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# Harmony in Contrast: Architectural Innovation in Preserving Candi Kimpulan in Yogyakarta, Indonesia

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### **ABSTRACT**

The shift in cultural preservation paradigms has necessitated a holistic approach to safeguarding cultural heritage in an increasingly globalized world prone to pressure and homogenization. Documents such as the Nara Document (1994), the Ciloto Agreement (2003), and the protocols established during meetings in Bangkok, notably the Hoi-An Protocol (2009), underscore the importance of appreciating cultural diversity, preserving intangible aspects, and fostering stakeholder cooperation in heritage conservation within their respective environments. The discovery of the 9th-century Candi Kimpulan archaeological site during the library's construction at Universitas Islam Indonesia (UII) sparked questions about reconciling modern architectural design with efforts to preserve cultural heritage. This research aims to unveil the architectural design process of the UII library, which strikes a compromise between modernity and the preservation of Candi Kimpulan. The intrinsic case study research method is employed to focus on the architectural elements of the library designed as cultural preservation strategies. Placing the library building in the development zone with surrounding structures in the buffer zone serves both as circulation and protection for the core zone of Candi Kimpulan. This design exemplifies harmony in the contrast between modernity and cultural preservation. The study demonstrates that modern architectural design can be reconciled with efforts to preserve cultural heritage through appropriate strategies, such as zoning division and circulation design.

# 1. Introduction

Understanding the presence of cultural heritage can be traced through its architectural footprints. The value of a building serves as evidence for future generations and gauges the level of culture that existed at that time. Culture, inherent only to humans, manifests in at least three forms: (1) the complex of human ideas, concepts, and thoughts; (2) the complex of activities; and (3) the form of objects-artifacts[1]. Architecture embodies the form of objects and artifacts, thus, its existence is inherently intertwined with culture. Architecture is often referred to as the archaeology of the future, signifying

that the continuum of the past – present, and future expressed through local architectural values, is vital in fostering pride, self-assurance, and identity. Culture, in its physical manifestation, is the most tangible, often termed as physical culture[2]. Its results encompass small objects like household utensils and grand structures like houses and palaces. Even cityscapes with their intricate drainage systems are remarkable physical cultural artifacts. Consequently, architecture becomes the most accessible cultural product to decipher, enabling the understanding and study of a society's high cultural standing at a given time. Architectural remnants of cultural heritage, such as temples, which significantly mark the history of societal cultural works, become pivotal artifacts and valuable assets for a nation.

Architecture is a tangible manifestation of culture, providing a direct avenue to comprehend historical narratives and societal values. Architecture encapsulates the essence of bygone eras through its form and structure, allowing us to delve into the intricacies of past civilizations and their ways of life. Cultural heritage buildings, particularly iconic structures like temples, stand as invaluable testaments to the rich tapestry of human history and culture. These architectural marvels not only symbolize the achievements of past societies but also serve as poignant reminders of their customs, beliefs, and societal norms. Preserving these cultural heritage buildings is not merely a matter of safeguarding physical structures; it is an endeavour to safeguard the collective memory and heritage of humanity. By conserving these architectural gems, we ensure that future generations can connect with their cultural roots, fostering a sense of identity, belonging, and pride in their heritage. Thus, preserving cultural heritage buildings is indispensable for nurturing a deep appreciation of our shared history and cultural legacy among successive generations[3].

The primary objective of this research is to unveil the architectural design process of the UII Library that balances the preservation of Candi Kimpulan and modernity. This is achieved by analysing the architectural elements revealed in the library's design and understanding the underlying decisions.

This research focuses on several key aspects of the design process of the UII Library:

- a. Integration of Modern Building with Surrounding Environment: How does the library's design integrate modern architecture with its surroundings, including Candi Kimpulan and the natural landscape?
- b. Use of Suitable Materials and Construction Technology: What materials and construction technologies are employed in the library's construction, and how do these choices support the preservation of Candi Kimpulan?
- c. Modern Facilities to Support Preservation of Heritage Sites: How do the modern facilities provided in the library, such as lighting systems, ventilation, and accessibility, support the preservation of Candi Kimpulan?
- d. Decision-Making Behind the Design: What decisions were made by the architects in designing the library, and how do these decisions reflect a commitment to preserving Candi Kimpulan while embracing modernity?

This research is expected to provide the following benefits:

- a. Better Understanding of the Design Process: Offering a deeper understanding of the architectural design process of the UII Library and how aspects of preserving Candi Kimpulan are integrated with modernity.
- b. Design Principles for Cultural Preservation: Identifying design principles that can be applied in designing modern buildings in areas with cultural heritage sites, focusing on preservation and authenticity.
- c. Contribution to Architectural and Cultural Preservation Discourse: Contributing to the discourse on architecture and cultural preservation by demonstrating how modern architecture can be effectively used as a means of cultural preservation.

This research aims to unveil the architectural design process of the UII Library, reflecting a commitment to preserving Candi Kimpulan while embracing modernity. By analysing architectural elements and understanding the decisions behind them, this research is expected to provide valuable

insights into design principles that can be applied in designing modern buildings in areas with cultural heritage sites, while also contributing to the discourse on architecture and cultural preservation.

# 1.1 UII Library: Building Harmony of Modernity and Cultural Preservation

The discovery of the 9th-century Candi Kimpulan archaeological site during the construction of the Universitas Islam Indonesia (UII) library raises questions about reconciling modern architectural design with cultural heritage preservation efforts. This research aims to unravel the architectural design process of the UII library that compromises between modernity and the preservation of Candi Kimpulan[4].

As the development of the Universitas Islam Indonesia (UII) campus unfolds according to the phased Physical Development Master Plan (RIP), designed to accommodate the needs of the academic community, initial concepts such as the superblock—a large building to be positioned at the main entrance—have yet to materialize. Instead, the construction of the Auditorium and Mosque took place in the central corridor of the UII Integrated Campus. Meanwhile, the construction of the Rectorate Building and Administrative Centre on the left, and the Library Building on the right, remains unrealized, with development efforts focused on meeting needs incrementally, in a piecemeal fashion.

Candi Kimpulan, an ancient Hindu-Buddhist temple dating back to the 9th century, stands as a poignant symbol of Yogyakarta's cultural legacy. However, its location within the volatile Merapi Hazard Zone presents a unique challenge to its preservation. This case study delves into the meticulous efforts undertaken to safeguard this invaluable site amidst the looming threat of volcanic activity[5].

# 1.2 Geological Context and Eruption Impact

Insights gleaned from the research conducted by the Geology Team at Universitas Gadjah Mada (UGM) shed light on Candi Kimpulan's buried state. Despite enduring the wrath of Mount Merapi's eruptions and ensuing lahar floods, the temple remarkably remained intact. The intricate dynamics of lahar flows, veering away from the temple site, played a pivotal role in sparing it from direct harm. This discovery elucidates the factors underpinning Candi Kimpulan's preservation, notably the interplay between volcanic activity and natural processes. UGM's research enriches our comprehension of the temple's buried state and its implications for preservation endeavours [4].

#### 1.3 Natural Burial and Preservation

The natural burial process, evident from the geological stratigraphy surrounding the temple, emerges as a key determinant in Candi Kimpulan's fortuitous preservation. Its near-pristine condition, devoid of significant damage, underscores the harmonious convergence of natural forces and human preservation initiatives[6].

Safeguarding Candi Kimpulan has necessitated a multifaceted approach encompassing physical fortification and cultural heritage management. Physical measures entail vigilant sedimentation management, structural reinforcement, and the construction of protective enclosures. Concurrently, cultural heritage management strategies include meticulous documentation, educational outreach, and community engagement initiatives.

Candi Kimpulan's preservation epitomizes the delicate equilibrium between cultural heritage conservation and environmental adaptability. Its survival amidst volcanic perils underscores the efficacy of integrated preservation strategies, amalgamating physical safeguards with cultural stewardship. As Candi Kimpulan endures as a bastion of Yogyakarta's cultural richness, its preservation narrative resonates as a testament to human resilience in the face of nature's whims.



**Fig. 1.** Location map of the UII Integrated Campus and Kimpulan Temple Source: Kimpulan Temple Reconstruction Research Report, 2022

Amidst this ongoing development, the 9th-century archaeological site of Candi Kimpulan was unearthed at the location earmarked for the construction of the UII Library. This discovery presented a new challenge: designing a modern library while preserving the cultural significance of Candi Kimpulan[7].

This challenge became the focal point of the research, aimed at unraveling the architectural design process of the UII Library that balances modernity with the preservation of Candi Kimpulan. Employing an intrinsic case study approach, the research analyzed the architectural elements of the library designed as cultural preservation strategies.

The research findings reveal that the UII Library was designed with the concept of "harmony within contrast." Positioned in the development zone, the library stands separate from Candi Kimpulan, located in the core zone. Buffer zones separate the two areas, serving as circulation pathways and safeguarding the core zone. This design facilitates the realization of the modernity of the UII Library without compromising the existence of Candi Kimpulan.





**Fig. 2.** Restoration Process of Kimpulan Temple and UII Central Library Source: UII Central Library Directorate <a href="https://library.uii.ac.id/candi/">https://library.uii.ac.id/candi/</a>

The study demonstrates that modern architectural design can be reconciled with efforts to preserve cultural heritage through appropriate strategies. In the case of the UII Library, zoning division and circulation design are key strategies to achieve harmony between modernity and cultural preservation.

This study contributes insights into balancing modernity and cultural preservation in architectural design. Its findings can serve as a reference for architects and planners in designing buildings in areas with cultural heritage sites.

The distinctive feature of the UII campus is evident in each cluster of individual classroom buildings, strategically designed as separate units. For instance, Unit XII currently serves as the campus for the Faculty of Medicine (FK), while Unit VII accommodates the Faculty of Civil Engineering and Planning (FTSP) and the Faculty of Natural Sciences (FMIPA). Similarly, Unit III houses the campus for the Faculty of Industrial Engineering (FTI), among others. Despite the segregation of these units, they all share a common characteristic of being inwardly oriented, with buildings facing an inner court.

As the development of the campus progressed, the need for library facilities eventually arose, prompting the allocation of space adjacent to the existing Auditorium and Mosque buildings, as outlined in the Integrated Campus Master Plan. In the planning process of the UII Central Library, there was a fundamental understanding of the vital role of libraries within the campus environment.

Libraries are recognized as indispensable assets within the university ecosystem, serving as dynamic hubs for intellectual engagement, research, and learning. Beyond mere repositories of books and resources, modern libraries are envisioned as vibrant centres of academic life, fostering collaboration, innovation, and knowledge dissemination among students, faculty, and researchers.

Incorporating a library into the campus infrastructure signifies a commitment to enhancing educational excellence and supporting the scholarly pursuits of the academic community. Thus, the planning and realization of the UII Central Library represent a strategic endeavour to enrich the academic environment, promote intellectual inquiry, and elevate the overall quality of education provided by the university.

The integration of the library into the campus fabric reflects UII's dedication to holistic education, where physical spaces are thoughtfully designed to facilitate intellectual growth, cultural enrichment, and community engagement. By establishing a state-of-the-art library facility, UII reaffirms its mission to nurture future leaders, scholars, and innovators who will contribute positively to society and address contemporary challenges with wisdom and compassion.

# 1.4 The Essential Role of the UII Central Library: A Hub for Learning, Research, and Knowledge

The Universitas Islam Indonesia (UII) campus is envisioned as a vibrant hub of knowledge and learning, and at its heart lies the UII Central Library. More than just a repository of books, the library is designed to serve as a dynamic centre for academic engagement, fostering a stimulating environment for students, faculty, and researchers alike[8].

The library remains a cornerstone of campus life and learning in the digital age by evolving to meet the changing needs of students and educators. By offering access to digital resources, creating collaborative learning environments, integrating advanced technology, providing essential support services, and fostering community engagement, modern libraries ensure they remain relevant and indispensable in the 21st-century educational landscape [9]. The library's central role in the UII community is undeniable. As Munichy Bachroon Edrees, IAI (2009) aptly states, "A campus cannot be alive without a library." The library serves as the core, the pulsating centre of activity that connects and energizes the entire academic ecosystem.

In line with this vision, the UII Central Library is conceptualized as a multifaceted hub encompassing three primary functions:

a. Learning Centre: The library provides a conducive space for a wide range of learning activities, both active and passive. Students can engage in collaborative learning sessions, participate in book discussions and seminars, or pursue independent study in a tranquil atmosphere. The library fosters a sense of community, serving as a "conjunction point" where students from diverse backgrounds can converge and exchange ideas.

- b. Research Centre: The library is a treasure trove of knowledge, supporting research endeavours across various disciplines. It facilitates in-depth discussions, and focus group gatherings, and provides access to a wealth of research findings. The library empowers researchers to explore new frontiers of knowledge and contribute to the advancement of their fields.
- c. Science Information Centre: Embracing the digital age, the UII Central Library is committed to becoming a leading electronic library (e-Library) and Islamic Library. It offers a comprehensive collection of electronic resources, ensuring that students and researchers have seamless access to up-to-date information. Additionally, the library's Islamic Library collection serves as a valuable resource for exploring the rich heritage of Islamic scholarship.

The UII Central Library's journey to its current form has been a testament to the university's commitment to excellence. The library's design has undergone three distinct phases, each reflecting the evolving needs and aspirations of the UII community. Each iteration has introduced unique characteristics and innovations, contributing to the library's overall richness and versatility[10].

Today, the UII Central Library stands as a beacon of knowledge, a testament to the university's dedication to fostering a vibrant intellectual environment. Its multifaceted functions, coupled with its commitment to embracing technological advancements, position the library as an indispensable resource for generations of UII students, faculty, and researchers. As the university continues to evolve, the library remains at the forefront, adapting and innovating to meet the ever-changing demands of the academic landscape.

# 2. Methodology

The study's purpose is to reveal the architectural design process of the UII Library, which reflects a commitment to preserving Candi Kimpulan while embracing modernity. By analysing architectural elements and understanding the decisions behind them, this study is expected to provide valuable insights into design principles that can be applied in designing modern buildings in areas with cultural heritage sites. In addition, this study contributes to the discourse on architecture and cultural preservation.

### 2.1 Intrinsic Case Study Method

This study uses a qualitative research design with an intrinsic case study approach focusing on one case. This approach was chosen because it allows in-depth exploration to reveal the design process. The phenomena studied in this study are best practices for successfully preserving Candi Kimpulan heritage architecture [11]. These facts show a harmonious contrast between the modern UII Library Museum building and the ancient Candi Kimpulan site.

The intrinsic case study approach with a single case was chosen for several reasons[12]:

- a. Alignment with Research Objectives: The goal of this research is to uncover the architectural design process of the UII Library, which reflects a commitment to preserving the Candi Kimpulan while embracing modernity. The intrinsic case study approach allows researchers to deeply understand the meaning of harmony and contrast in the specific context of the Kimpulan Temple.
- b. Ability to Generate Rich Data: This approach enables researchers to gather rich and in-depth data through various data collection methods such as observations, interviews, and document analysis.
- c. Capability to Produce Credible Findings: The intrinsic case study approach allows researchers to generate credible and contextual findings.

By using this intrinsic case study approach, it is expected to conduct an in-depth and contextual investigation, identifying the factors contributing to the successful architectural preservation of the

Candi Kimpulan Complex. This approach aims to formulate findings that enrich architectural knowledge, particularly related to architectural preservation, and provide recommendations to improve the quality of temple preservation in the future.

# 2.2 Analytical Framework

The analytical framework integrates theoretical foundations into the analysis process of the single-case study of the Candi Kimpulan restoration, combined with the architectural planning of its surrounding buildings. This approach demonstrates how architectural strategies can effectively support cultural preservation. The framework is comprehensive and well-structured and guides the qualitative data analysis, allowing for the identification of significant relationships and findings within the context of the Candi Kimpulan preservation and its encompassing architectural planning. This approach facilitates a deep understanding of how architecture can contribute to cultural preservation [13]. The following are the steps in the analysis process:

- 1. Data Collection: Gather observational data from various sources, including interview transcripts, field notes, images, project documents, and other relevant materials. This data forms the foundation for further analysis.
- 2. Data Organization and Grouping: Organize and group the collected data based on specific themes or aspects. This helps identify patterns and relationships within the data.
- 3. Coding with Classification: Assign codes to the data according to the research objectives. These codes categorize the data into relevant aspects, such as spatial values, sense of place, or local wisdom.
- 4. Theme Development and Description of Code Relationships: Develop themes from the coded data. These themes reflect the relationships between the chosen codes and form the analytical framework.
- 5. Reorganizing into a Comprehensive Narrative: The themes and code relationships are structured into a comprehensive narrative that illustrates the findings and relationships within the case study context. This aids in theory formation within the case study.
- 6. Interpretation of Themes and Comprehensive Narrative: Interpret the meaning of the developed themes and comprehensive narrative. This provides a deep understanding of how architectural approaches in restoration support sustainable cultural preservation.

By following these steps, the research aims to yield an in-depth understanding of the role of architectural strategies in supporting sustainable cultural preservation in the context of the Candi Kimpulan restoration and its surrounding buildings.

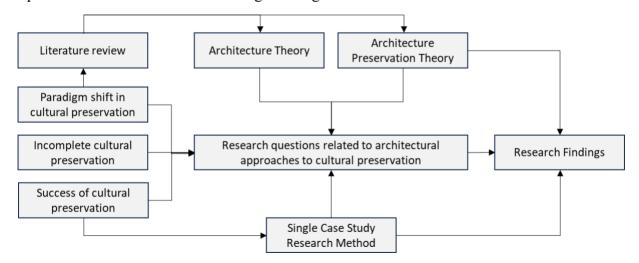


Fig. 3. Research Framework Flow

Source: The Candi Kimpulan Research Report, 2023

### 3. Results

3.1 UII Library Redesign: Modernity Meets Ancient Sites

3.1.1 Unveiling Candi Kimpulan: An Archaeological Journey

The unearthing of Candi Kimpulan, a hidden 9th-century Hindu temple beneath the UII campus, marked a significant milestone in Yogyakarta's archaeological narrative. This case study intricately examines the captivating journey of excavation and exploration that brought this concealed treasure to light.

# 3.1.2 Initial Discovery and Survey

In December 2009, reports of intriguing stone structures reminiscent of a temple foundation piqued the curiosity of archaeologists from the Yogyakarta Cultural Preservation Centre (BP3 DIY). Under the leadership of Indung Panca Putra, Coordinator of Archaeological Experts at BP3 DIY, a team embarked on an exhaustive investigation to validate these claims[4].

After the preliminary survey, a meticulously planned three-stage excavation operation unfolded, spanning 35 days. This methodical endeavour aimed to unveil the scope and intricacy of the temple's architectural remnants. By January 30, 2010, the excavation had successfully unearthed the enigmatic depths of the temple.

In August, a comprehensive technical study ensued to meticulously document and analyse the vast array of data acquired during the excavation phase. This exhaustive analysis provided invaluable insights into the construction techniques and architectural nuances of the temple.

### 3.1.3 Restoration and Preservation

With the temple's mysteries laid bare, a meticulous four-month restoration endeavour commenced, focusing on the meticulous preservation of the main temple (Candi Induk), the accompanying smaller shrine (Candi Perwara), and the encircling courtyard wall. The restoration initiatives were geared towards safeguarding the structural integrity of the temple and showcasing its architectural grandeur.

Candi Kimpulan serves as an indelible testament to the opulent architectural heritage of Yogyakarta during the 9th century. Its compact dimensions and intricate embellishments render it a distinctive exemplar of Javanese temple craftsmanship. The presence of a linga-yoni and a Ganeśa statue within the main temple further accentuates its religious and cultural significance.

The excavation and restoration endeavours surrounding Candi Kimpulan epitomize the painstaking endeavors of archaeologists and heritage conservationists in preserving Yogyakarta's cultural legacy. Amidst the modernity of the UII campus, the temple's impeccable preservation serves as a poignant reminder of the delicate equilibrium between contemporary development and the conservation of our rich cultural heritage. Candi Kimpulan stands as an enduring testament to Yogyakarta's illustrious history, beckoning visitors to delve into its intricate details and marvel at the craftsmanship of a bygone era [14].

# 3.1.4 Candi Kimpulan's Unique Features: A Glimpse into Yogyakarta's Cultural Heritage

Nestled within the UII campus, Candi Kimpulan, a 9th-century Hindu temple, unveils a treasure trove of unique architectural features that offer a glimpse into Yogyakarta's rich cultural heritage. Beyond its captivating architecture, the temple houses intriguing artifacts that further enrich our understanding of its significance[15].

 Enigmatic Stone Circles: Adorning the temple's terrace, two concentric circles of stones, known as "boulders" stand as intriguing architectural elements. Their precise function remains a mystery, but speculations suggest they could have served as directional markers or supports for lightweight structures like canopies. These enigmatic stone circles add an air of intrigue to the temple's design, hinting at the rituals or practices that once took place within its walls [14].

- Sacred Linga-Yoni: At the heart of the temple's inner sanctum lies a sacred linga-yoni, carved from andesite stone. Measuring 18 x 18 x 38 centimeters, this symbolic representation of the divine male and female principles holds profound religious significance in Hindu culture. The presence of the linga-yoni underscores Candi Kimpulan's dedication to Shiva worship and its role as a sacred site for spiritual devotion[16].
- Majestic Ganesha Statue: Flanking the linga-yoni, a majestic Ganesha statue, also crafted from andesite stone, graces the temple's interior. Standing tall at 67 centimeters, this revered deity of Hindu mythology embodies wisdom, prosperity, and the removal of obstacles. The Ganesha statue's presence reinforces the temple's spiritual significance and its connection to the Hindu pantheon[17].

# 3.1.5 Preserving Heritage through Museum Collection:

These unique features, along with other artifacts unearthed during the excavation, have found a permanent home in the Candi Kimpulan Museum. This dedicated museum serves as a repository of the temple's rich heritage, ensuring that these precious artifacts are preserved and accessible for generations to come [18].

Candi Kimpulan's unique architectural elements and preserved artifacts provide a window into the temple's spiritual and cultural significance. The enigmatic stone circles, the sacred linga-yoni, and the majestic Ganesha statue stand as testaments to the craftsmanship and devotion of a bygone era. As these treasures are carefully preserved within the Candi Kimpulan Museum, they continue to inspire and educate, fostering a deeper appreciation for Yogyakarta's rich cultural heritage.

# 3.2 Unveiling the Design Concept of the UII Central Library

The UII Central Library envisioned as a beacon of knowledge and a hub for academic engagement, stands as a testament to the university's commitment to creating an inspiring learning environment. Its unique architectural design, meticulously crafted by a team of experts, embodies a harmonious blend of functionality and aesthetics[19].

At the heart of the library lies a captivating central atrium, a defining feature of the building's design. This open space, shaped as a void within the cubic mass, serves as a conduit for natural light, flooding the interior with a warm, inviting ambiance. The atrium's soaring height fosters a sense of openness and grandeur, while the interplay of light and shadow creates a dynamic and visually stimulating environment.

# 3.2.1 Functional Layout: Fostering Seamless Learning Experiences

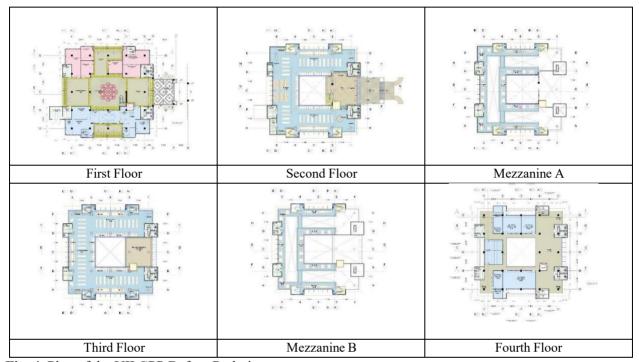
The library's layout is meticulously designed to cater to the diverse needs of its users, ensuring a seamless and efficient learning experience. The four main floors, complemented by two mezzanine levels, provide ample space for a comprehensive collection of books, periodicals, and digital resources. Dedicated study areas, both individual and collaborative, cater to a range of learning styles, while quiet reading zones offer tranquillity for focused study [20].

The UII Central Library embodies the university's commitment to environmental sustainability. The orientation of the building, coupled with strategically placed openings, optimizes natural ventilation, reducing reliance on artificial lighting and air conditioning. The use of energy-efficient materials and systems further minimizes the building's environmental impact [8].

# 3.2.2 A Symbol of Innovation and Progress

The UII Central Library stands as a symbol of the university's dedication to innovation and progress. Its architectural design, a fusion of functionality and aesthetics, reflects the university's commitment to providing a world-class learning environment that fosters intellectual growth and academic excellence. As the library serves as a hub for students, faculty, and researchers, it embodies the university's dynamic spirit and its unwavering pursuit of knowledge.

The UII Central Library stands as a remarkable architectural achievement, seamlessly blending functionality and aesthetics to create an inspiring and conducive learning environment. Its central atrium, functional layout, and commitment to sustainable design principles make it a testament to the university's dedication to providing a world-class facility that supports academic excellence and environmental responsibility. As the library continues to serve as a hub for knowledge and intellectual engagement, it will undoubtedly play a pivotal role in shaping the future of UII and its community.



**Fig. 4.** Plan of the UII GPP Before Redesign Source: Planning Document, UII Integrated Campus Management Office

# 3.2.3 UII Central Library: A Functional and Aesthetic Hub for Learning

The UII Central Library stands as a remarkable architectural achievement, seamlessly blending functionality and aesthetics to create an inspiring and conducive learning environment. Its meticulous design, driven by a deep understanding of user needs and sustainability principles, positions the library as a cornerstone of UII's academic excellence and commitment to environmental responsibility.

With a capacity to accommodate 2,294 individuals, the UII Central Library ensures adequate space for a diverse range of users. The library can comfortably host 1,384 library patrons, 550 seminar or discussion participants, and 360 users of public facilities. This well-planned capacity ensures that the library can effectively cater to the needs of the UII community without compromising on comfort or functionality.

Housing a comprehensive collection of 207,000 books and equipped with 62 self-service kiosks, the UII Central Library serves as a veritable treasure trove of knowledge. This extensive collection, coupled with the availability of modern technology, empowers students, faculty, and researchers to delve into a wide range of subjects and pursue their intellectual endeavours.

# 3.2.4 A Haven for Learning and Collaboration

The leadership management at the Universitas Islam Indonesia (UII) Library, which adopts prophetic leadership values, exemplifies how Islamic principles can effectively guide organizational management. By embodying the qualities of shidiq (honesty), amanah (trustworthiness), fathonah (wisdom), and tabligh (communication), the library creates a work environment that is both harmonious and productive. This approach ensures that tasks are carried out with integrity, responsibilities are handled with trust, challenges are met with wisdom, and policies are developed through open and constructive communication. Consequently, the UII Library not only serves as a central hub for academic information but also stands as a model of Islamic values in leadership and service [21].

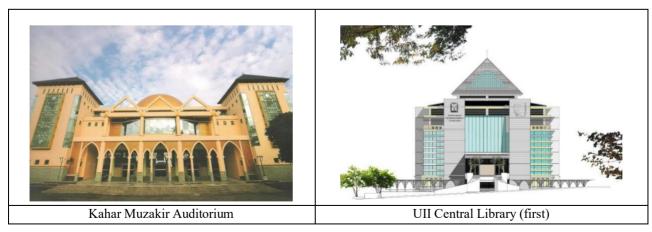
The library's layout is meticulously designed to foster a conducive environment for both individual and collaborative learning. Dedicated study areas, both individual and collaborative, cater to a range of learning styles, while quiet reading zones offer tranquility for focused study. These well-appointed spaces encourage students to engage in independent learning, group discussions, and collaborative projects, fostering a vibrant academic atmosphere.

The UII Central Library embodies the university's commitment to environmental sustainability. The orientation of the building, coupled with strategically placed openings, optimizes natural ventilation, reducing reliance on artificial lighting and air conditioning. The use of energy-efficient materials and systems further minimizes the building's environmental impact. These sustainable design principles demonstrate UII's dedication to creating a greener future and minimizing its ecological footprint.

# 3.2.5 A Fusion of Aesthetics and Functionality

The UII Central Library's architectural design is a harmonious blend of aesthetics and functionality. The central atrium, a defining feature of the building, serves as a conduit for natural light, flooding the interior with a warm, inviting ambiance. The interplay of light and shadow creates a dynamic and visually stimulating environment, while the soaring height of the atrium fosters a sense of openness and grandeur. This fusion of aesthetics and functionality creates a space that is both visually appealing and conducive to learning and intellectual engagement.

The UII Central Library stands as a testament to the university's dedication to providing a worldclass learning environment that supports academic excellence and environmental responsibility. Its functional layout, comprehensive collection, commitment to sustainability, and fusion of aesthetics and functionality make it a hub for knowledge, collaboration, and intellectual growth. As the library continues to serve as a cornerstone of UII's academic community, it will undoubtedly play a pivotal role in shaping the future of the university and its students.



**Fig. 5.** Harmonization of the Front View of the UII Auditorium and Central Library Source: Planning Document, UII Integrated Campus Management Office

# 3.3 Unveiling the Transformation of UII Central Library: A Fusion of Learning and Heritage

The UII Central Library (CL UII) stands as a remarkable testament to the university's unwavering commitment to knowledge, heritage preservation, and architectural innovation. Its transformation from an originally planned library to a library and museum complex, triggered by the discovery of the UII Candi, exemplifies UII's dedication to adapting to unforeseen circumstances and embracing opportunities that enrich the academic and cultural landscape.

During the construction of the UII Central Library, the serendipitous discovery of the UII Candi, an ancient Hindu temple, sent shockwaves through the project. This significant archaeological find presented an unprecedented challenge and an opportunity to redefine the library's purpose and design.

# 3.3.1 Embracing Change and Adapting to Heritage

The discovery of the UII Candi necessitated a complete redesign of the UII Central Library, transforming it into a unique fusion of learning and heritage preservation. The original design, meticulously crafted to cater to the needs of students and researchers, had to be reimagined to seamlessly integrate the ancient temple into the fabric of the modern library.

The redesign of the UII Central Library encompassed a holistic approach, ensuring that the library's functionality and aesthetic appeal remained intact while harmonizing with the presence of the UII Candi. The building's layout underwent significant modifications to accommodate the temple, altering the height and configuration of the structure. The interior design was carefully curated to blend modern elements with the temple's architectural heritage, creating a captivating interplay of styles and eras.

The discovery of the UII Candi not only reshaped the library's design but also expanded its functional scope. The library's role evolved to encompass not only providing access to knowledge but also fostering education and preservation of cultural heritage. The UII Candi became an integral part of the library's educational offerings, providing students and visitors with a unique opportunity to delve into Yogyakarta's rich cultural history.

# 3.3.2 A Beacon of Learning and Heritage

The transformation of the UII Central Library into the UII Library and Museum (LM UII) stands as a testament to UII's adaptability, commitment to heritage preservation, and dedication to creating an inspiring learning environment. The LM UII seamlessly blends modern functionality with the preservation of an ancient temple, creating a unique and captivating space that serves as a hub for knowledge, cultural exploration, and intellectual growth.

The UII Library and Museum (LM UII) stands as a beacon of learning and heritage, a testament to UII's ability to adapt to unforeseen circumstances and embrace opportunities that enrich the academic and cultural landscape. The LM UII serves as a reminder of the delicate balance between progress and preservation, demonstrating that modern learning institutions can thrive alongside the remnants of our rich cultural heritage. As the LM UII continues to serve as a hub for knowledge and cultural exploration, it will undoubtedly play a pivotal role in shaping the future of UII and its community.

# 3.4 A Symphony of Preservation and Development: Zoning Agreement for the UII Library and Museum

The discovery of the UII Candi, an ancient Hindu temple, during the construction of the UII Central Library presented a unique challenge and an opportunity to harmonize modern development with the preservation of cultural heritage. To address this challenge, a series of dialogues were initiated among key stakeholders, including the UII Foundation (PYBW UII) and government representatives, to reach a consensus on the zoning of the area[22].

# 3.4.1 Zoning Agreement: A Tripartite Approach

Through these dialogues, a comprehensive zoning agreement was established, dividing the area into three distinct zones[23]:

- Core Zone: Encompassing a radius of 18 meters from the center of the UII Candi, this zone serves as the primary focus for the preservation of the temple site. Strict measures will be implemented to safeguard the integrity and authenticity of the temple's structures and archaeological remains.
- Buffer Zone: Spanning an area between 18 and 24 meters (or a width of 6 meters) surrounding the core zone, this zone acts as a protective barrier, shielding the core zone from potential disturbances and ensuring its long-term preservation.
- Supporting Zone: Extending beyond the 24-meter delineation, this zone remains designated for
  the development of the library facilities. However, the design and construction of these
  facilities will be carefully considered to minimize any adverse impact on the core and buffer
  zones.

#### 3.4.2 A Testament to Shared Commitment

The zoning agreement stands as a testament to the shared commitment of UII and the government to prioritize the preservation of the UII Candi while simultaneously enabling the development of a modern and functional library. This agreement exemplifies the delicate balance between safeguarding cultural heritage and embracing progress[24].

### 3.4.3 Preservation at the Forefront

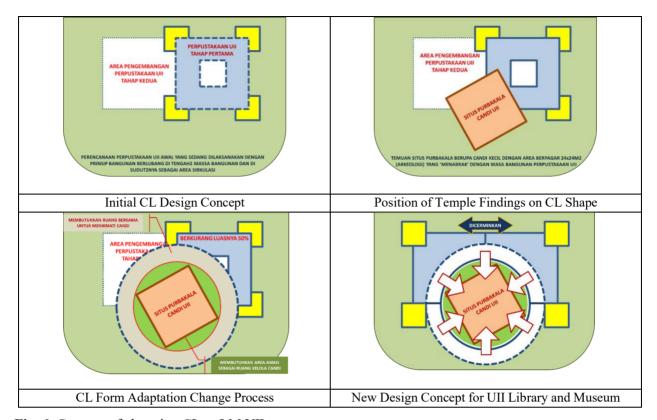
The establishment of the core and buffer zones prioritizes the preservation of the UII Candi, ensuring that this significant archaeological site remains intact for future generations. These zones serve as a protective shield, minimizing the risk of damage or disturbance to the temple's structures and archaeological remains.

# 3.4.4 Development with Sensitivity

The designation of the supporting zone acknowledges the need for the library's development. However, this development will be undertaken with utmost sensitivity, ensuring that the design and construction processes do not compromise the integrity of the core and buffer zones. Measures will be implemented to minimize visual and auditory impacts, preserving the tranquility and ambiance of the temple site.

# 3.4.5 A Model for Future Endeavors

The zoning agreement for the UII Library and Museum serves as a model for future endeavors that seek to harmoniously integrate development with the preservation of cultural heritage. It demonstrates that progress and preservation are not mutually exclusive but can coexist through careful planning, collaboration, and a shared commitment to safeguarding our cultural legacy.



**Fig. 6.** Concept of changing CL to LM UII Source: Planning Document, UII Integrated Campus Management Office

The zoning agreement for the UII Library and Museum stands as a beacon of hope, demonstrating that it is possible to strike a balance between development and preservation. Through this agreement, UII and the government have set an example for future endeavours, showcasing the importance of safeguarding our cultural heritage while embracing progress and creating modern spaces for learning and intellectual growth. As the UII Library and Museum continue to evolve, it will undoubtedly serve as a symbol of this harmonious coexistence, a testament to the university's dedication to preserving its cultural heritage while fostering a vibrant academic community.

# 3.5 The UII Library and Museum: A Symphony of Modernity and Heritage

The UII Library and Museum (LM UII) stands as a remarkable architectural masterpiece, seamlessly blending modern design with the preservation of the ancient UII Candi. Its unique form and thoughtful integration with the temple site transform it into a landmark that not only serves as a hub for learning and knowledge but also embodies UII's deep respect for history and culture.

### 3.5.1 A Fusion of Modernity and Heritage

The LM UII's design is a testament to the university's commitment to harmonizing progress with preservation. The modern five-story structure, meticulously crafted to cater to the needs of students and researchers, carefully embraces the UII Candi, an ancient Hindu temple, within its embrace. This harmonious integration showcases UII's dedication to preserving its cultural heritage while simultaneously creating a modern and inspiring learning environment.

The LM UII's layout invites visitors on a captivating journey through time and space. The basement level houses the UII Museum and the Candi Kimpulan Museum, providing a glimpse into the university's rich history and the archaeological significance of the temple. To access these museums, visitors embark on a symbolic pradakshina, a circumambulation ritual, following a

meandering indoor corridor and an outdoor ramp that encircles the temple site. The upper ground floor and first floor, interconnected by a semi-circular rooftop walkway, serve as the heart of the library, offering a vast collection of books, study spaces, and collaborative learning areas. The second-floor houses additional support spaces, including seminar rooms and workshops, catering to the diverse needs of the UII community.

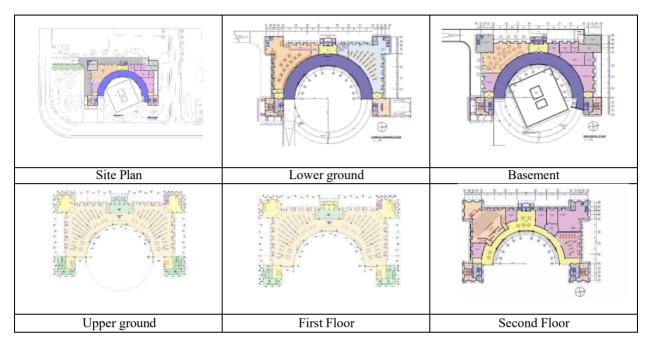


Fig. 7. Plan of LM UII and Position of Kimpulan Temple

# 3.5.2 A Design that Inspires and Educates

The LM UII's unique design, seamlessly integrated with the UII Candi, offers an immersive experience that goes beyond its functionality as a library and museum. The building's form, the layout of its spaces, and the thoughtful placement of the temple within its structure serve as a constant reminder of UII's rich heritage and its commitment to preserving the past while embracing the future.

The UII Library and Museum stands as a beacon of UII's dedication to knowledge, heritage preservation, and architectural innovation. Its unique design, a harmonious blend of modernity and reverence for the past, transforms it into a landmark that not only serves as a hub for learning and cultural exploration but also symbolizes the university's unwavering commitment to its history and its community. As the LM UII continues to evolve, it will undoubtedly play a pivotal role in shaping the future of UII and its legacy.

# 4. Conclusions

The discovery of the UII Candi during the construction of the UII Central Library presented an unprecedented challenge and an opportunity to redefine the library's purpose and design. The transformation of the UII Central Library into the UII Library and Museum exemplifies UII's adaptability, commitment to heritage preservation, and dedication to creating an inspiring learning environment.

Key takeaways from the design process:

a. Adaptability: The design team demonstrated remarkable adaptability in responding to the unexpected discovery of the UII Candi. Instead of viewing this as a setback, they embraced it as an opportunity to create a unique and culturally significant space.

- b. Heritage Preservation: The preservation of the UII Candi was paramount in the redesign process. The new design carefully integrates the temple into the fabric of the library, ensuring its protection and showcasing its historical significance.
- c. Community Engagement: The design team engaged with key stakeholders, including the UII Foundation (PYBW UII) and government representatives, to reach a consensus on the zoning of the area and ensure that the design aligned with the community's values and aspirations.
- d. Modernity and Heritage in Harmony: The LM UII stands as a testament to the delicate balance between modernity and heritage preservation. The modern design seamlessly blends with the ancient temple, creating a space that is both functional and inspiring.

The UII Library and Museum serves as a model for future endeavours that seek to harmoniously integrate development with the preservation of cultural heritage. It demonstrates that progress and preservation are not mutually exclusive but can coexist through careful planning, collaboration, and a shared commitment to safeguarding our cultural legacy.

#### References

- [1] R. Fenn and C. Geertz, "The Interpretation of Cultures," J. Sci. Study Relig., 1974, doi: 10.2307/1384392.
- [2] C. P. Kubontubuh and W. Martokusumo, "Meeting the past in the present: authenticity and cultural values in heritage conservation at the fourteenth-century Majapahit heritage site in Trowulan, Indonesia," *Int. J. Herit. Stud.*, 2020, doi: 10.1080/13527258.2019.1652923.
- [3] P. Zucker and C. Norberg-Schulz, "Intentions in Architecture," J. Aesthet. Art Crit., 1970, doi: 10.2307/429522.
- [4] I. Panca Putra, A. Setyastuti, S. Pramumijoyo, A. Indrajaya, A. Sesaria Mochtar, and V. Degroot, "Candi Kimpulan (Central Java, Indonesia): Architecture and Consecration Rituals of a 9th-Century Hindu Temple," *Bull. Ec. Fr. Extr. Orient.*, 2019, doi: 10.3406/befeo.2019.6297.
- [5] A. N. Ciptahening, N. E. Nugroho, and N. Phienwej, "Geological Investigation and Risk Assessment for Disaster Management of Merapi Volcano and Surrounding Area, Yogyakarta Special Territory, Indonesia," 2019. doi: 10.1007/978-3-030-02032-3 5.
- [6] C. G. Newhall *et al.*, "10,000 Years of explosive eruptions of Merapi Volcano, Central Java: Archaeological and modern implications," *J. Volcanol. Geotherm. Res.*, 2000, doi: 10.1016/S0377-0273(00)00132-3.
- [7] S. B. Kusumayudha, H. Murwanto, Sutarto, and S. U. Choiriyah, "Volcanic Disaster and the Decline of Mataram Kingdom in the Central Java, Indonesia," 2019. doi: 10.1007/978-3-030-02032-3 8.
- [8] F. Tian, "Application of Ecological Architecture Design in Library," *Adv. Eng. Technol. Res.*, 2022, doi: 10.56028/aetr.1.1.156.
- [9] D. Jones and A. Grote, "The Library as Learning Commons," *Plan. High. Educ.*, 2018.
- [10] A. Tella, "Revitalizing the library through usability features of the university library websites," *J. Electron. Resour. Librariansh.*, 2022, doi: 10.1080/1941126X.2022.2028425.
- [11] R. Johansson, "Case Study Methodology," in *Methodologies in Housing Research*, 2005, p. 14. [Online]. Available: https://www.academia.edu/68377155/Case\_Study\_Methodology
- [12] D. Wang and L. N. Groat, Architectural research methods / David Wang, Linda N. Groat. 2013.
- [13] R. K. Yin, Case study research design and method. 2003.
- [14] R. R. W. Ahmad Saifudin Mutaqi, "Merekonstruksi Candi Terkubur. Studi Kasus: Eskavasi dan Pemugaran Candi Kimpulan di Universitas Islam Indonesia (UII)," *ATRIUM J. Arsit.*, vol. 9, no. 2, pp. 137–147, 2023, doi: https://doi.org/10.21460/atrium.v9i2.199.
- [15] S. A. Fathoni, H. Rosyadi, and D. Wijayanto, "Pustakasala Temple was Buried by Catastrophic Ancient of Merapi Volcano," *PetroClan, UPN "Veteran" Yogyakarta*, vol. 1, no. 5, 2010, [Online]. Available: https://www.researchgate.net/profile/Hasan-Rosyadi/publication/283568451\_Pustakasala\_Temple\_was\_Buried\_by\_Catastrophic\_Ancient\_of\_Merapi\_Volcano/links/563f6fee08ae8d65c0150d32/Pustakasala-Temple-was-Buried-by-Catastrophic-Ancient-of-Merapi-Volcano.pdf
- [16] I. M. Suta, "Fungsi dan Makna Lingga dalam Ajaran Agama Hindu," Widya Duta J. Ilm. Ilmu Agama dan Ilmu Sos. Budaya, 2019, doi: 10.25078/wd.v13i2.680.
- [17] A. Murdihastomo, "Penggambaran Ornamen Ular Pada Arca Ganesha Koleksi Museum Candi Prambanan, Yogyakarta," *Berk. Arkeol.*, 2020.
- [18] J. S. Prianto, "Rekreasi Edukasi di Direktorat Perpustakaan dan Museum UII serta Candi Kimpulan," *Bul. Perpust. UII*, vol. 6, no. 1, pp. 48–64, 2022, doi: https://doi.org/10.20885/bpuii.v6i1.25607.
- [19] I. W. Marzuki, "PANDANGAN CIVITAS AKADEMIA UII MENGENAI CANDI KIMPULAN DI KAMPUS TERPADU UII YOGYAKARTA," *PAPUA*, vol. 1, pp. 65–72, 2012, doi: https://doi.org/10.24832/papua.v4i1.77.

- [20] L. H. Li, F. Wu, and B. Su, "Impacts of Library Space on Learning Satisfaction An Empirical Study of University Library Design in Guangzhou, China," *J. Acad. Librariansh.*, 2018, doi: 10.1016/j.acalib.2018.10.003.
- [21] R. E. Winastman and N. Laugu, "Prophetic Values in Library Leadership at Islamic University of Indonesia," *Journal, Int. Information, Libr. Vol. Netw.*, 2021.
- [22] A. Sakellariadi, "Strategic participatory planning in archaeological management in Greece: The Philippi management plan for nomination to UNESCO's World Heritage List," *Conserv. Manag. Archaeol. Sites*, 2013, doi: 10.1179/1350503313Z.00000000044.
- [23] A. Soeroso, "Konservasi Saujana Budaya Kawasan Borobudur: Zonasi Ulang dengan Pendekatan Ekosistem," *J. Mns. dan Lingkung.*, 2007.
- [24] R. F. Bouty, A. B. Sholihah, and P. A. P. Agustiananda, "Preservation of Conclusion Temple With 'Historic Urban Landscape' Technique in The Islamic Indonesia University Environment," *Int. J. Archit. Urban.*, 2019, doi: 10.32734/ijau.v3i1.775.