TOWARDS INCLUSIVITY: ENHANCING ACCESS TO OMAN’S PRIVATE HERITAGE HOUSE MUSEUMS FOR INDIVIDUALS WITH MOBILITY IMPAIRMENTS

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ABSTRACT

Objectives: This paper aims to investigate and assess the accessibility of Oman's private heritage house museums for individuals with mobility impairments. The study focuses on two case studies, namely Bait Al Zubair Museum and the Place and People Museum, to examine the level of inclusivity and the effectiveness of Omani legislation in addressing accessibility concerns.

Method: The research is conducted through a comprehensive analysis of the two selected case studies. Three main areas are investigated: (a) the accessibility provided for individuals with mobility impairments, (b) the relevance of Omani legislation concerning accessibility, and (c) the extent to which these historic sites align with the United Nations Sustainable Development Goals (SDGs) regarding inclusivity.

Results: The findings indicate that although Bait Al Zubair Museum has made efforts to accommodate individuals with mobility impairments in both its external and internal environment, there are still some challenges related to internal accessibility. On the other hand, the Place and People Museum faces significant obstacles both externally and internally, significantly impeding the enriching experience for visitors with mobility impairments. Furthermore, the study highlights that while existing Omani legislation emphasizes the rights of individuals with physical disabilities, it lacks specific legislative tools and policies dedicated to accessibility in museums and heritage sites.

Conclusions: This paper emphasizes the importance of enhancing inclusivity in Oman’s Private Heritage House Museums for Individuals with Mobility Impairments. To achieve this, implementing comprehensive accessibility policies and collaborating with disability organizations are recommended. Additionally, creating educational programs on disability awareness can promote public understanding and sensitivity. By prioritizing inclusivity and accessibility, these museums can enrich cultural experiences for all visitors, fostering a sense of belonging and social cohesion. Aligning with the UN SDGs, such measures contribute to sustainable development and cultural preservation, ensuring equal opportunities for all individuals to access and appreciate the country's cultural heritage.

Keywords: Heritage house museums, disability, mobility impairment, inclusivity, accessibility, legislation, Oman.

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EM DIREÇÃO À INCLUSÃO: MELHORAR O ACESSO AOS MUSEUS DA CASA DO PATRIMÔNIO PRIVADO DE OMÃ PARA INDIVÍDUOS COM DEFICIÊNCIAS DE MOBILIDADE

RESUMO

**Objetivos:** Este artigo tem como objetivo investigar e avaliar a acessibilidade dos museus de casas de patrimônio privado de Omã para indivíduos com deficiência de mobilidade. O estudo se concentra em dois estudos de caso, a saber, o Museu Bait Al Zubair e o Museu do Lugar e do Povo, para examinar o nível de inclusão e a eficácia da legislação omani em lidar com questões de acessibilidade.

**Método:** A pesquisa é realizada através de uma análise abrangente dos dois estudos de caso selecionados. São investigadas três áreas principais: (a) a acessibilidade proporcionada a indivíduos com deficiências de mobilidade, (b) a relevância da legislação omani em matéria de acessibilidade e (c) até que ponto estes sítios históricos se alinhem com os Objetivos de Desenvolvimento Sustentável (ODS) das Nações Unidas em matéria de inclusividade.

**Resultados:** As descobertas indicam que, embora o Museu Bait Al Zubair tenha se esforçado para acomodar indivíduos com deficiências de mobilidade em seu ambiente externo e interno, ainda há alguns desafios relacionados à acessibilidade interna. Por outro lado, o Museu do Lugar e do Povo enfrenta obstáculos significativos tanto externa quanto internamente, impedindo significativamente a experiência enriquecedora para os visitantes com deficiência em mobilidade. Além disso, o estudo destaca que, embora a legislação omani existente enfatize os direitos das pessoas com deficiência física, ela carece de ferramentas legislativas específicas e políticas dedicadas à acessibilidade em museus e locais históricos.

**Conclusões:** Este artigo enfatiza a importância de aumentar a inclusão nos Museus da Casa do Patrimônio de Omã para Indivíduos com Deficiência de Mobilidade. Para isso, recomenda-se a implementação de políticas abrangentes de acessibilidade e a colaboração com organizações de pessoas com deficiência. Além disso, a criação de programas educacionais sobre a conscientização da deficiência pode promover a compreensão e a sensibilidade do público. Ao dar prioridade à inclusão e à acessibilidade, estes museus podem enriquecer experiências culturais para todos os visitantes, promovendo um sentimento de pertença e coesão social. Em consonância com os ODS das Nações Unidas, tais medidas contribuem para o desenvolvimento sustentável e a preservação cultural, garantindo a igualdade de oportunidades para todos os indivíduos acederem e apreciarem o patrimônio cultural do país.

**Palavras-chave:** museus de casas de patrimônio, deficiência, deficiência de mobilidade, inclusividade, acessibilidade, legislação, Omã.

1 INTRODUCTION

In recent years, there has been a growing global acknowledgment of the significance of accessibility and inclusivity at cultural heritage sites, including heritage house museums. Ensuring equal access for individuals with mobility impairments has
emerged as a crucial area of concern for heritage preservation institutions, notably museums (Pezzo, 2010; Allday, 2009).

The Sultanate of Oman, with its rich cultural heritage, is aligning itself with the global trend of promoting inclusivity in cultural institutions, notably museums. Oman boasts a distinctive built heritage, renowned for its architectural diversity and utilization of various building techniques. These structures serve as potent symbols of cultural identity and reflect the remarkable human adaptability to the surrounding environment.

According to official statistics, the number of archaeological and historical sites in the country increased from 22,257 in 2017 to 33,218 in 2021. Similarly, the count of registered Omani historic quarters rose from 1029 in 2017 to 1034 in 2021. Additionally, the Sultanate witnessed a growth in the number of castles and forts designated for tourism purposes, reaching 60 in 2021 compared to 51 in 2017, distributed across various governorates (National Center for Statistics and Information, 2022).

Despite the dedicated conservation efforts by governmental institutions, part of Oman's built heritage faces risks due to rapid and unprecedented development since the 1970s, leading to shifts in societal and economic values that impact the functional aspects of historical and heritage buildings (Al-Belushi, 2008). In response, the country has sought a harmonious balance between preserving its heritage and embracing modern progress. This endeavor has led to the establishment of governmental institutions and the implementation of legislative measures, including the enactment of the National Heritage Protection Law in 1980, later replaced by the Cultural Heritage Law in 2019 (Al-Belushi, 2014a). The documentation project for old Omani quarters has also been instrumental in preserving their unique features, even amidst contemporary urban development (Ministry of Heritage and Culture, 2009). As part of urban planning approaches adopted since the 1970s, emphasis has been placed on integrating built heritage preservation into proposed urban development plans (Damluji, 1998; Al-Belushi, 2013). As Oman looks to achieve sustainable urban growth aligned with the goals of the future vision (Oman 2040), the preservation of the Omani identity remains a fundamental pillar in urban development and housing projects.

As of the year 2021, the total number of registered historical and heritage houses in Oman reached 149, an increase from 124 houses recorded in 2017 (National Center for Statistics and Information, 2022: 27). However, this figure remains relatively small in comparison to the vast and diverse built heritage that Oman possesses. While the adaptive
reuse of historic homes has emerged as a prominent preservation practice, supporting sustainable urban development and neighborhood revitalization, it is still in its early stages in Oman (Benkari, 2021), including in the capital city of Muscat. Among the few historical houses in Muscat that have undergone adaptive reuse for contemporary purposes, Bait Al-Juraizah, Bait al Kharjiyyah, Bayt Nadir, Bait Muzna, Bait Fransa, Bait Al Zawawi, Bait Nasib, Bait Al Zubair, and Sur Al Lawatiya stands out as a notable example, now serving as a museum.

Heritage house museums in Oman serve as invaluable cultural and educational resources, offering visitors insights into the nation's history, traditions, and achievements. These museums include both governmental and private establishments, with the state overseeing all museums' administration and technical supervision, as per the Regulation of Private Museums and Heritage Houses (Ministerial Decision, 262/2010).

Official statistics (National Center for Statistics and Information, 2022) indicate that Oman had a total of 22 museums by the end of 2021, out of which 12 were private. The total number of visitors to both government and private museums reached 115,255, with government museums accounting for 84% of the visitors, and private museums comprising 16% of the total. Bait Al-Zubair had the highest number of visitors among private museums, making up 76.4% of their total visitors.

The official names of these museums, as the Regulation for the Organization of Museums and Private Heritage Houses provides two distinct definitions - one for private museums and the other for private heritage houses (Ministerial Decision, 262/2010).

According to the regulation, a private museum is defined as “a place where archaeological, heritage, historical, scientific, cultural, natural, arts, and other collections are displayed for the purpose of study, research, public service, and the development of society's culture” (Article 1). On the other hand, a private heritage house is defined as “a historical building owned by private institutions or individuals, displaying the heritage collections of the region in which it is located” (Article 1).

Given the varied terminology used for this type of museum worldwide and the specific focus of this study on private heritage house museums in Oman, the term ‘the private heritage house museum’ will be utilized. It's important to note that there are also government museums established in historical houses, such as the Bait Al-Baranda and the Omani-French Museum; however, these museums are not within the scope of this study.
The Guide to Museums and Private Heritage Houses in the Sultanate of Oman emphasizes that these establishments are intended as “individual experiences” in which owners showcase collections, antiquities, and national heritage treasures with the goal of preserving them for future generations and upholding Oman's national heritage identity (Ministry Heritage and Tourism, n.d.). While the Regulation of Museums and Private Heritage Houses (Ministerial Decision, 262/2010) does not specifically address the accessibility of people with disabilities to these establishments, it includes relevant articles. Article (14) stipulates that applicants for museum or private heritage house licenses must provide architectural drawings showing the location and specifications of the proposed building, including room dimensions, facilities, and designated areas (Article 14). Article (2) requires private museums to “facilitate access to information for visitors,” while Article (3) mandates that private heritage houses must “preserve the old buildings of historical and architectural significance.” Additionally, the regulations mandate that the museum or heritage house must be easily accessible with proper lighting, security, and safety measures in place for visitors' well-being (Article 5). Lastly, the regulations prohibit relocating the museum or heritage house, making significant modifications to the building or exhibits, or prolonged closures (Article 6).

While urban planning and housing laws in Oman emphasize making new buildings accessible to people with mobility disabilities, historical buildings, particularly private heritage house museums, pose significant accessibility challenges. This is mainly due to the absence of dedicated legislation or policies addressing accessibility in museums and heritage sites.

According to the National Centre for Statistics and Information, the official registration data in the disability card system of the Sultanate reveals that there were 29,761 individuals with disabilities in 2019, accounting for 1.1% of the total population of Omanis. Among them, 29.4% had mobility disabilities, which is the largest proportion compared to other types of disabilities (National Centre for Statistics and Information, 2020, pp. 9-11).

The Basic Law of the State, serving as the nation's constitution and the fundamental basis for its laws, ensures justice, tranquility, and equality for all citizens (Royal Decree, 6/2021, Article 13). With the establishment of the modern state in 1970, legislation related to people with disabilities began to appear in Oman, and the country began to ratify the basic international conventions and agreements related to people with
disabilities. The existing Omani legislation provides for the rights of people with physical disabilities, and requires all stakeholders to provide everything that would allow them to access public places and deal with them in accordance with the principles of equality and equal opportunities (Al-Belushi, 2014b).

The Basic Statute of the State emphasizes that "the state … shall be committed to providing care for children, persons with disabilities … in the manner prescribed by the law" (Article 15, p. 12, Royal Decree 6/2021),[1] and that "life and dignity are a right for every human, and the state shall be committed to respecting and protecting them in accordance with the law" (Article 18, p. 14, Royal Decree 6/2021). It also underscores that "all citizens are equal before the law. They have equal public rights and duties, and there shall be no discrimination between them on grounds of sex, origin, colour, language, religion, sect, domicile, or social status” (Article 21, p. 15, Royal Decree 6/2021).

In accordance with the Basic Statute of the State, a specific law concerning the care and rehabilitation of individuals with disabilities was issued in 2008 (Royal Decree, 63/2008). This law defines a "disabled person" as “someone who experiences congenital deficiencies in their sensory, physical, or mental abilities, or has limitations due to genetic factors, disease, or accidents that affect their ability to fulfill their natural role in life compared to others of their age. As such, they require care and rehabilitation to enable them to participate fully in life (Royal Decree, 63/2008, Article 1, p. 2).”

To facilitate the engagement of individuals with disabilities in society, this law includes provisions for tax exemptions on “rehabilitation and compensatory tools and devices necessary for the disabled” imported by rehabilitation centers or for personal use by individuals with disabilities (Royal Decree, 63/2008, Article 2, p.3). Additionally, the law mandates the state's responsibility to provide educational services that cater to the sensory, physical, and mental abilities of persons with disabilities (Article 7).

The same law mandates the relevant government agencies to implement all necessary measures to ensure that individuals with disabilities have access to public services. This includes adhering to engineering specifications for places, public roads, buildings, places of worship, entertainment venues, market entrances, parking lots, and other facilities frequented by individuals with disabilities. Additionally, the law requires the provision of accessible public transportation to facilitate their movement in airports, ports, roads, and other transportation hubs (Article 10, p. 5).
In addition to the aforementioned legislations, the Sultanate established the "Oman Human Rights Committee" in 2008 (Royal Decree, 124/2008). This commission, with legal personality and complete independence in its activities related to human rights (Article 6), aims to promote and protect human rights in Oman. It operates in accordance with the provisions of the Basic Law of the State, international covenants and agreements ratified by Oman, and the laws in force (Royal Decree, 57/2022, Article 10). The committee's tasks include developing a national strategy for human rights, monitoring its implementation in coordination with other human rights authorities, pursuing the protection of human rights and freedoms, providing advice to relevant authorities, monitoring and resolving human rights violations, receiving and recommending solutions for complaints, and cooperating with international human rights mechanisms (Article 11).

Additionally, Oman established the National Committee for the Care of the Disabled, responsible for studying and preparing the general plan for the care and rehabilitation of individuals with disabilities, developing care and rehabilitation programs, promoting their employment and advancement, and ensuring their access to public services (Royal Decree, 63/2008, Article 13-15).

On the international level, Oman has ratified the International Convention on the Rights of Persons with Disabilities (Royal Decree, 121/2008) and has incorporated the principles and provisions of this Convention into its national legislation. At the national level, a monitoring and follow-up committee was formed to promote and activate the implementation of this agreement (Ministerial Decision, 124/2010).

Despite these efforts, there are currently no specific laws or policies in Oman dedicated entirely to addressing the issue of accessibility for individuals with disabilities in museums or heritage sites. Notably, the Cultural Heritage Law does not contain any provisions regarding accessibility for disabled individuals in museums or heritage sites (Royal Decree, 35/2019). Regarding the Regulations for the Organization of Museums and Private Heritage Houses, it includes two articles related to people with disabilities (Ministerial Decision, 262/2010). One article emphasizes the need for museums and private heritage houses to facilitate access to information for visitors (Article 2), while the other focuses on ensuring easy access to museum or private heritage house premises by providing adequate lighting, security, and safety measures for the visitors (Article 5).

This study aims to enrich the understanding of inclusivity in historical house museums, particularly within the distinct context of Oman's built heritage. By offering
recommendations to enhance accessibility and inclusivity, this study seeks to provide valuable insights for policymakers, facilitating efforts to ensure that heritage house museums are open to everyone, irrespective of their physical capabilities. Moreover, the goal is to foster a more inclusive and rewarding experience for individuals with disabilities, with a specific focus on those with mobility impairments, thereby reinforcing Oman's dedication to upholding cultural heritage and promoting social equity.

2 THEORITICAL FRAMEWORK

Promoting accessibility to cultural places, particularly museums, holds immense significance (Weisen, 2008). Museums stand as invaluable repositories of human knowledge, showcasing human achievements over time and offering insights into our interactions and adaptations with the environment. By ensuring accessibility, everyone, regardless of their physical abilities, can benefit from this rich cultural heritage. Moreover, enhancing museum accessibility fosters inclusivity and social cohesion within societies (Bada, 2022; Chiscano & Jiménez-Zarco, 2021) while upholding the principle that cultural heritage belongs to all. It transforms museums into spaces that nurture a sense of belonging and unity for individuals with disabilities within their communities.

By facilitating museum access for people with disabilities, we encourage lifelong learning, personal growth, and broader perspectives on the world. Equitable access also reflects the principles of social justice (Bada, 2022), ensuring equality among individuals, irrespective of their physical abilities, thus fostering a more inclusive society. Moreover, embracing this trend brings positive outcomes for museums themselves, as it expands their appeal to a broader and more diverse audience. This inclusivity may enhance their ability to secure financial support to fulfill their responsibilities.

Promoting accessibility to museums housed in historic buildings, such as heritage house museums, poses several challenges. The primary difficulties arise from the architectural constraints of these historical structures and the need to find a balance between conservation efforts and modern accessibility requirements (Merritt & Reilly, 2010).

Physical barriers present one of the major challenges for museums located in old buildings. Since these structures were not originally designed as museums, features like narrow doorways, stairs, and uneven floors create significant obstacles for individuals with mobility impairments.
Moreover, adapting historical buildings to meet the accessibility needs of people with mobility disabilities, especially on upper floors, is limited due to various factors. In many cases, the original construction materials are unsuitable for incorporating modern additions, such as elevators and escalators. The intricate process of harmonizing preservation efforts with retrofitting initiatives poses a constant challenge for heritage managers, curators, and architects.

Additionally, the financial aspect of making such modifications and renovations presents a considerable obstacle. Heritage house museums often lack the necessary financial means to undertake costly structural changes. Nevertheless, museums now recognize the importance of proactively addressing accessibility concerns to uphold principles of equality and inclusiveness (Chiscano & Jiménez-Zarco, 2021). Many heritage house museums have sought various forms of support to implement accessibility projects. By securing financial support, some museums have devised innovative solutions that promote universal access for individuals with mobility impairments (Pezzo, 2010). These initiatives draw inspiration from international and national legislation, all of which emphasize equal access for people with mobility disabilities to cultural and heritage sites on par with the rest of society.

The issue of accessibility for individuals with mobility impairments to heritage house museums is closely intertwined with legislation, as it ensures equitable access for these individuals. These laws encompass provisions that mandate the implementation of measures to facilitate seamless access for visitors with mobility impairments (Smith et al., 2012). Vital modifications to the museum's infrastructure, such as ramps, elevators, and accessible pathways, form integral parts of these measures, allowing people with mobility disabilities to navigate the museum without hindrance. Additionally, these legislations often emphasize the importance of providing assistance and guidance services to enhance the overall experience and enjoyment for this category of visitors. Equally crucial is the focus on how museum staff interacts with individuals with mobility impairments.

The legislation emphasizes the necessity of training employees to address obstacles that may hinder access to various aspects of the museum. However, it is essential to acknowledge that many heritage house museums, particularly the private ones, may lack the required resources and expertise to implement such inclusive practices (Alleyne, 2010).
Nonetheless, the implementation of these legislations is vital in fostering inclusivity, bridging the gap for people with mobility disabilities, and enabling them to experience the cultural significance conveyed by heritage house museums. For citizens, the prominent outcomes lie in the reinforcement of identity values and the promotion of equality.

Throughout the years, numerous international organizations, professional associations, and government agencies have released standards, codes of ethics, and guidelines emphasizing the importance of promoting accessibility, fairness, and inclusivity for individuals with disabilities visiting museums (e.g. UN, 2006; ICOM, 2017).

Across the globe, international conventions and agreements have significantly influenced the formulation of new rules and strategies for promoting inclusivity of persons with disabilities in numerous countries (Abdullahi, 2023). The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is a significant international standard that places emphasis on the rights of individuals with disabilities to fully participate in society, including cultural heritage sites (UN, 2006). The Convention highlights the importance of integrating disability issues as an integral part of sustainable development strategies. It acknowledges that promoting the full enjoyment of human rights and freedoms, and ensuring equal participation for persons with disabilities, leads to a sense of belonging and substantial advancements in human, social, and economic development, ultimately contributing to poverty eradication. Moreover, the convention obliges states parties to implement appropriate measures to ensure equal access for persons with disabilities to the physical environment, transportation, information, communications, and other public facilities and services, both in urban and rural areas (Article 9).

In addition, the convention emphasizes the right of persons with disabilities to participate on equal terms with others in cultural life. It calls upon states parties to take all necessary measures to ensure that individuals with disabilities have access to places for cultural performances and services, such as theaters, museums, cinemas, libraries, tourism services, and, to the extent possible, monuments and sites of national cultural significance (Article 30).

Furthermore, the International Council of Museums (ICOM) has issued recommendations urging museums to take active measures in enhancing accessibility and
promoting inclusivity. According to the ICOM Code of Ethics for Museums (ICOM, 2017), it is imperative for the governing body to ensure that "the museum and its collections are available to all during reasonable hours and for regular periods. Particular regard should be given to those persons with special needs" (Article 1.4). Additionally, the code emphasizes the importance of the governing body in "ensuring that institutional standards of health, safety, and accessibility apply to its personnel and visitors" (Article 1.5).

In the contemporary world, addressing the challenges and concerns of individuals with disabilities has emerged as a significant component of the social and economic policies pursued by numerous countries (Strelnikova et al., 2023). Many countries have developed national standards and guidelines pertaining to accessibility, encompassing aspects such as physical access and the implementation of inclusive programs and services. These countries often strive to align their standards with the principles and criteria outlined in international agreements (Walters, 2009).

To meet the requirements of these standards, certain heritage house museums are conducting evaluations of their facilities and services to ensure accessibility for individuals with mobility disabilities.

Adherence to these international standards and ethical guidelines for heritage house museums guarantees inclusivity and enables individuals with mobility disabilities from all backgrounds to fully participate and enjoy the museum's offerings and cultural experiences in a fair and equal manner.

UNESCO recognizes that ensuring access for individuals with disabilities fosters the development of inclusive knowledge societies and contributes to the attainment of the Sustainable Development Goals. In pursuit of this vision, UNESCO extends technical assistance to its member states to align with global regulations and standards, including the United Nations Convention on the Rights of Persons with Disabilities (UNESCO, 2021).

The Sustainable Development Goals outlined by UNESCO encompass the three dimensions of sustainable development (environmental, economic, and social) with specific attention to disability, particularly in the areas concerning education, inequality, and accessibility to human settlements (UNESCO, 2021). For instance, Goal 4 aims at achieving inclusive and equitable quality education, emphasizing equal access to education at all levels, including for individuals with disabilities. It emphasizes the
consideration of the needs of people with disabilities when constructing and developing educational facilities. Goal 10 targets reducing inequalities within and between countries by promoting the social, economic, and political inclusion of all, including individuals with disabilities. Furthermore, Goal 11 emphasizes the importance of creating inclusive, safe, and sustainable cities and human settlements by providing safe, affordable, accessible, and sustainable transport systems for everyone (UN, 2023).

According to McGhie (2019), museums hold a crucial role in advancing sustainable development objectives by leveraging their unique resources to promote education, preserve cultural and natural heritage, and foster cultural participation. McGhie argues that cultural participation ensures that individuals of all abilities and backgrounds have equal opportunities to fully engage in society, thereby contributing to various sustainable development goals through inclusive and accessible services. Museums act as unifiers, bringing together people with diverse backgrounds and interests, promoting equitable, tolerant, and just societies. Consequently, by ensuring accessibility for individuals with disabilities, museums can significantly enhance their involvement in achieving sustainable development goals, enabling them to make valuable and equitable contributions to societal progress (McGhie, 2019).

Several studies have addressed the issue of accessibility for people with disability in museums in general (e.g. Chiscano & Jiménez-Zarco, 2021; Weisen, 2008; McMillen, 2012; Pezzo, 2010; Allday; 2009; Walters, 2009; Buckley, 1992).

Few of these studies focused on museums' responses to disability and their correlation with legislation. An example is the study by Walters (2009) which investigated how museums in the United Kingdom and the United States respond to disability, particularly in the context of anti-discrimination legislation. The study employed a factor analysis to identify clusters of attitudes and beliefs that underpin responses to disability within museums. The analysis indicated that even though museums have made efforts to enhance access and adhere to anti-discrimination laws, the findings suggest that attitudes still present a considerable obstacle to truly including disabled individuals. The research also indicated that understanding about disability in museums remains inconsistent, and the concept of inclusion is often narrowly defined. The study underscored the need for further research on changing attitudes towards disability and curatorship and the potential impact on access and inclusion. Ultimately, the paper emphasized that addressing attitudes towards disability is essential in breaking down
barriers and ensuring genuine inclusivity for all visitors, including those with disabilities, and those outside the traditional museum audience.

Additional studies have employed various strategies to investigate the accessibility of museums for people with disabilities. McMillen (2012) conducted a case study at a contemporary art museum in the United States to examine disability access using the nine-step strategy of accessibility published by the American Association of Museums (AAM). The AAM's guidelines aim to make museums inclusive for all, including people with disabilities. The study found that the museum diligently worked towards disability access, making significant progress through its outreach program for audiences with disabilities. Implementing Salmen's nine-step strategy proved effective in achieving accessibility in manageable steps. By adopting these strategies, art museums can not only become more accessible but also enhance learning experiences for all visitors, not just those with disabilities.

Further research has focused on the challenges associated with providing educational experiences for individuals with disabilities in museums. Allday (2009) explored the historical and current exclusion of material related to people with intellectual impairments in museums. The study focused on three UK museums and compared their curatorial attitudes towards including and presenting such material. Findings revealed curatorial anxieties and a lack of national guidance on addressing learning disability in museum collections. However, some examples demonstrated that with organizational commitment and facilitative approaches, museums can present the history of learning disability in thought-provoking ways that challenge preconceptions. Given their responsibilities under the Disability Discrimination Act and the importance of social inclusion, this study emphasized the need for museums to reevaluate their approaches to learning impairment.

Additional research explored the hurdles museums encounter in catering to the needs of individuals with disabilities, highlighting issues such as museum managers' limited awareness of these requirements and the insufficient expertise among museum staff in addressing them. Chiscano and Jiménez-Zarco (2021) conducted an exploratory study at the CosmoCaixa science museum in Barcelona to investigate the consumption experiences of visitors with disabilities. Despite museums' efforts to be inclusive, this study found that there are still challenges in fully catering to the needs of people with disabilities. Ethnographic techniques and post-experience interviews revealed difficulties
faced by museum staff in identifying visitors with disabilities and a lack of training and knowledge among museum managers about their wants and needs. The study emphasizes that an inclusive management strategy should go beyond merely providing resources and materials and should focus on improving the interaction between museum staff and visitors with disabilities to create more meaningful and enjoyable experiences for this group.

These studies have revealed various challenges that museums face in achieving genuine inclusion for individuals with disabilities. Additionally, they demonstrate that implementing access strategies to enhance disability access can significantly enrich educational experiences. Moreover, these studies highlight the difficulties in identifying visitors with disabilities and meeting their specific needs, underscoring the importance of adopting a comprehensive management strategy.

Certainly, these studies have contributed significantly to our comprehension of the challenges concerning equitable access for individuals with disabilities to museums overall. Nevertheless, there remains a research gap when it comes to the accessibility of historic house museums specifically for people with mobility disabilities. Particularly, the scarcity of studies examining best practices tailored to the needs of smaller museums in this context is evident.

Regarding museums in Oman, there is a scarcity of published studies in general, with only a few notable exceptions (e.g., Al-Belushi, 2014c). Al-Belushi's research explored the relationship between museums and universities in Oman and the Arab Gulf countries, but it did not address accessibility for people with disabilities. Additionally, there is a significant gap in research regarding accessibility for individuals with mobility disabilities to museums, particularly heritage house museums in Amman. Furthermore, apart from limited studies such as Nasr & Khalil (2022) and Benkari (2021), there is a lack of research on the adaptive reuse of traditional houses in Oman.

Nasr & Khalil (2022) conducted a study to assess the adaptive reuse of heritage houses in Oman, aiming to propose guidelines for achieving comprehensive and sustainable adaptive reuse. The research analyzed five selected heritage projects through semi-structured interviews with stakeholders and community representatives, onsite observations, documentation, and data analysis. The results emphasized the importance of a comprehensive sustainable management plan for the success of adaptive reuse projects. They argue that such projects can contribute to promoting the local economy,
preserving cultural identity, enhancing social values, and adapting to the local environment. The study provided an assessment strategy that serves as a checklist to ensure social, cultural, environmental, and economic benefits.

Benkari (2021) examined the emerging trend of community-led initiatives for rehabilitating and reusing vernacular settlements in Oman. Through three case studies, the paper explored the process, modes of action, and effects of these initiatives on vernacular settlement transformations. Employing a mixed research methodology, including data analysis, onsite observations, interviews with local community representatives and key stakeholders, and quantitative data extraction from a hotel booking website, the study uncovers the critical role of local communities in bottom-up management and horizontal cooperation within these initiatives. The paper also highlights challenges arising from centralized and top-down heritage conservation policies and insufficient regulations for land use, building restoration, and adaptive reuse. Offering actionable solutions, the research addresses concerns and threats faced by community-led vernacular heritage rehabilitation efforts.

Thus, the current research seeks to address the existing gap in knowledge and aims to enhance our comprehension of inclusivity in historical house museums, with a specific focus on Oman's distinctive built heritage.

3 METHODOLOGY

The study encompassed visits to five private house museums: Bait Al-Zubair Museum, Place and People Museum, Bait Al Ghasham Museum, Bait Al Darwaza Museum, and Al-Safah Museum. All these museums hold licenses from the Ministry of Heritage and Tourism and comply with the requirements stipulated in the Regulation for Organizing Museums and Private Heritage Houses (Ministerial Decision 262/2010).

The primary objective was to assess the accessibility of historical home museums in Oman for individuals with mobility impairments and to identify the existing adaptation methods used for enhancing mobility access in these old Omani buildings. The focus was specifically directed at two museums: Bait Al Zubair Museum and the Museum of Place and People, chosen due to their strategic location in Muscat and popularity among tourists. These museums are among the most frequented private museums, with Bait Al Zubair Museum accounting for the highest percentage of visitors, making up 76.4% of the total visits to museums and private heritage houses in 2021, while the Museum of
Place and People secured approximately 6% of the total visits, ranking fourth among all these museums (National Center for Statistics and Information, 2022). The selection was also based on the distinctive differences in their buildings; Bait Al Zubair Museum consists of relatively large, multi-storey buildings reflecting the family wealth of its founders, while the Place and People Museum comprises smaller buildings and exhibits holdings that convey the journey of an individual transitioning from traditional to modern life in Oman.

The study aimed to evaluate the accessibility of historical house museums in Oman for individuals with mobility impairments, pinpointing the challenges faced by both visitors and the museum buildings in achieving comprehensive access to exhibits while preserving their authenticity and heritage values. Data for the case studies was primarily gathered through field visits conducted from March to June 2023. A checklist was employed to assess facilities for people with mobility disabilities, encompassing external areas of the museum buildings and internal equipment.

Moreover, supplementary information was obtained through extensive research of literature, archives, manuals, and museum directories. Statistical data on the number of these museums and their visitors were acquired from the National Center for Statistics and Information. Additionally, official documents, including legislation, royal decrees, laws, and international agreements related to museums, private heritage houses, and the rights of people with disabilities, were surveyed to enrich the study's findings.

4 RESULTS AND DISCUSSION

4.1 CASE STUDIES

4.1.1 Bait Al Zubair Museum

The Bait Al Zubair Museum is situated in the heart of Muscat, the capital of Oman, within a historical area that serves as the seat of government (Figure 1). Notable landmarks such as the Sultan's Palace, the Diwan of the Royal Court, the National Museum, the Al Saidiya School, and various government agency headquarters surround the museum. Owned by the prominent Al Zubair family, the museum was established in 1998 and currently operates as the cultural and social arm of the Bait Al Zubair Foundation. In recognition of its architectural excellence, the museum received the Sultan Qaboos Award for Architecture in 1999.
The Bait Al Zubair Museum showcases the historical and ethnographic collections owned by the Al Zubair family. It consists of five independent buildings: Bait Al-Bagh, Bait Al Dalaleel, Bait Al Oud, Bait Al Nahdah, and Gallery Sarah. The main building, Bait Al Bagh, dates back to 1914 when it served as a residence for the Zubair bin Ali family, frequently hosting gatherings of elite society members. The building was later converted into a museum while preserving its traditional Omani architectural features. It houses six halls across two floors, with the first floor exhibiting information about the ruling Al Busaid family, the Sultans of Oman, Omani daggers, traditional costumes, jewelry, weapons, household items, and musical instruments. The second floor holds a collection of postage stamps, coins, manuscripts, and historical documents.

Bait Al Nahdah, known as the Renaissance House, features four floors and showcases the achievements of Oman's modern renaissance under Sultan Qaboos bin Said's leadership since 1970. The house also displays paintings by Omani artists, depicting the development of modern fine art in Oman. Bait Al Oud, with its three floors dating back to the 19th and 20th centuries, was reconstructed after the original house was demolished in the late 1940s. It features a large exhibition hall on the ground floor and an exhibition hall on the first floor containing old maps, pictures, and models of past Muscat furniture.
Al Dalaleel House has undergone renovation to reflect the architectural style of traditional Omani houses. It includes a living room, a bedroom, and a store for dates. Additionally, the museum houses the "Sarah Gallery," a hall dedicated to displaying fine art works and hosting workshops. The gallery, opened in 2013 within the Bait Al Bagh building, can be accessed through both the eastern side of the museum and Bait Al-Bagh.

The outer courtyard of Bait Al Zubair Museum features an outdoor garden and a water channel inspired by traditional Omani irrigation channels (aflaj). The courtyard also includes a model of an Omani village and a gift shop, providing visitors with an authentic experience of Oman's rich heritage and culture.

4.1.1.1 Accessibility in the external environment

Accessibility in the external environment of the museum is well addressed to accommodate people with disabilities. The museum is situated in a bustling area with adjacent car parks designed for their use (Figure 1). Clear wayfinding and signage signs guide visitors from the street to the building. The external corridors are thoughtfully paved, flat, and obstacle-free, ensuring easy access for individuals with mobility disabilities, with no changes in levels posing any hindrance.

The main entrance to the museum building is both wide and level, allowing cars to enter the inner courtyard if needed to assist visitors with disabilities. Each of the five houses within the museum is equipped with ramps located next to the stairs leading to the doors. Notably, Bait Al Bagh boasts two ramps—one on each side of the entrance—for added convenience. All ramps have the appropriate slope and handrails for support, except for the entrance to Bait Al Oud, which lacks handrails, likely due to the short length of the ramp.

One aspect that could be improved concerns the model of the heritage village located in the courtyard. The village is enclosed by a wall that exceeds one meter in height, obstructing the view for individuals with disabilities, especially those using wheelchairs. Additionally, the courtyard lacks seating options for people with mobility impairments who do not use wheelchairs. Providing such seating would enhance the overall accessibility and comfort of the museum's outdoor space.
4.1.1.2 Accessibility within and around the museum

Accessibility within and around the museum buildings presents some challenges for individuals with mobility impairments. Certain areas of the museum can only be accessed via stairs, like the upper floor of Bait Al Bagh that houses postage stamps and coins, lacking an electric elevator for access (Figure 2). Similarly, Bait Al Dalaleel has internal stairs that separate its sections, such as the living room and date palm store (Figure 3). These obstacles may be attributed to the fact that Bait Al Dalaleel was restored rather than completely rebuilt, unlike the other houses in the museum.

While the spaces inside the buildings and galleries are generally wide and accessible, allowing easy movement for wheelchair users, the Islamic Coins Room presents a limitation. The narrow spaces between display panels hinder the passage of wheelchairs in this area.

Regarding accessibility information for visitors, the museum lacks a published policy specifically catering to people with disabilities. The museum's website does not provide any targeted information for this group, which can be crucial for pre-planning and preparation to ensure a smooth visit. The only reference on the website indicates that "people with special needs can visit all the buildings of Bait Al Zubair because elevators are available in them and special facilities are provided for them." However, more comprehensive and detailed information would be beneficial to enhance the overall accessibility experience for visitors with disabilities.

Figure 2: Stairs leading to the upper floor in Bait Al Bagh

Source: Authors
4.1.2 People and Place Museum

The Place and People Museum is an ethnographic museum that delves into the life of individuals who experienced the transition from traditional to modern life in Oman, particularly during the transformative period between 1950 and 1970. This era, known as the "Modern Renaissance of Oman," saw significant changes in all aspects of life, as the country embraced modernity, established institutions, and utilized its natural resources, notably oil, to drive national development and reshape lifestyles. The museum showcases how Omanis successfully integrated modern elements while preserving their cultural values, way of life, and expressive methods.

Situated in the bustling city of Muttrah, the museum occupies an old restored house, offering a captivating setting overlooking the Corniche, a popular area frequented by shoppers and tourists, near the iconic Muttrah Fort atop a mountain (Figure 4).
The museum comprises a single floor, divided into several rooms, each depicting different aspects of Omani life during that era. The Wedding Room represents the traditional rooms prepared for marriage ceremonies, displaying intricate decorations, carpets, bridal attire, and the "Mandoos" containing the bride's dowry and essentials for the wedding night. The Kitchen showcases a model of a typical Omani kitchen from the 1970s, complete with utensils and tools. The Mother and Children's Room exhibits toys, dolls, and women's daily-life tools like sewing and embroidery supplies from the early to mid-sixties. The Winter Room replicates the cozy spaces families used during extreme cold, designed without windows to retain warmth. The Majlis presents the hospitality of the 1960s and 1970s, blending antique and old furniture and featuring exhibits illustrating the transition from ancient to modern, including the introduction of modern machines like telephones and cars. Lastly, Musabbeh’s Room reflects the living conditions of Omanis who left their villages in search of work in Muscat during the 1950s, telling the story of a man named "Musabbeh" through simple furnishings, books, and living supplies. Additionally, the museum houses an art gallery exhibiting fine art paintings by both Omani and non-Omani contemporary artists.
4.1.2.1 Accessibility in the external environment

The museum is situated in a bustling tourist area with very limited parking spaces, and unfortunately, there are no designated spots for people with mobility disabilities due to space constraints. However, there are clear and appropriate wayfinding and signage signs along the street leading to the building. The accessible routes in front of the museum are paved and flat, but the main entrance poses challenges for individuals with mobility impairments (Figure 4). It features a narrow wooden door, merely one meter wide, and is flanked by two staircases, without any ramps to accommodate wheelchair users. Similarly, the exit door from the museum presents the same width and is also surrounded by two staircases, lacking accessibility features.

4.1.2.2 Accessibility in the internal environment

The museum building itself is not well-suited for individuals with mobility disabilities, particularly wheelchair users, as it lacks ramps, possibly due to the limited spaces reflecting the traditional layout of Omani houses, which tend to be narrow (Figure 5). However, individuals with moderate mobility impairments, who do not use wheelchairs, can navigate the museum's rooms and corridors.

Figure 5: Absence of ramps in the Place and People Museum

Source: Authors
The museum’s construction on a gentle mountain slope leads to varying floor levels in its internal parts, requiring small concrete stairs to connect different areas, all equipped with handrails. To facilitate movement and compensate for the differences in height, a one-meter-wide wooden path, resembling a railing, is present (Figure 6). This wooden railing guides visitors through the exhibition rooms, offering an intended route for exploration and keeping them at a distance from the exhibits. While this may cause some visual congestion in the narrow rooms, it can serve as a supportive rail for individuals with moderate motor disabilities as they roam the museum. Similar to the Bait Al Zubair Museum, the museum lacks a published policy dedicated to people with disabilities, and the website provides no specific information targeted at this group, which could be invaluable for planning their visits ahead of time.

Figure 6: The wooden railing in the Place and People Museum

Source: Authors
Through an analysis of Bait Al Zubair Museum and the Place and People Museum, this study evaluated the level of accessibility and the efficacy of Omani legislation in promoting inclusivity.

The Bait Al Zubair Museum, renowned for its historical and ethnographic collections, offers visitors a glimpse into Oman's rich cultural heritage. While the external environment demonstrates considerable efforts to accommodate people with mobility impairments, the internal accessibility presents some challenges that require attention.

In terms of the external environment, the museum addresses accessibility concerns commendably. Located in a bustling area, the museum provides adjacent car parks, making it convenient for visitors with disabilities to access the premises. The presence of clear wayfinding and signage along the street leading to the museum further enhances the accessibility experience. Additionally, the external corridors are thoughtfully paved, flat, and obstacle-free, ensuring easy access for individuals with mobility disabilities. The absence of changes in levels eliminates potential hindrances for visitors with mobility impairments.

The main entrance to the museum boasts commendable accessibility features, being wide and level. Furthermore, the provision of ramps next to the stairs at each of the five houses within the museum demonstrates a proactive approach towards inclusivity. The inclusion of appropriate slope and handrails on the ramps ensures the safety and comfort of visitors with mobility disabilities. However, improvements can be made regarding the model of the heritage village within the courtyard. The high surrounding wall obstructs the view for individuals with disabilities, particularly those using wheelchairs. Additionally, providing seating options in the courtyard would significantly enhance the overall accessibility and comfort for visitors with mobility impairments who do not use wheelchairs.

While the external environment showcases exemplary efforts, the internal accessibility poses certain challenges. Some areas within the museum can only be accessed via stairs, such as the upper floor of Bait Al Bagh and Bait Al Dalaleel's internal stairs separating different sections. These limitations may be attributed to Bait Al Dalaleel's restoration process, which differed from the complete rebuilding of other houses in the museum. Moreover, the narrow spaces between display panels in the Islamic Coins Room hinder the passage of wheelchairs, limiting the accessibility of this particular area.
The museum’s accessibility information for visitors with disabilities remains inadequate. The lack of a published policy specifically addressing accessibility concerns for people with mobility impairments hinders their ability to pre-plan and prepare for a smooth visit. While the museum's website mentions the availability of elevators and special facilities for individuals with special needs, detailed and comprehensive information would significantly enhance the overall accessibility experience and ensure an inclusive environment for all visitors. The evaluation of the facilities provided by the Place and People Museum for people with mobility impairments reveals several shortcomings that hinder their access to this enriching experience.

In terms of the external environment, the museum’s location in a bustling tourist area with limited parking spaces poses a significant challenge. The absence of designated parking spots for individuals with mobility disabilities further exacerbates this issue, limiting their ability to conveniently access the museum. While clear wayfinding and signage signs along the street guide visitors, the main entrance presents a considerable barrier. The narrow wooden door, measuring only one meter wide, and the presence of two staircases on either side without accompanying ramps effectively restrict wheelchair users from entering the museum with ease. Moreover, the exit door shares the same accessibility limitations, further hindering the mobility-impaired visitors’ movement within the museum.

Turning to the internal environment, the museum's single-floor layout may seem accommodating at first, but the lack of ramps makes it inaccessible for wheelchair users. The traditional design of the Omani house, while providing an authentic experience, inadvertently creates narrow spaces that hinder the mobility of individuals with disabilities. As a result, visitors with mobility impairments are unable to explore all areas of the museum freely.

Despite these challenges, the museum does offer some support for individuals with moderate motor disabilities. The one-meter-wide wooden path, resembling a railing, guides visitors through the exhibition rooms, allowing for additional support while exploring the museum. However, the presence of this wooden railing in the already narrow rooms may create visual congestion, potentially causing inconvenience for visitors.

The Place and People Museum currently lacks a published policy specifically addressing accessibility concerns for people with mobility impairments. Additionally, the
absence of targeted information on the museum's website deprives potential visitors with disabilities of crucial pre-planning details. Such information is essential for individuals with mobility impairments to prepare adequately for their visit, ensuring a smooth and enjoyable experience.

In terms of legislation, the study revealed both strengths and areas for improvement. Existing Omani laws emphasize the rights of people with physical disabilities, requiring public places to be accessible and inclusive (Royal Decree 35/2019; Royal Decree 6/2021; Royal Decree 63/2008). However, specific laws dedicated solely to accessibility in museums and heritage sites are lacking. The Cultural Heritage Law and the Regulations for the Organization of Museums and Private Heritage Houses do not include provisions directly addressing accessibility for individuals with disabilities. While Article 5 of the latter regulation touches on safety measures, more comprehensive policies are necessary to ensure inclusive access for all visitors.

Regarding the contribution of private heritage house museums to support sustainable development by promoting access for people with disabilities to their buildings, there is no doubt that ensuring accessibility for individuals with disabilities to these museums plays a crucial role in contributing to sustainable development and cultural preservation in Oman. By prioritizing inclusivity and accessibility for all, including those with mobility impairments, these museums foster social and cultural integration, elevate cultural awareness, and instill a sense of identity and belonging within the community (Bada, 2022). This dedication to inclusivity is also in alignment with the United Nations' Sustainable Development Goals (SDGs) (UN, 2023), which prioritize the safeguarding of cultural heritage, promotion of education, and the assurance of equal opportunities for everyone.

By making these museums accessible to individuals with mobility impairments, they promote social inclusion and equality. Through the removal of physical barriers and provision of accessible facilities, individuals with disabilities can fully partake in cultural experiences, fostering a sense of belonging and enhancing social cohesion. This dedication to inclusivity corresponds with Goal 10 (Reduced Inequality) and Goal 16 (Peace, Justice, and Strong Institutions).

To align accessible heritage house museums with the United Nations Sustainable Development Goals, several measures can be undertaken. Firstly, museums must develop and implement comprehensive accessibility policies and guidelines. These should
encompass the provision of ramps, elevators, and other facilities that cater to the needs of individuals with mobility impairments. Secondly, collaboration with disability organizations and advocacy groups can facilitate museums in better understanding and addressing the specific needs of this community. Moreover, creating educational programs and workshops on disability awareness and inclusion can heighten public awareness and promote cultural sensitivity.

In short, accessible heritage house museums in Oman play an indispensable role in sustainable development and cultural preservation. By prioritizing inclusivity and aligning with relevant SDGs, these museums contribute to the protection of cultural heritage, foster social integration, and promote equal opportunities, ensuring that cultural experiences are accessible and enriching for all.

5 CONCLUSION

Enhancing the accessibility of Oman's Private Heritage House Museums for individuals with mobility impairments requires a multi-faceted approach. Collaboration between stakeholders, including museum authorities, architects, urban planners, and disability advocates, is essential to identify and address accessibility challenges effectively. Implementing inclusive practices, providing comprehensive accessibility information, and integrating accessibility considerations into heritage preservation and urban planning processes are vital steps towards achieving inclusivity in Oman's heritage house museums. Legislation specifically tailored to address accessibility concerns in museums and heritage sites would further strengthen the country's commitment to promoting inclusivity and ensuring equal access to cultural treasures for all citizens and visitors alike. By making these efforts, Oman can pave the way towards a more inclusive and enriching cultural experience for individuals with mobility impairments, aligning with the principles of the UN Sustainable Development Goals (SDGs) and fostering a sense of pride and identity for its people.

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REFERENCES


Royal Decree (6/2021). The Basic Statute of the State, Official Gazette (in Arabic), Muscat.


