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Impact the Narrative Thinking in Secnario of Heritage Buildings

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Abstract

Heritage buildings, with their rich historical and cultural significance, are not just static structures; they are vessels of stories, memories, and identities. This research explores the transformative impact of narrative thinking on heritage buildings, aiming to bridge the gap between architectural preservation and the dynamic nature of cultural heritage. As heritage conservation efforts increasingly shift from a focus on physical preservation to a more holistic understanding of heritage, narrative thinking emerges as a powerful tool for enriching our perception and engagement with these historic structures.

This study employs an interdisciplinary approach, drawing from fields such as architecture, history, cultural studies, and storytelling theory. It delves into the ways in which narrative thinking, encompassing both the stories associated with heritage buildings and the potential for narrative creation within these spaces, contributes to the preservation, interpretation, and utilization of heritage sites.

The research framework includes both qualitative and quantitative methodologies, encompassing case studies, interviews, surveys, and architectural analysis. It investigates the multifaceted impact of narrative thinking in the following key areas:

Preservation and Restoration: How does narrative thinking influence the decisions surrounding restoration and conservation of heritage buildings? How can the incorporation of historical narratives inform design choices and materials selection, ensuring the preservation of the building's authenticity and historical significance

Visitor Engagement and Education: By harnessing the power of storytelling, how can heritage sites enhance visitor experiences? This aspect explores the potential for narrative-driven guided tours, multimedia exhibits, and interactive installations that bring the history and cultural context of the building to life.

Community Identity and Social Connection: Investigating the role of heritage buildings as anchors for community identity and cohesion, this research explores how narrative thinking can empower communities to take ownership of their heritage, fostering a sense of belonging and pride.

Economic and Tourism Impact: How does narrative-driven heritage preservation influence local economies and tourism? This segment analyzes the economic benefits of heritage storytelling and its role in attracting tourists and fostering cultural tourism.

The findings of this research aim to highlight the significant impact of narrative thinking in preserving and revitalizing heritage buildings, while also shedding light on the ethical considerations and challenges associated with the selective narration of history. The study ultimately contributes to a more holistic and dynamic approach to heritage preservation, where the narrative becomes a central element in reimagining the past while ensuring the cultural and historical continuity of heritage buildings.

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1. Introduction

Heritage buildings are not merely structures of brick and mortar; they are repositories of history, culture, and memory. These architectural marvels embody the legacy of bygone eras and bear witness to the evolution of societies. Preserving and revitalizing heritage buildings has long been a matter of global concern, seeking to safeguard the tangible remnants of our shared human story. However, in the evolving field of heritage conservation, a transformative force has emerged, one that extends beyond the physical aspects of restoration and engages the very essence of these historical landmarks-narrative thinking.

This research embarks on a journey to unravel the profound impact of narrative thinking in the context of heritage buildings. It delves into the interplay between the rich stories that enshroud these edifices and the potential for new narratives to be created within their hallowed walls. By doing so, it explores how narrative thinking can enhance our understanding, preservation, and utilization of these precious cultural treasures.

The traditional approach to heritage preservation has often prioritized structural integrity and authenticity. While these principles remain integral, there is a growing realization that heritage conservation must extend beyond bricks and mortar. It must embrace the living, breathing narratives that these buildings hold within them. Such narratives, whether tales of grandeur or humble origins, offer a deeper connection to the past and foster a more profound appreciation of the heritage building's place in the collective memory.

In recent years, a paradigm shift has occurred in heritage conservation. The emphasis has transitioned from passive preservation to dynamic engagement, from passive storytelling to narrative creation. The recognition of the profound influence of narratives within the heritage context has opened up a new realm of possibilities for understanding, appreciating, and reinvigorating heritage buildings. By weaving stories into the very fabric of these structures, we can create living museums where the past speaks to the present, and the present whispers to the future.

This research adopts an interdisciplinary approach, drawing from fields such as architecture, history, cultural studies, and storytelling theory. It seeks to address fundamental questions: How does narrative thinking influence decisions regarding the preservation and restoration of heritage buildings? How can these narratives be harnessed to enhance visitor engagement and education? What role does narrative thinking play in shaping community identity and fostering social connections in the vicinity of heritage sites? And how does it impact the economic and tourism potential of these historical landmarks?

By exploring these questions, this research endeavors to enrich our understanding of the dynamic relationship between narrative thinking and heritage buildings. It aims to offer valuable insights to conservationists, architects, historians, communities, and policymakers seeking to strike a balance between the preservation of historical authenticity and the infusion of narrative vitality. In doing so, this research ultimately contributes to a more holistic and integrated approach to heritage conservation—one where the stories embedded in these architectural gems become integral to their ongoing legacy in our ever-evolving world.

1.1. Importance of narrative thinking in architectural design

In the field of architectural design, the importance of narrative thinking cannot be understated. Stories and historical narrations have not only inspired different art and design movements but have also played a significant role in shaping architecture and

conserving tangible and intangible heritage. Qualitative research has been conducted to establish the relationship between historical narrative and architecture, with a focus on prominent architects and their architectural masterpieces. This research explores the philosophy and narration of these architects, emphasizing the significance of historical narratives in architecture.

The historical narrative is discussed in relation to the 4Ps (People, Place, Purpose, Period) of architecture. By understanding the historical context and narratives associated with a particular building or site, architects can create designs that are deeply connected to their surroundings. This connection adds layers of iconography and expression to contemporary architectural heritage, bridging the gap between the past, present, and future.

Architectural narratives play a crucial role in design decision-making processes. They provide a framework for understanding the client's requirements and needs while considering the unique constraints and opportunities presented by the site. Design narratives allow architects to test decisions throughout the project, ensuring that every aspect aligns with the overarching story or concept behind the design.

Moreover, architectural narratives are not limited to functional or aesthetic considerations; they also hold social and cultural significance. Buildings reflect the values and aspirations of their communities as well as broader society. A well-crafted narrative can convey meaning and impact beyond basic functionality, creating buildings that are meaningful to both their users and their surrounding context.

Designing within a historical context presents its own challenges. When creating buildings in close proximity to existing historical structures, architects must navigate a complex design process that respects both tradition and preservation. The act of constructing a new building within a historical location requires an understanding of architectural historiography implications and contextualism.

A strong design narrative is essential for any project, regardless of its size or purpose. It serves as a guiding force throughout the design process, ensuring that decisions align with the project's vision and purpose. Design narratives help architects influence projects from conception to build, preventing suboptimal outcomes that may arise in the absence of a clear narrative.

In conclusion, narrative thinking is of paramount importance in architectural design. It enables architects to create designs that are deeply rooted in historical context, drawing inspiration from stories and narrations. Architectural narratives not only inform design decisions but also contribute to the preservation of cultural heritage and the creation of meaningful, impactful spaces. By embracing narrative thinking, architects can elevate their designs and engage with the built environment in a thoughtful and profound way. See references: [1], [2], [3], [4], [5], [6], [8], [9].

An architectural narrative is the story told by a building through its form and feel. It is not superfluous, to be added after the 'real business' of design, but should guide the design.

These are the three basic methods used by architects to create narrative.

The first is through specific application of shapes, materials, scale, light, heat, and sound, particularly when form and function are linked to improve practicality. Think about the Institut du Monde Arabe, which has a brise-soleil—a tropical architectural element that deflects sunlight to keep buildings cool.

Despite Paris's distance from a tropical region, the architects incorporated a photosensitive brise-soleil including motorized openings. In addition to evoking the mishrabiya in Islamic construction, the filtered light that results safeguards the museum's priceless items. Considering the location and physical characteristics of a building's site

and working with them rather than against them is how architects generate narrative in a second way.

Cities, artwork, buildings, and other well-designed objects all communicate tales in different ways through their form, materials, and historical allusions. Naturally, they don't accomplish this on their own; the designer's role is to "write" and convey this narrative, also referred to as the tale.

This page provides a thorough explanation of what an architectural narrative is, along with several real-world instances of when and how it could be created. We look at methods for presenting architectural narratives and provide some advice on how to get better at creating them.

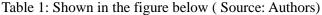
a narrative: In short, a narrative is just a story - a description of a sequence of events, involving characters and usually some underlying messages or themes. The word is commonly used to discuss novels and plays, but also features strongly in the field of design.

Architectural narrative: An architectural narrative is the story that a building tells about its users and/or its patrons. A great example is the Institut du Monde Arabe (1987) in Paris by Architecture-Studio and Jean Nouvel, which combines elements of Western and Islamic architecture in order to illustrate and nurture the relationship between France and the Arab world.

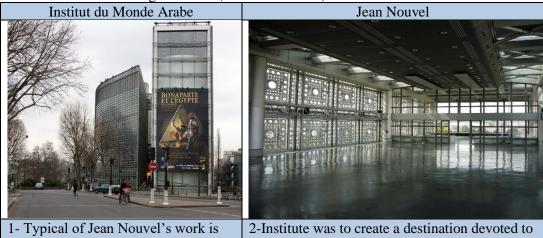
"Spatial narrative" and "design narrative":

Although there are some minor distinctions, the phrases architectural narrative, design narrative, and spatial narrative are frequently used synonymously. "Design narrative" has a wider application than "architectural narrative" since most design disciplines (industrial, graphic, fashion, and so on) use storytelling as part of their process. However, "spatial narrative" mostly refers to landscape architecture and design.

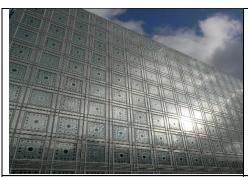
The tale that a structure conveys about its users and/or patrons is known as an architectural narrative. One outstanding example is the 1987 Architecture-Studio and Jean Nouvel building Institut du Monde Arabe in Paris, which blends Western and Islamic architectural aspects to highlight and strengthen ties between France and the Arab world.. [3] [19]



his attention to façade detailing.



the relationship of the Arab culture with France



3-Nouvel's proposal for this system was well received for its originality and its reinforcement of an archetypal element of Arabic architecture



4-it responds to its immediate context both in plan and elevation. In plan it follows the curvature of the road, whose form is dictated by the river

Table 1: Architecture Narratives Coates, N., 2012. Narrative architecture. John Wiley & Sons. (source: reference [20]) AD Classics: Institut du Monde Arabe / Enrique Jan + Jean Nouvel + Architecture-Studio

1.2. Purpose of the essay - exploring the impact of narrative thinking on heritage buildings

In this essay, we will explore the impact of narrative thinking on heritage building design. Stories and historical narration have long been influential in inspiring different art and design movements, and they have also played a significant role in shaping architecture and conserving tangible and intangible heritage. The relationship between historical narrative and architecture is the focus of qualitative research conducted in this research paper. By examining the architectural masterpieces of prominent architects, we can gain insights into their philosophy and narration. The discussion of historical narrative revolves around the 4Ps (People, Place, Purpose, Period) of architecture, providing a comprehensive understanding of how narratives shape the built environment.

Furthermore, there is an effort to establish a connection between historical narrative and contemporary architectural heritage. By adding layers of iconography and expression to the design process, architects aim to connect past traditions with present realities and future aspirations. This approach allows for a deeper appreciation of cultural significance and historical context in architectural design.

The importance of architectural narratives cannot be overstated. These narratives go beyond mere functionality or aesthetics; they tell stories that resonate with people's lives. Architectural narratives encompass various elements such as the symbolic use of materials and forms, the interaction between buildings and their environment, and their social and cultural context. Understanding these narratives is crucial not only for architects but also for the general public as buildings shape our daily experiences and contribute to our sense of place and belonging.

When it comes to heritage buildings specifically, narrative thinking becomes even more essential. Designing within a historical context requires careful consideration to ensure that the new structure respects its surroundings while preserving its own importance. By crafting a strong design narrative that combines client requirements with site-specific constraints, architects can influence every stage of the project from conception to completion.

In this regard, architectural narratives empower architects to create meaningful spaces that transcend basic functional needs. These narratives provide a guiding thread throughout the entire design process, allowing for informed decision-making even when the designer is no longer involved. A well-crafted narrative ensures that a building

becomes more than just an assembly of materials; it becomes a vessel for storytelling and cultural expression.

By exploring the impact of narrative thinking on heritage building design, we can gain valuable insights into how architecture can connect past traditions with present realities. Through a deep understanding of historical narratives, architects can create buildings that not only serve their intended purpose but also contribute to the preservation and celebration of our collective heritage. As we delve into this topic, we will uncover the various strategies and approaches employed by architects to weave narratives into their designs, ultimately shaping the built environment in profound and lasting ways. references: [1], [2], [3], [4], [5], [6], [8].

2. The influence of narrative thinking on architectural design

2.1. Definition and explanation of narrative thinking

Narrative thinking is crucial in architectural design, particularly for heritage buildings. Historical narratives inspire art and design movements and shape architecture while conserving heritage. Architectural narratives go beyond storytelling and hold significance for the design process. They manifest in various forms, from symbolism to community interaction. Social and cultural contexts influence architectural narratives, reflecting values and societal norms. Narrative thinking is important in architectural education and practice, guiding decision-making and establishing coherence. By understanding architectural narratives, designers can create meaningful and impactful buildings that respect cultural heritage and address contemporary needs. references: [1], [2], [3], [4], [5], [6], [7], [8].

2.2. Examples of heritage buildings influenced by narrative thinking

The influence of narrative thinking on heritage building design can be seen in various examples of architectural narratives that have shaped the construction and meaning of these buildings. One example is the 'Sai Mandir' Temple in Hyderabad, designed by SEA architects. This temple beautifully combines contemporary architecture with a historical narrative, specifically the Shakira Style of North Indian temples. The architects have invoked cultural and historical narratives through the use of ornamentation and symbols, creating a building that straddles the world of memory and history.

Narrative thinking in architectural design goes beyond just storytelling; it also involves considering the relationship between buildings and their surroundings. This is particularly important when designing buildings in historical contexts, such as museums. Designing a museum in a historical context requires careful consideration to ensure that the building respects its surroundings while also preserving its own identity. The challenge lies in finding a balance between contextual architecture and creating a landmark that shapes the landscape.

Architectural narratives can serve as a framework for designers to structure their projects and guide their decision-making process. By thinking in narratives, architects can specify the program and necessities of a design task, giving physical shape to the processes and experiences it needs to accommodate.

The utilization of narratives in architectural design has been explored by various firms and designers. For example, Amsterdam-based firm Heren 5 uses storytelling by residents as a way to explore the genius loci or spirit of a place. By incorporating narratives into their analysis process, they create more meaningful and contextual places.

Understanding and mastering storytelling as an architect not only embeds buildings into their environments but also turns them into landmarks that capture the spirit and history of their locations. It allows architects to think bigger, capture clients' needs, and express them through design presentations.

In conclusion, narrative thinking plays a crucial role in heritage building design by shaping not only the physical form but also the deeper meanings associated with these structures. Examples such as the 'Sai Mandir' Temple demonstrate how narrative thinking can bridge the gap between contemporary architecture and historical narratives. By incorporating narratives into the design process, architects can create more meaningful and contextually relevant buildings. Furthermore, narratives serve as a framework for structuring designs and guiding decision-making processes, ensuring that the resulting buildings reflect their surroundings while preserving their own identities. references: [1], [2], [3], [4], [6], [7], [8], [9], [10].

Principal architect of the SEA Hari Krishna has never constructed a temple and is neutral about faith and customs. 'Lack of experience or views about religion did not impede the design,' he insists. 'Any sensitive designer can evoke the sense of the sacred by remaining alert to the relation between nature and architecture. Light, scale and site-specific natural features are critical to achieving this'.

Krishna kept most of the conventional features of a temple when designing the Sai Mandir. The temple's features include towers over the sanctuary, articulated gateways, axial entry signaling a sequential movement to the sanctum, orientation to cardinal directions, and boundary walls that clearly define the sacred space. Shown in the figure below narrative thinking plays a crucial role in heritage building design by Daniel Libeskind Jewish Museum- Collective Memory and Memorial-Making in this project. This is particularly true of historical pasts that include the stain of mass traumas like genocide. Tiremembrance engendering shame, doubt, or feelings of guilt" in a way that prevents a difficult past from being avoided and makes it notably relevant to the present in collective memory-making processes.



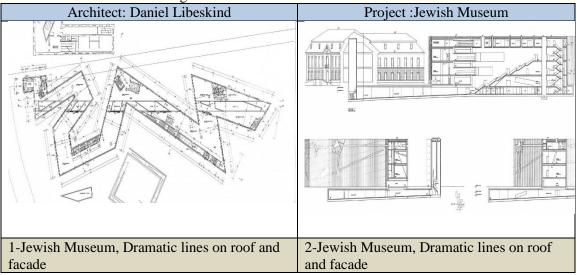
Figure 1: Source: osmartbricks.com/sai-mandir-vennached-made-out-of-porotherm-bricks-by- s.. (source: reference [1]) Shown in the figure above.



Figure 2: Source: osmartbricks.com/sai-mandir-vennached-made-out-of-porotherm-bricks-by-s... (source: reference [1]) Shown in the figure above

Reading a Museum as a Text In order to analyze I employ performative and rhetorical theory as the theoretical foundation for my analysis of the Jewish Museum Berlin. Because it clarifies how this space encourages social action in its particular local context, a rhetorical reading positions the act of memorialization as a social genre. First of all, by emphasizing circumstances and opposing viewpoints, these spaces enable evaluation and interpretation, which makes them rhetorical (Blair, Dickinson, and Ott 2).9. Making "an event of the past—what the memorial marks—relevant to the needs and desires of the memorial's own present" is still "one of the most profound rhetorical challenges faced" by the designers of these places, therefore reading them in this way is essential to the creation of public memory. [25] [26]

Table 2: Shown in the figure below







3-Voids symbolize the emptiness in the Jewish museum

4-Continuous lines and scars through the interior of the museum

Table 2: Voids symbolize the emptiness in the Jewish museum Structuring is mainly useful for the designer himself, since it structures the design method, as a sort of umbrella, a leading concept from which design decisions can be taken. The third role, framing, affects the designers task of manipulating the perception of the observer more and is discussed next. Framing A third role for narratives involves what the designer shows the observer. It implies the power of designers to manipulate the perceptions of observers. According to the narratology narratives are a series of chronological events connected with (source: reference [22) [25) [26)

Table 3: Shown in the figure below

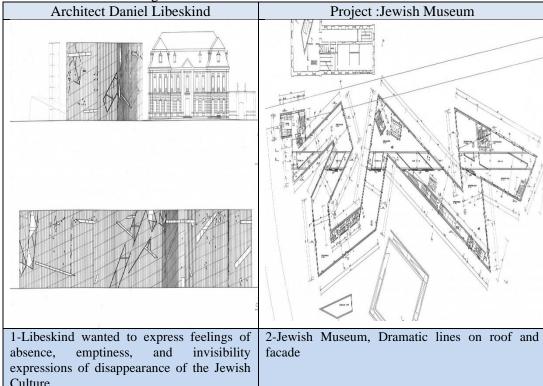


Table 3: https://www.archdaily.com/91273/ad-classics-jewish-museum (source: reference [22])

2.3. Discussion on how narrative thinking enhances the design process

Narrative thinking is crucial in the architectural design process, especially for heritage buildings. It allows designers to create meaningful spaces by incorporating storytelling elements. Architectural narrative, design narrative, and spatial narrative have subtle differences but are all important in their respective fields. Mainstream architectural practice often overlooks participation and client involvement, which needs to be addressed in education. Phenomenological thinking and pragmatic theory provide a theoretical foundation for narrative thinking in design. Integrating narrative thinking into architectural education through research by design has shown positive outcomes. Narratives help structure the design process and can combine modernistic and romantic approaches. Storytelling is not limited to public buildings and can enhance residential architecture. Architects who embrace storytelling can attract like-minded clients and increase client satisfaction. Storytelling sets great architects apart and captures the spirit and history of a location. Incorporating storytelling as an architect can help grow business and increase value proposition: [1], [3], [4], [6], [7], [8], [9], [10].

3. Enhancing narrative thinking as a design strategy in historical buildings

3.1. Exploring dimensions and techniques used to enhance narrative thinking

Exploring dimensions and techniques used to enhance narrative thinking as a design strategy in historical buildings requires an understanding of the importance of narratives in architecture. Narratives have long been used to convey knowledge and shape identities, starting from childhood fairy tales to adult experiences. In the context of architectural design, narratives can play multiple roles.

The first role is that of linking, which emphasizes the relevance of narratives in connecting humans to their environment and helping them form identities. According to narrative psychology, our consciousness occurs through stories, and our thinking, interpreting, imagining, and decision-making happen within narrative structures. By incorporating narratives into architectural design, architects can create spaces that evoke meaning and resonate with individuals on a personal level.

Another role is structuring, which involves adding a certain structure to the way we experience things. By thinking in narratives, architects can specify the program and necessities of a design task and give physical shape to the processes and experiences that the building will need to house. Narratives act as a core story from which everything else is framed or hung upon, providing clarity and coherence to the design process.

Framing is another important role played by narratives in architectural design. It allows architects to express and convey narratives towards users by creating realistic stories of use. By imagining the stories that could unfold within buildings during the design process, scenarios can be created that explore possible experiences. This method brings together both functional considerations (form follows function) and emotional engagement (form follows fiction), resulting in dynamic and time-based designs.

Architectural storytelling goes beyond mere aesthetics; it enriches the built environment with meaning and purpose. Just as every building has a story to tell, narratives help embed each architectural project into its cultural context. The ability to construct compelling narratives distinguishes talented architects who turn their projects into landmarks.

In conclusion, enhancing narrative thinking as a design strategy in historical buildings involves utilizing various dimensions and techniques. By understanding how narratives link individuals to their environment, structure experiences, and frame design concepts, architects can create spaces that are not only visually appealing but also resonate with users on a deeper level. Narrative thinking encourages critical, empathetic, and democratic attitudes in architectural practice, preventing architects from becoming disconnected from the needs and desires of the clients. Through narratives, architecture

becomes a powerful tool for storytelling and preserving the heritage of our built environment. references: [1], [4], [6], [8], [9], [11], [12]. Shown in the figure below.



Figure 2: Infill problematic design. (source: reference [6]) Shown in the figure above.

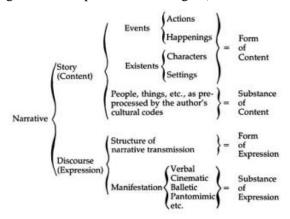


Figure 3: Chatmans Model, 1987. Narrative consists of story and discourse (source: reference [8]) Shown in the figure above

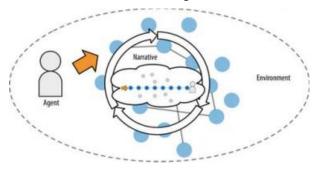


Figure 4: Narratives, the link between us and our context (source: reference [8]) Shown in the figure above

3.2. The role of the designer in producing architectural patterns that communicate the context of the place

The role of the designer in architectural patterns that communicate the context of historical buildings is crucial. Contextual design types, such as alteration, addition, and infill, present challenges and opportunities. Designing in relation to the context, or contextualism, is a way to resolve this problem. The Natural History Museum of Denmark is an example of seamlessly integrating with the historical context by placing most of the building underground and using clear glass materials for transparency. Narrative thinking is significant in architectural design as it allows for storytelling through built environments. Architectural storytelling goes beyond functionality and conveys messages, evokes emotions, and immerses individuals in a narrative experience. Architects serve as narrators, shaping space and time through their designs. Different roles of narratives can be used in architectural design, including linking, structuring, and

framing narratives. The use of narratives in design practice has been observed in various architectural firms. In conclusion, narrative thinking plays a vital role in enhancing design strategies for historical buildings. references: [1], [3], [4], [6], [8], [9], [11], [12].

The role of the designer in architectural patterns that communicate the context of historical buildings is crucial. Contextual design types, such as alteration: Reviewers and academics have variously characterized it as possessing a "sense of presence," a "atmosphere," "evoking mystery," promoting experiences of the "spiritual," "transcendence," even of the "sacred," and "leading] towards the holy." [23], [24], Shown in the figure below

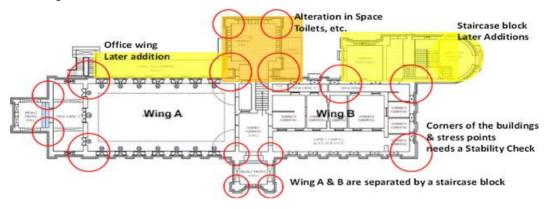


Figure 5: Restoration of Heritage Building Council Hall, Pune, India, Contextual Design Types. (source: reference [6]) Shown in the figure above.



Figure 6: The British Museum in London is dedicated to human history and culture. (source: reference [6]) Shown in the figure above.



Figure 7: The disappearance of the added architectural work and raising some parts to contrast with the context. (source: reference [6]) Shown in the figure above.

Narritve Thinking architecture

Kolumba musem

Peter Zuthuor

I-he museum houses the Roman Catholic Archdiocese's collection of art which spans more than a thousand years

2-Zumthor's design delicately rises from the ruins of a late-Gothic church, respecting the site's history and preserving its essence.

3-They believe in the inner values of art, its ability to make us think and feel, its spiritual values.

Table 4: The Kolumba musemin in Cologne, Germany, is dedicated to human history and culture(source: reference [23]) [24])

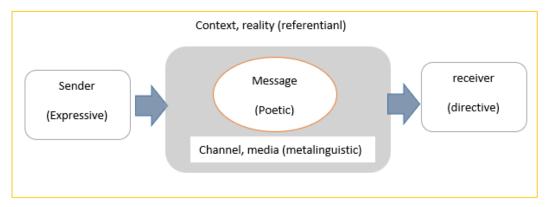


Figure 8: Roman Jakobsons communication model(source: reference [21]) Shown in the figure above.

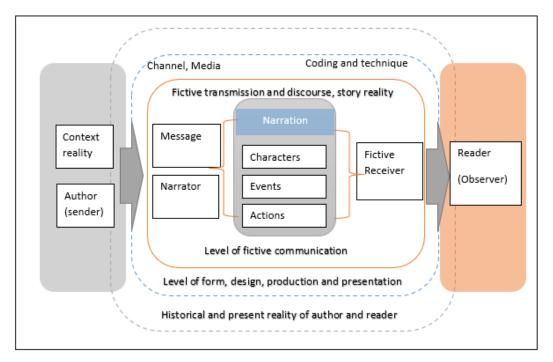


Figure 9: model for narrative communication (source: reference [21]) Shown in the figure above.

3.3. Case studies showcasing successful implementation of narrative thinking in historical buildings

Case studies showcasing successful implementation of narrative thinking in historical buildings for enhancing narrative thinking as a design strategy in historical buildings are essential to understand the impact and potential of this approach. One such case study is the 'Sai Mandir' Temple by SEA architects in Hyderabad. This temple beautifully straddles the world of memory and history, perfectly fitting into contemporary architecture while following the historical narrative of Shakira Style of the North Indian temple. The architects have invoked the cultural and historical narrative through the design, shaving out ornamentation that connects the present with the past.

Another example that highlights the power of narrative thinking is the Natural History Museum of Denmark, designed by Kengo Kuma & Associates, Erik Mller Arkitekter, and JAJA Architects. This museum proposal focuses on creating a coherent and inseparable experience by blending conventional museum experiences with classical garden elements. The location within the historical setting of the city's botanical garden adds authenticity and engagement to the museum's design. The architects have successfully integrated narratives into their design ideas, such as the disappearance of added architectural work to maintain and conserve the character and vision of the historical context.

In addition to these case studies, it is important to understand how narratives can be relevant to architectural design in various contexts. Architectural storytelling goes beyond memorials and public buildings; it can also be applied to residential architecture. By expressing ideas through clear and accessible narratives tied to existing cultural references, architects can satisfy clients' needs while growing as storytellers.

The roles of narratives in designing built environments are crucial for linking humans to their surroundings, forming identities, structuring designs, framing experiences for users, creating scenarios for possible experiences, and preserving consistency when designating monuments or transforming historic buildings. By incorporating narratives into their design processes, architects can create meaningful connections between people and their environment.

Overall, narrative thinking plays a significant role in enhancing heritage building design. Through successful implementation showcased in case studies and a deeper understanding of the relevance and roles of narratives in architectural design, architects can create buildings that not only serve their functional purpose but also tell compelling stories that resonate with people. This approach not only enriches the cultural and material heritage but also elevates the reputation and value of architects who embrace narrative thinking, references: [1], [4], [6], [8], [9], [11], [12], [14].

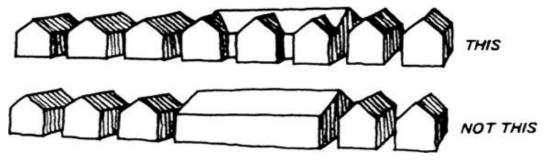


Figure 10: Reproduction of the historical building. (source: reference [6]) Shown in the figure above.

4. Challenges and considerations in implementing narrative thinking in heritage buildings

4.1. Potential conflicts between preservation and storytelling objectives

When implementing narrative thinking in heritage building design, there can be potential conflicts between preservation objectives and storytelling objectives. Preservation aims to maintain the historical integrity and authenticity of a building, while storytelling seeks to engage visitors and convey a narrative or story. These objectives can sometimes clash, requiring careful consideration and balancing of priorities.

One challenge in implementing narrative thinking is the alteration of the original facade of a building. In order to accommodate historical use behind the facade, alterations may be necessary. However, these alterations must be carefully executed to ensure they are in harmony with the original building and do not compromise its historical value.

Another challenge is the addition of new wings or structures adjacent to existing heritage buildings. While these additions can enhance visitor experience and provide additional space for education and services, they must be designed in a way that seamlessly integrates with the original building. The new and old structures should complement each other rather than detract from the historical character.

Infilling is also a consideration when implementing narrative thinking. Designing a new building among a group of existing buildings with similar characteristics requires careful attention to maintaining consistency while also incorporating elements that contribute to the overall narrative or story being told.

The preservation of architectural heritage often involves adherence to regulations and guidelines set forth by governing bodies. However, these regulations may not always be coercive but rather recommendatory in nature. This lack of enforcement can pose challenges in ensuring that preservation efforts align with storytelling objectives.

Furthermore, changes in the external form of architectural heritage can impact its identity and present-day value. The preservation and restoration of various components such as roofs, walls, windows, and decorative elements must be approached with careful consideration for maintaining authenticity while still allowing for necessary repairs or modifications.

In order to successfully implement narrative thinking in heritage building design, it is crucial to strike a balance between preserving historical integrity and engaging visitors through storytelling. This requires collaboration between architects, preservationists, historians, and other stakeholders to ensure that the narrative objectives do not compromise the preservation goals. By carefully interpreting existing elements, maintaining historical context, and incorporating storytelling elements in a respectful manner, heritage buildings can be transformed into immersive experiences that educate and inspire visitors while preserving their valuable historical significance, references: [2], [6], [10], [15], [19].



Figure 11: The disappearance of the added architectural work and raising some parts to contrast with the context. (source: reference [6]) Shown in the figure above.

4.2. Balancing modern architectural needs while honoring historical significance

Balancing modern architectural needs while honoring historical significance presents a unique challenge when implementing narrative thinking in heritage building design. The goal is to create a harmonious relationship between the new building and the historical context, while preserving the character and vision of the original site.

One practical example of this approach is seen in the Smithsonian Campus Master Plan for Washington DC. Designed by Bjarke Ingels Group (BIG), this plan aims to improve visitor services, create clear entrances and connections, and replace aging mechanical systems. To maintain the historical context, nearly 90% of the buildings are located underground, allowing unobstructed views of surrounding historical structures. However, to avoid losing the museum's personality within the context, parts of the building are raised above ground with transparent glass materials, providing a contrast with the surroundings and allowing visitors to view the historical context through this unique feature.

Another example is the Natural History Museum of Denmark designed by Kengo Kuma & Associates, Erik Mller Arkitekter, and JAJA Architects. This museum is seamlessly integrated into a historical botanical garden, aiming to create an authentic and engaging experience for visitors. Like the Smithsonian project, significant portions of this building are also located underground to preserve the independence and character of the historical context. However, some parts of the museum are raised above ground level using clear glass materials to maintain its identity while contrasting with its surroundings.

When dealing with contextual design problems such as alteration, addition, or infill within heritage buildings or new constructions among them, different strategies can be employed. These include compatibility by copy/reproduction or congruence/harmony through abstraction of original details from historical context. Contrast can also be used to make old buildings new again or disappearing architectural work can be employed for compatibility purposes.

Narrative thinking plays a crucial role in achieving balance between modern needs and honoring historical significance in heritage building design. By recognizing and analyzing stories behind existing buildings and areas, designers can tap into their rich

potential and incorporate these narratives into the design process. This ensures continuity, respects the existing character, and preserves consistency within the community's memories.

Preserving and promoting historic buildings not only adds character to an area but also brings economic benefits. Older buildings are often made with higher quality materials that are no longer readily available. Additionally, they were built to last longer than newer constructions. Rehabilitating these buildings to their original appearance can attract investment and tourism, revitalizing entire neighborhoods.

In conclusion, implementing narrative thinking in heritage building design requires a delicate balance between modern architectural needs and honoring historical significance. By carefully considering the context, architects can create harmonious relationships between new and old structures while preserving the character and vision of the original site. This approach not only adds value to the built environment but also contributes to economic benefits and the overall identity of a community, references: [6], [8], [14], [15], [18], [19].

5. Conclusion

5.1. Recap of the impact of narrative thinking on heritage buildings

In conclusion, the influence of narrative thinking on heritage building design is evident in the way architects and designers utilize narratives to create more meaningful and contextual places. By incorporating narratives into their design process, these professionals are able to tap into the rich history and stories associated with existing buildings, allowing them to create or rewrite a main storyline that boosts redevelopment.

One key role that narratives play in our built environment is the preservation of strong characteristics and the maintenance of consistency. When transforming buildings or neighborhoods, it is important to blend in with the existing character in order to respect and justify people's memories. By integrating stories into a building's design, architects can create a level of meaning and connection with the user, providing an area with landmarks that contribute to a sense of identity.

Architectural firms have employed various working methods to incorporate narratives into their designs. For example, firms like Heren 5 use spoken narratives by conducting qualitative interviews with focus groups to understand the needs and demands of future residents. These methods have different qualities depending on the goals of the project, but they all aim to structure the design in a way that incorporates narrative elements.

However, it is important to note that defining narratives within the context of architectural design can be challenging due to multiple interpretations and stakeholders involved. The lack of a clear universal definition adds complexity to the research process. Nevertheless, this study has provided valuable insights into how narratives can be utilized in design processes.

To fully consider narratives as a worthy extension of architectural analysis, further research is needed. This research should evaluate the success of different narrative-driven design methods used by architects. Understanding which methods are more or less successful and why will provide valuable insights for future architectural projects.

In conclusion, narrative thinking has a significant impact on heritage building design by allowing architects and designers to tap into rich historical contexts and create meaningful connections between buildings and their users. By incorporating narratives into their designs, these professionals can preserve strong characteristics while also providing new developments with a sense of identity and continuity. Further research is needed to fully explore the potential of narratives in architectural design and to determine

the most effective methods for incorporating narrative thinking into the design process, references: [3], [8], [9], [10], [13], [14].

5.2. Importance of enhancing narrative thinking as a design strategy for future historical buildings

The importance of enhancing narrative thinking as a design strategy for future historical buildings cannot be overstated. Narrative thinking allows architects to create a deeper level of meaning and connection with the users of these heritage buildings. By integrating a story into the design, architects can combine the positive aspects of romanticism with rationalism, resulting in a more successful environment.

In order to understand how narratives can be effectively used in architectural design, it is crucial to examine the working methods of architectural firms. Different firms employ various methods depending on their goals and objectives. For example, Heren 5 works with spoken narratives, conducting qualitative interviews with focus groups to understand the needs and demands of future residents. These narratives are then summarized in drawings, leading to new and unexpected ideas.

However, it is important to note that there is no universal definition of what constitutes a narrative in architecture. The interpretation and understanding of narratives can vary among different stakeholders such as narrators, readers, and authors. This complexity makes it challenging to determine how exactly narratives should be used in the design process.

Further research is needed to evaluate the success of different narrative-driven design methods used by architects. This research should consider factors such as when and at which scale these methods should be employed in specific situations. Understanding the pros and cons of each method will provide valuable insights for future architectural projects.

Historical buildings play a significant role in preserving a nation's history and architectural heritage. Their unique architecture and design allow people to experience different historical eras and styles. By preserving these buildings, we can gain insights into how people lived in the past and appreciate the craftsmanship and techniques used during those times.

Moreover, historical buildings serve as an attraction for local residents. Their charm lies in their distinctiveness compared to modern structures. When people encounter an old building amidst newer ones, their attention is immediately drawn to its character and history.

Preserving historic buildings also offers lessons and motivation for future generations. By learning from the mistakes and difficulties faced by previous generations, we can make progress and avoid repeating those errors. History should not hinder a nation's development but rather inspire and guide its progress.

In conclusion, enhancing narrative thinking as a design strategy is essential for the future of heritage building design. By incorporating narratives into architectural projects, architects can create meaningful connections with users and evoke a sense of history and place. Further research is needed to evaluate the effectiveness of different narrative-driven design methods. Ultimately, preserving historical buildings allows us to appreciate our past, maintain our architectural heritage, and inspire future generations, references: [3], [6], [8], [10], [13], [14], [16], [17].

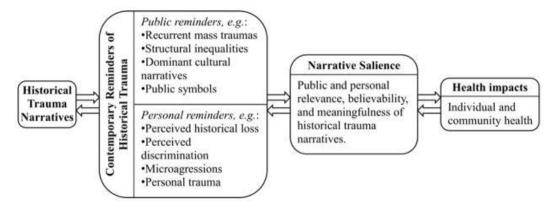


Figure 12: Narrative Model of How Historical Trauma Impacts Health: Public narratives connect historical traumas to health impacts through public and personal contemporary reminders and the degree of narrative salience. Each stage of the narrative model is recursively influential of the connecting stages. (source: reference [17]) Shown in the figure above.

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