rotazione delle colture e l'uso di varietà locali, possono garantire la sicurezza alimentare senza danneggiare l'ambiente. La biodiversità è cruciale, con pratiche agricole che preservano ecosistemi unici e riducono l'impatto ambientale.

L'architettura gioca un ruolo importante nella riflessione sui valori alimentari e culturali. La progettazione di case che promuovono la convivialità, la sostenibilità e il legame con la natura, come le case tradizionali mediterranee, le case giapponesi o le abitazioni nelle zone rurali dei paesi in via di sviluppo, favorisce una connessione tra cibo, comunità e ambiente. La sostenibilità in architettura si può vedere anche in progetti contemporanei che combinano tradizione e innovazione, come le case modulari in bambù in Vietnam o i progetti di agricoltura urbana a Cuba.

Le costruzioni storiche italiane, come le masserie nel Sud Italia, i trulli della Valle d'Itria, le case a corte della Pianura Padana e i Sassi di Matera, riflettono il legame tra architettura, cibo e paesaggio. Questi edifici storici erano progettati per soddisfare le necessità agricole e alimentari, come la conservazione e la produzione del cibo. Le soluzioni architettoniche italiane sono esempi di sostenibilità che integrano pratiche alimentari tradizionali con l'ambiente circostante.

Le sfide globali richiedono un approccio integrato per la sostenibilità alimentare. Le comunità scientifiche e i governi devono cooperare per promuovere pratiche agricole che preservano la biodiversità e favoriscono l'autosufficienza alimentare. L'architettura, quindi, diventa un potente strumento per rispecchiare i valori legati al cibo e alla sostenibilità, creando spazi che celebrano la diversità culturale e promuovono soluzioni innovative per un futuro più sostenibile e connesso.

Infine, l'architettura e l'alimentazione sono strettamente legate al patrimonio culturale, e le soluzioni innovative e resilienti possono ispirare una progettazione globale che rispetti l'ambiente e promuova l'accesso equo al cibo. Gli studiosi sono chiamati a contribuire con ricerche e proposte per sviluppare pratiche sostenibili che integrano il cibo con la vita quotidiana e il contesto architettonico, riflettendo le tradizioni locali e le necessità globali.

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World Heritage and Food to Feed

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Agriculture|Health|Economy|Archeology|Cultural Heritage|Training|e-Learning|Gender Equality

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Mercanti

XXIII INTERNATIONAL FORUM

20-21 June 2025 Napoli Capri

Earth, Wood and Architecture. Measure and Proportion. Educational and Cultural Center in Ghana.

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Topic: Architecture, Urban Planning, Design

Keywords: Memory. Measure and Proportion. Self-construction. Atrium. Rammed Earth and Wood.

Abstract

This proposal examines contemporary architecture as a response to the revitalization of urban and rural places. It is part of a broader study on the relationship between modern architectural and urban design, and the tradition and identity of local cultures. The focus is on museum typologies and cultural centers, exploring their evolution and both theoretical and practical aspects. The project presents a new Educational and Cultural Center in Busua, Ghana, developed in 2023 for a competition launched by the Archstorming in collaboration with an NGO. The aim was to empower the community through sustainable and collective activities. The design, selected for the pre-final stage of the competition, is intended for self-construction using sustainable materials. It follows bioclimatic principles, as natural ventilation and rainwater harvesting for near-zero energy consumption. The layout has two courtyards and semi-open corridors, with the first volume housing public functions such as classrooms, offices, and living spaces. The second volume hosts private and shared volunteer bedrooms, connected by a "summer hut" for cooking classes and community meals. The project blends ancient Roman and Greek courtyard with traditional Ghanaian and African elements, using materials like Akasa wood and rammed earth. The structure is Akasa wood for pillars, beams, and panels, creating visual connections to the observation tower and public spaces. The façade combines rammed earth and wood windows.

Full Text

The research on architectural design presented here has been developed as part of an ongoing and comprehensive study at the University of Florence, Architecture Department, which has a long history of exploring the complexities and intricacies of architectural spaces. The focus of this particular study is on Museum and Cultural Buildings, a topic of great relevance in today's architectural discourse. This research examines not only the design aspects of these structures but also their social, cultural, and environmental implications. It aims to push the boundaries of contemporary architectural practice by focusing on the integration of public spaces and their role in fostering a sense of community, identity, and collective memory. One of the central aims of the research, which is led by the prominent architect and scholar Riccardo Renzi, in collaboration with a team of talented collaborators and research assistants, is to address the significant topic of "Memory of Places and Contemporary Architecture." This concept of memory place, which refers to spaces that help preserve cultural heritage, history, and collective memory, plays a critical role in the design of cultural buildings, particularly those located in areas with rich cultural traditions and histories. The

research explores how architecture can be used as a tool to remember, honor, and reflect upon the past, while also providing spaces that can be used in the present and future for cultural expression, learning, and community engagement.

The research and design project outlined here was initiated as a response to a call for tenders promoted in 2023 for the creation of a new Educational and Cultural Center in Busua, a town located along the coast of Ghana. This new center is intended to be a dynamic space capable of hosting social and community functions, which would serve the local population by offering new educational and cultural programs. The center is designed to be more than just a building; it aims to be a catalyst for social change and empowerment, offering the community a space for collaboration, creativity, and self-expression.

The competition for the design of this center was organized and launched by the Archstorming team, in collaboration with a Non-Governmental Organization (NGO) focused on sustainable development and community empowerment.

The call for tenders set the ambitious goal of creating a self-built, eco-friendly, and cost-effective social hub using simple, low-impact materials. The design required the use of locally sourced materials that could easily be found near the construction site, reflecting the importance of sustainability and local resource utilization in modern architecture. This approach ensures that the building not only supports the needs of the community but also minimizes its environmental footprint.

The design research has been led by Riccardo Renzi, with the collaboration of Souha Gasmi, Damla Icyer, Elena Ceccarelli, and Valentina Marras during 2023. The research follows and builds upon other cultural projects in Africa, such as the design of a new museum in Senegal, which focuses on preserving local traditions. This museum project, which was completed in 2017, won an award and was featured in a book held by Kengo Kuma.

The project presented here was conceived to be self-built in several phases, which allows the construction process to unfold gradually, making it easier for the local community to become directly involved in the building's creation.

The use of sustainable materials was a key component of the design, with the goal of creating a structure that has a minimal impact on the environment while also being durable and functional. The building was designed with bioclimatic principles in mind, ensuring that it would be energy-efficient and capable of maintaining comfortable indoor temperatures through natural ventilation and the strategic use of shading and insulation. Rainwater collection systems were also incorporated into the design to provide water for services and irrigation, further reducing the building's environmental impact.

The architectural layout of the building follows a 6x6 meter grid, which is a simple yet effective organizational structure that allows for flexibility in the arrangement of spaces. The building features two central courtyards that serve as gathering spaces for the community, surrounded by interior circulation areas that create a semi-open corridor, which functions as a covered passage. This layout is designed to foster a sense of openness and connectivity, with spaces that encourage social interaction and collaboration. The courtyards also serve as important environmental elements, providing natural light and ventilation to the building's interior spaces, while also serving as areas for relaxation and informal gatherings.

The first volume of the building is directly connected to the existing structure and serves as the core of the public functions. This section includes classrooms for adults, administrative offices, service areas, a kitchen, a dining room, and a living room, all of which are essential components for the daily functioning of the center. The spaces within this volume are designed to be flexible and adaptable, allowing for different types of activities and events to take place throughout the day and evening.

The second volume is dedicated to volunteer accommodation, consisting of two types of bedrooms: two private rooms with double beds and private bathrooms, and seven common rooms with bunk beds and shared bathrooms. This arrangement allows for a variety of users to be accommodated, from volunteers to visiting guests, while ensuring comfort and privacy where needed. The volunteer rooms are designed with simplicity in mind, focusing on providing essential amenities while also maintaining a connection to the surrounding environment.

The two volumes of the building are connected by a central element: the summer hut. This space is a semi-outdoor structure that houses an open kitchen, which is intended to host

cooking classes, community meals, and other social gatherings. The summer hut serves as a communal space where people can come together to cook, eat, and share experiences, reinforcing the sense of community and collaboration that is central to the project's vision.

The building's main structure is composed of Akasa wood, which is a locally sourced material known for its durability and aesthetic qualities. The use of wooden pillars and beams throughout the structure adds a sense of warmth and natural beauty to the building, while also supporting the building's eco-friendly design. The façade of the building is made up of pivot wooden panels with louvres, which allow for natural ventilation and provide visual connections between the observation tower, the existing building, and the public courtyard. The same system of wooden panels is used for the interior façades of the public spaces, linking them to the courtyards and ensuring a consistent design language throughout the building.

The observation tower, which stands 12 meters tall, is located next to the existing building and serves as a focal point for the entire project. The tower is composed of two parts: a water tank that collects rainwater for use in the building's services and an open staircase that leads to an observation deck at the top. From the top of the tower, visitors can enjoy panoramic views of the surrounding area, further emphasizing the connection between the building and its natural surroundings.

Sustainability is at the heart of this project, with every aspect of the design focused on minimizing environmental impact and promoting sustainable practices. The building is elevated 15 cm above ground level to protect it from water, humidity, and soil, while also allowing for natural ventilation. The design of the building ensures that air circulates freely through the interior spaces, with windows placed strategically to facilitate cross-ventilation. Natural light is filtered through the wooden louver panels, providing illumination without the need for artificial lighting during the day. Rainwater is collected from the sloped roof and stored in an underground tank, where it is used for the building's service and irrigation systems. This approach not only reduces the building's water consumption but also helps to conserve local water resources.

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