

Decolonization Effects in Contemporary Australian Cities: A Case Study of Ultimo Power Station, Sydney

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Abstract: As a colonial country, the advent of colonialism brought about rapid urbanization and industrialization in Australia. However, it also brings negative impacts. Decolonization is becoming a concern of the people. The research aims to delve into the topic of decolonization efforts in contemporary Australian cities in depth and redefine decolonization from a new perspective. Taking the Ultimo Power Station as an example, this report would draw upon various forms of evidence, such as maps, photographs, interviews, and collages, to analyze the colonial problems, as well as depict and design a vision of the future of decolonization and multiculturalism of Australian urban development. This report analysis the case of Ultimo Power Station in Sydney, providing a lens through which to explore these processes incorporating indigenous design principles and practices into urban and architectural planning and work towards a more equitable paradigm for all groups of peoples, especially the indigenous communities in Australia.

Keywords: decolonization, ultimo power station, Sydney

1. Introduction

As a colonial country, Australia experiences rapid urbanization and industrialization by the advent of colonialism. However, colonialism also brings negative impacts on the country. Recently, there has been a growing awareness of the importance of the decolonization process of contemporary urban planning and architectural design in Australia. It is urgently needed to address the impacts of colonization on the local urban contexts by educating the wider public about indigenous history, culture, and perspectives in Australia's modern cities. In this report, the redesign and its related strategies of the museum is regarded as a revolution of educational method as it is providing an interactive and democratic space. These design interventions, considering the multiscale, should connect the political scale to the environmental scale of the cultural landscape, to create a holistic approach to sustainable development [1].

Ultimo Power Station Museum, situated in the inner-city suburb of Ultimo in Sydney, has a multifaceted history that broadly mirrors the wider colonial legacy in Australia [2,3]. It was a power station built in the late 19th century, which played a significant role in powering Sydney's growth during the Industrialization process in Australia. Nevertheless, same as many other infrastructure projects during that time, it was built on Indigenous land without the consent or consultation of the

traditional owners. With the utilization of diverse forms of evidence and a critical lens, this report aims to shed light on the complexities of decolonization processes and their implications for Australian cities.

Based on a refined and thoughtful analysis of the case of Ultimo Power Station in Sydney, this report illustrates its historical and cultural meaning and the subsequent establishment of the Power Station Museum. Through a multi-faceted approach that includes maps, photographs, interviews, and collages, this report also provides a nuanced and comprehensive understanding of decolonization and its significance in the context of modern cities in Australia, to promote awareness, education, and construction of infrastructure towards a more just and inclusive future.

2. Background

2.1. Colonialist Culture

Sydney, as a bustling metropolis, and major coastal economic hub in Australia, has a colonial past dating back to the late 1700s. The advent of colonialism brought about rapid urbanization and industrialization, propelling the city toward economic growth and development.

However, it also brings negative impacts. One of the major drawbacks of colonialism in Sydney was the marginalization of the Aboriginal people. The discriminatory policies and practices of the colonial government led to the destruction of Aboriginal culture and language, hindering the development of multiculturalism in Australia. Consequently, Australian society has largely been influenced by British culture and traditions, resulting in a relatively homogenized cultural landscape. Nevertheless, the idea and the colonial desire that urbanization would erase Indigeneity is not only incorrect but turned upside down [4].

2.2. Industrialization

Another notable feature of Sydney's colonial history was the development of heavy industry, which transformed the city into a major manufacturing centre. The growth of heavy industry played a vital role in the country's economic progress, providing employment opportunities and boosting trade. However, this development came at a significant cost to the environment. The rampant deforestation, pollution, and ecosystem destruction caused by industrialization had severe and long-lasting impacts on the natural world and local urban context.

2.3. Case Study

The Ultimo Power Station, located in the heart of Sydney near Darling Harbour, is a notable building from the colonial period (Figure 1). Constructed in 1899, the power plant served as a prominent electricity supplier for central Sydney and represented the city's burgeoning heavy industry [5]. However, the plant's operations also generated significant amounts of carbon dioxide, contributing to severe pollution in the local environment. As urban planning and economic structures changed in central Sydney, the Ultimo Power Station ultimately ceased operations in 1963. After a period of abandonment, the building underwent renovations in the 1980s and was transformed into a vibrant cultural and arts centre known today as the Ultimo Power Station Museum.

The Ultimo Power station Museum has evolved into a contemporary museum that showcase extensive collection and dynamic exhibition programming encompass a broad range of topics, including science, technology, design, decorative arts, social history, and Indigenous culture. [6,7]. The museum boasts a remarkable collection of over 500,000 items that have been curated over 125 years, spanning Australia's social history, science, technology, design, decorative arts, transport, and space exploration. Presently, the museum hosts dynamic rotating exhibitions, featuring a range of

themes, such as Aboriginal stories, contemporary fashion, photographic competitions, and school holiday programs. Notably, the museum's exhibits predominantly focus on machines that powered industry or transport, with an entire floor dedicated to the theme of the steam revolution. However, the museum also has displays from different cultures, such as the Clay Dynasty section on the ground floor, which showcases clay works from Aboriginal, Asian, and various other cultures.



Figure 1: The old site of the Ultimo Power Station.

3. Methods

3.1. Images Comparison and Analysis

3.1.1. Cultural Maps

The historical maps of the city are used in this study. It could not only be used to track the distribution of resources over time, but also to gain insight into the perspectives of cartographers and the technological capabilities of their era. For instance, the mid-19th century map of Sydney delineates Ultimo as a remote area situated at a considerable distance from the city centre. However, the construction of railways subsequently transformed the locality into a bustling and prosperous district. Comparing maps from different periods could also indicate power and resources evolution.

3.1.2. Photographs

Through photographs, the comparison can be useful in understanding the layout, functionality, aesthetic qualities, and especially the decolonization level of the environment. For example, these photos (Figure 2) help to evaluate the accessibility of design with the evidence of pedestrian-friendly features, such as sidewalks, crosswalks and bike lanes. It also evokes the architects about the texture,

material, and forms of the whole project and their contribution to the overall visual impact of the design.



Figure 2: The comparison between the Exterior spaces and different exhibits of Power Station Museum.

3.1.3. Exhibitions

The city maps provide valuable insights into the power dynamics, resource distribution, and knowledge production that have shaped the history of Ultimo and the surrounding areas. This section aims to illustrate the methodologies and core concepts used in comparing maps drawn at various points in time and to demonstrate how these tools can be employed to analyze this building on a smaller scale.

3.2. Interviews

A recent interview was conducted at the Ultimo Power Station Museum, where a diverse group of interviewees was involved, including the visitors, the management team of the museum, and the government staff. The primary focus of the open interview was to understand people's feelings about the museum and the aspects that needed to be improved. These interviews are also helpful to the museum, which plans to evaluate visitor response at every phase of exhibit design, development, and revision [2].

Generally, it is also important to critically analyze all the information collected from these interviewees to avoid adopting extreme or impractical strategies in the future. For professional research, the street interview also has its limitations. As a professional with relevant knowledge, the interviewer's interviewing methods and opinions may influence the expression of the interviewee's viewpoints to some extent. However, this is difficult to avoid, as interviewees may find it challenging to logically articulate the underlying causes of certain phenomena or even recognize the existence of issues within their own surroundings. However, the interview is essential because this will ensure that any changes made to the museum's design and exhibits are based on a comprehensive understanding of diverse perspectives and needs, which are aligned to create a more inclusive and enjoyable experience for all visitors.

4. Results

4.1. Analysis of Cultural Maps

A sequence of maps visually documents the evolution of the area from a barren wasteland to an industrial hub, and finally to a modern city centre replete with verdant parks and greenery. This transformation could be interpreted as emblematic of the decolonization process and economic development that has unfolded within the Ultimo precinct over time (Figure 3). The diagrams in the top right-hand corner are cited to mirror the relationship between the resource's distribution and maps.

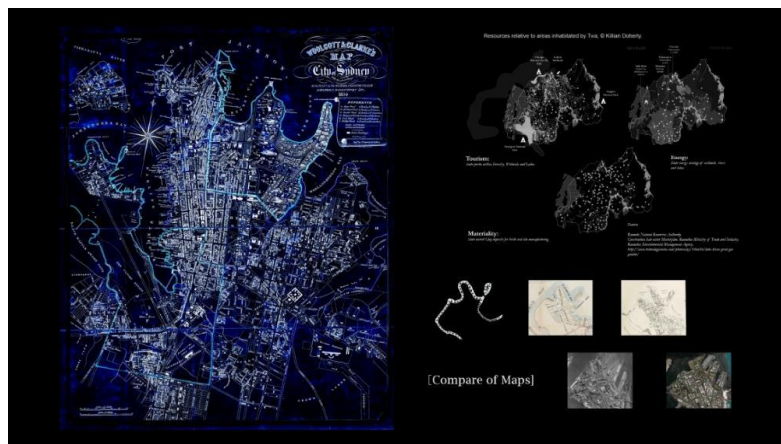


Figure 3: The transformation processes of the Ultimo Power Station [1].

4.2. Comparison of Photos

The exterior spaces of the Ultimo Power Station have experienced significant changes, as evident in these photographs (Figure 4). Despite the retention of partial rails, this public space has been decolonized with the introduction of new facilities. For instance, the platform has been made available to the public with free access for everyone, including families, and disabled individuals who can easily use the ramp to navigate the area. Furthermore, installing seats and other facilities creates a more comfortable environment for visitors to relax and enjoy the surroundings.

One of the most noticeable additions to the exterior space is the greenery planted throughout the area. This provides a welcome oasis from the urban environment, introducing natural elements to the site. The introduction of plants and trees not only creates a more pleasant environment for visitors, but also promotes environmental sustainability, making the site eco-friendlier.

The interior photographs reveal that the museum has replaced all the industrial machinery of the colonial period with exhibits showcasing the development of transportation (Figure 5). However, only the truss structure remains, reminding visitors of the museum's history as a factory.

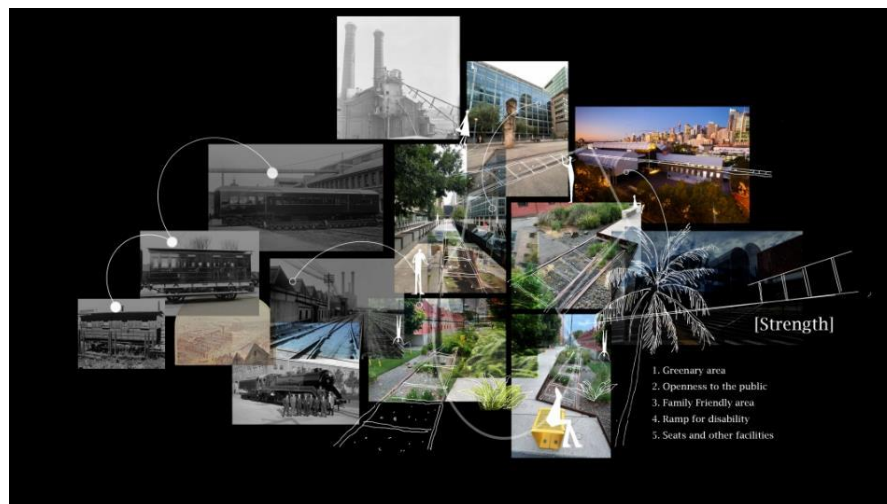


Figure 4: Photographs of exterior spaces in the Ultimo Power Station.



Figure 5: The interior photographs of the museum.

4.3. Analysis of Exhibits

Figure 6 shows the layouts of part of the exhibits in the museum. Industrial products are generally larger in size compared to art masterpieces. As a result, the size of these exhibits affects how they are displayed. For instance, porcelain pieces are usually not on permanent display and are rotated periodically, despite embodying profound cultural and artistic value. However, the large volume of facilities left behind by the industrial era makes them difficult to relocate, which is precisely why they can be exhibited over the long term. By comparing the sizes of exhibits related to the Clay Dynasty and the plane, a kind of industrial legacy, it is possible to reveal the power relationships between indigenous or multicultural communities and the post-industrial social system. The accompanying figure provides a visual representation of the storytelling methods of this museum, highlighting the systemic industrial forces that can overpower individuals and related multicultural backgrounds.

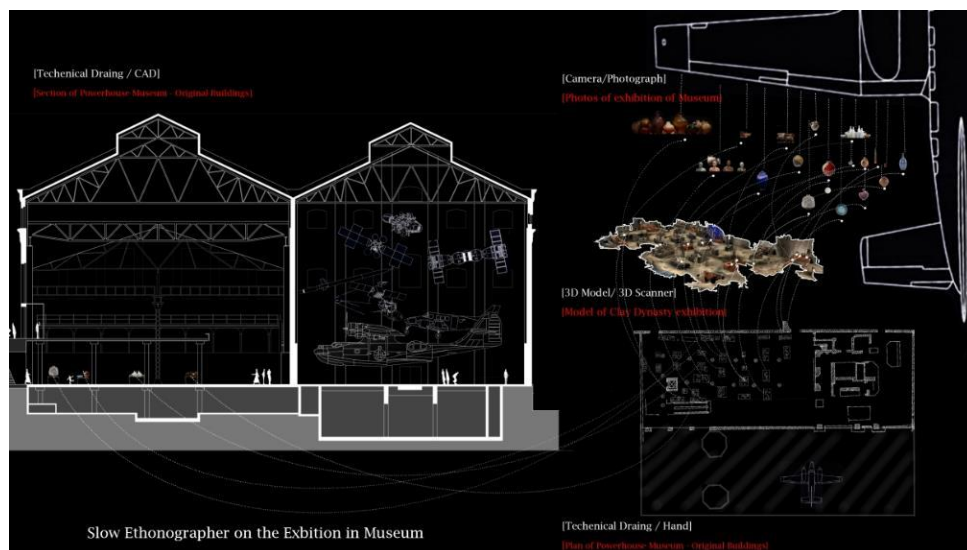


Figure 6: The layouts of part of the exhibits in the museum.

4.4. Interviews Results

Several visitors at the Power Station Museum were recently interviewed to gather insights for a more inclusive and democratic design process for the entire project. During the interviews, a few Chinese girls expressed that they did not want to take selfies in certain museum areas but were initially unable to articulate the reasons. However, with the interviewer's guidance, they could describe issues such as poor lighting conditions and inadequate consideration in layout of exhibits that affected their experience negatively. The museum's theme is not adequately communicated to visitors, confusing the exhibition's start and endpoints. Another issue is the absence of signs, making it difficult for visitors to understand the building's layout and circulation. This lack of clarity can make it challenging for visitors to navigate the museum and detract from their overall experience. Additionally, during the conversation, it was noted that the museum would benefit from having more interactive infrastructure to enhance visitors' experiences and make the museum more enjoyable. This lack of interactivity contributes to the museum's unfavourable impression among visitors.

In another case, an Aboriginal girl shared her ideas that she found the museum to be perfect as it is, appreciating the amazing history that it represents and feeling that no changes were necessary. The subsequent inquiry pertained to the extent of the Aboriginal girl's knowledge regarding the colonial history of the museum. Her response indicated that she possessed familiarity with the subject matter.

This response was unexpected and differed from what was anticipated, as it was based on the understanding that the museum of Ultimo still has a long way to go in decolonization, and the indigenous community would express dissatisfaction with the current state of affairs. The unexpected answer highlights the existed problems and potential reasons.

The unexpected answer from the aboriginal girl who expressed satisfaction with the museum's current state could be due to Indigenous individuals' differing perspectives and experiences regarding the decolonization process. Various factors, such as social background and education, may shape an individual's understanding and perception of colonialism and its impact.

5. Discussion

5.1. Process of Decolonization

The case study provides a comprehensive decolonization process undertaken in developing the Power Station Museum. It shows that the museum is transformed within the original Power Station factory but also the modernization and improvement of the facility in accordance with local culture and community. The museum features locomotives from the Ultimo Power Station, serving as a memory of the past, albeit as non-functioning exhibits. Additionally, unlike the colonial period when access to the Power Station factory was restricted, the museum is now freely accessible to all without limitation. In contrast to the cultural control exerted during the colonial period, the museum's exhibits show a more diverse range of cultures.

5.2. Current Problems of Decolonization

While the museum has made some changes to decolonize its space, significant areas still require improvement.

One of the issues contributing to this is the disjointed layout caused by unclear circulation and complex exhibits. The museum would benefit from a unifying story that links the exhibits, creating a cohesive and engaging experience for visitors. Additionally, the lack of permanent multicultural or indigenous exhibits is a missed opportunity to showcase diverse perspectives and histories. Furthermore, the museum's enclosed design creates a dark and uninviting atmosphere, which may contribute to its lack of popularity on the internet. Another area in need of improvement is accessibility. The current ramp and toilet facilities are not disability-friendly enough, which can be a significant barrier for some visitors. Ensuring the museum is fully accessible to everyone should be a top priority. Lastly, introducing visitors to green living styles and clean technologies could be an opportunity to educate and inspire change.

The museum is perceived as unengaging and unappealing due to a lack of interactive and entertaining facilities. Additionally, issues with the roof have been noted, as the walls have been observed to be damp due to leaks from the building's top. In light of these concerns, there is a need for museum managers to consider potential renovations or repairs.

From a visitor's perspective, the Power Station Museum is not considered a family-friendly space, as it fails to provide adequate interactive and entertaining facilities for visitors with children. To enhance the museum's appeal and accessibility to a wider audience, there is a need for the museum to prioritize the development of family-friendly spaces that cater to visitors of all ages. By creating an environment that is both educational and engaging, the museum can attract a broader range of visitors and offer a more fulfilling experience for families seeking to explore its exhibits.

During this interview at the museum, another visitor articulated their preference for an open space oriented towards the street, featuring a diverse range of shops specializing in arts products, and an outdoor café offering high-quality coffee. Nevertheless, the government staff acknowledged that such preferences fell outside the practical purview of the museum's design team, given that they pertained

to the museum's management and commercial operations. Although the openness to the public is an important impact to consider, the efficacy of the museum's operations is contingent upon a multitude of factors that exceed the ambit of the designers' proposals.

5.3. Suggestions

5.3.1. Redefine “Decolonisation”

From the previous description and discussion, it is evident that the redefined concept of decolonization involves recognizing and addressing the historical impact of colonization on land, communities, and Indigenous peoples. It also involves acknowledging their unique perspectives on understanding the world and granting them autonomy over the decolonization process [8]. It is far from simply disguising what has happened to the land in Ultimo. The proposal of redesign on the land is required to admit that history cannot be reversed, even through extreme measures such as demolishing heritage buildings or attempting to move indigenous communities back to the city centre. The destruction of historical heritage denies colonial history and its impact and fails to compensate for past wrongdoing. Forced relocation of indigenous communities to the city is inappropriate in contemporary society. Potentially, it would be another form of colonization, as the policy disregards their inherent rights to self-determination and autonomy. On the contrary, it should involve actively dealing with colonization problems by promoting social, economic, and environmental justice and democracy. To plan effectively with specific goals, the plan redefines decolonization as relocating resources, including museum exhibits, improving accessibility, and expanding green spaces. These proposed approaches and design strategies are required to make the museum and the surrounding area more democratic, sustainable, and equitable, contributing to a fairer and more just future.

5.3.2. Possible Development in Future

Currently, the functionality of the powerhouse museum is highly emphasized, but its environmental sustainability is lacking in its design. The adoption of a passive house design approach is suggested as a potential solution to address the aforementioned issue within the museum. This approach would incorporate large windows throughout the exhibition space to allow natural light to enter, thereby reducing the need for artificial lighting. Additionally, the museum should use environmentally friendly materials, such as renewable wood, bamboo, or even the indigenous sustainable materials instead of concrete and metal, in order to reduce the consumption of non-renewable resources and minimize the museum's carbon emissions. As designers not only utilize the physical characteristics of a material such as strength, appearance, texture, or longevity, but also manipulate the contextual connotations that are linked to cultural associations [9]. By implementing these changes, including using recyclable materials and redesigning the lighting, the museum can take a more proactive stance on environmental protection and promote decolonization.

One possible solution to the problem of visitors struggling with the museum's layout and circulation due to the lack of signs is to introduce a wayfinding system. This could be achieved through the installation of physical signs or digital displays placed strategically throughout the museum to provide clear directions and information about exhibits and facilities.

The museum's goal is to transform into an inclusive and inviting space by introducing greenery and trees throughout the area, creating a peaceful atmosphere in the busy urban landscape of Sydney. This vibrant community will unite visitors from diverse backgrounds and celebrate their distinct cultures and identities. The museum will act as a communication centre, promoting mutual understanding and appreciation among individuals. To decolonize modern Australian cities, like the Ultimo Power Station in Sydney, it is vital to acknowledge and redress colonization's historical and ongoing impacts on Indigenous peoples and their lands. Integrating indigenous perspectives and

knowledge into urban planning and development and increasing public education and awareness about indigenous history and culture. To achieve decolonization in museums, a practical approach would be to allocate greater exhibition space to permanent displays showcasing Indigenous cultures. Additionally, information panels could be incorporated to highlight the modernization and evolution of Indigenous cultures over time. By implementing these measures, museums can take significant steps towards decolonization and foster a more inclusive and equitable representation of Indigenous peoples and their heritage.

6. Conclusion

Through a range of data collection approaches and various source materials, this report demonstrates a study on decolonizing the city by reflecting on and assessing the Ultimo Power Station Museum in Sydney.

Overall, the significant transformation in the decolonization of the Power Station Museum is closely related to the decolonization, democratization and economic development of Sydney, the entire city. Evolved from its colonial origins as a power station, this museum is becoming a modern institution that embraces the indigenous and multicultural local communities and people worldwide. However, there are still areas where the museum can improve its service in terms of decolonization. The museum's progress demonstrates the transformative power, and its remaining challenges highlight the need for greater inclusivity and accessibility in the cultural and social sectors. Despite the design strategies mentioned above, the development of the design intervention also needs to be further explored.

References

- [1] Doherty, K. 2016. *Indigenous Perspectives: the Post-Conflict Landscapes of Rwanda*. Footprint, 151-156.
- [2] Chambers, W. and Faggetter, R. 1992. *Australia's Museum Powerhouse*.
- [3] McIlroy, J. 2018. NSW gov't forced to reveal case for powerhouse museum move. *Green Left Weekly*, (1177), 4.
- [4] Peters, E.J. and Andersen, C. eds., 2013. *Indigenous in the city: Contemporary identities and cultural innovation*. UBC Press.
- [5] Brady, F. 1996. *A Dictionary on Electricity*.
- [6] Miller, D. P. and Rudder, D. 2020. A 'revolver' evolving: the careers of a Boulton & Watt rotative steam engine at the Whitbread Brewery, London and the Powerhouse Museum, Sydney, 1784–2020. *The International Journal for the History of Engineering & Technology*, 89(1-2), 238-263.
- [7] Hicks, M. 2005. 'A whole new world': the young person's experience of visiting Sydney Technological Museum. *Museum and society*, 3(2), 66-80.
- [8] Datta, R. 2018. Decolonizing both researcher and research and its effectiveness in Indigenous research. *Research Ethics*, 14(2), 1-24.
- [9] Worden, S. 2009. Aluminium and Contemporary Australian Design: Materials History, Cultural and National Identity. *Journal of Design History*, 22(2), 151-171.