A Thematic Review on Museum Accessibility for Visually Impaired Visitors

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Abstract
Although new, renewed, and innovative museum experiences are constantly provided to the sighted public, millions of visually impaired persons worldwide are still deprived of access to enjoying and engaging with collections.There is a notable gap in empirical studies identifying a comprehensive set of factors that affect the way people with visual impairments co-create their museum experiences.Considering this research gap, this review aims to analyze the literature on the limitations of blind or partially sighted persons in visiting a museum from 2019 to 2025.A criterion for inclusion and exclusion is presented to search and screen articles from Web Of Science. Ultimately, 24 articles meeting the eligibility criteria were selected for synthesis analysis.ATLAS.ti 9, as the analysis software, yielded quantitative results showing trends in research on visually impaired related visiting museum. At the same time, from the qualitative analysis emerged four main themes about the topic: (1) Technology and multi-sensory experiences, (2) Visiting experience, (3) Museum policy and accessibility concepts, (4) Participatory Design and Co-Creation experience. Finally, the findings are expected to be beneficial in promoting exceptional, memorable, and exciting visiting opportunities for visual impairments.
Keywords: Visual Impairments, Visiting Experience, Museum, Accessibility, Multisensory

Introduction
According to the World Health Organization (2019), at least 2.2 billion people have a vision impairment: blindness or low vision. In many contexts, people with disabilities face additional difficulties and require a higher degree of accessibility. As social and cultural environments, museums are of great value to society,increasing accessibility to culture and providing leisure and socialization opportunities. Museums, as agents of social change in the community,have increasingly embraced digital innovation, interactive exhibits, and community-focused programming to enhance public engagement. These developments have led to a wave of renewed and novel experiences that enrich the museum landscape—primarily for sighted visitors.

However, from a social-scientific perspective, this unequal distribution of accessibility reflects broader debates on cultural justice and inclusive citizenship, raising critical questions

about whose experiences and sensory modes are privileged in the public sphere.despite technological advancements, millions of blind and visually impaired individuals continue to face limited access to museums' physical spaces, information, and sensory content (Quero et al., 2021). The result is a systemic form of cultural exclusion that affects both the opportunity to experience collections and the ability to meaningfully engage with them (Hutchinson, 2020). Accessibility, often narrowly defined in spatial or legal terms, does not necessarily equate to inclusion. Research suggests that while some museums adopt tactile exhibits or offer audio guides, such measures are often fragmented, inconsistently implemented, or fail to address the multisensory and cognitive needs of blind and partially sighted visitors (Reinhardt et al., 2024). Moreover, the museum experience is not merely about access to information, but about presence, autonomy, and the ability to co-construct meaning—factors often missing from institutional design (Vaz, 2025).

Recent empirical research has expanded this discussion, linking museum accessibility to the broader framework of inclusive design and social sustainability(Cecilia, 2021).These studies collectively suggest that accessibility should be redefined as a dynamic process of co-creation, negotiation, and shared authorship between institutions and disabled communities.The problem is further compounded by a lack of empirical studies that comprehensively examine the lived experiences of visually impaired visitors, particularly in terms of their ability to participate, navigate, and contribute to the museum space. While a growing body of research explores assistive technologies (Avni et al., 2023), sensory design (Cho et al., 2020), or museum policy (Zakaria, 2020), few have attempted to integrate these dimensions into a holistic understanding of accessibility that bridges technology, embodiment, and agency.Moreover, the question of how visually impaired individuals can be empowered as co-creators—rather than passive beneficiaries—remains underexplored.

In response to these theoretical and empirical gaps, this review seeks to synthesize and interpret contemporary literature published between 2019 and 2025, using a thematic framework grounded in inclusive museology and disability studies. By drawing upon both qualitative and quantitative findings through ATLAS.ti 9, this study situates museum accessibility within the ongoing discourse of social inclusion and sensory diversity, aiming to contribute to an evidence-based rethinking of accessibility in cultural institutions.

Materials and Methods
The goal of this review is to analyze and explain the current visually impaired community's experience of visiting museums; however, this topic has only gained attention in recent years, and there is a limited amount of research related to what will enhance the visually impaired community's experience of visiting museums. Therefore, a thematic review was prepared based on the procedure introduced by Zairul(Zairul, 2020), to capture key data related to the research question through themes representing which have some degree of patterned response or significance in the dataset. This study is dedicated to analyzing and interpreting the findings and making recommendations for future grounded theory of museum-related accessible design.The literature was selected based on the following criteria: (1) published in 2019–2025, (2) having at least 'visual impairments' or 'Museum' as a keyword, and (3) associating visual impairments with museum. A systematic methodological framework is adopted for this study from formulating the research question, selecting the data source,

retrieval, and pre-processing; then extracting, analyzing, and synthesizing the themes; and, finally, visualizing and presenting, interpreting, and discussing the results.

The literature search was conducted in one database of Web of Science. According to the censored exclusion and inclusion criteria set, the initial search resulted in 82 articles from Web of Science. However, there are 29 papers to be down due to previous results or inconsistency with the topic, and some of them are incomplete or inaccessible with a fragmented link. Five results are moved since the literature is limited to English. The papers to be reviewed were dropped to 24 results and uploaded as primary files into ATLAS. Ti9. Each article was then classified into author, volume and issue number, periodical, publisher, and publication year for further analysis (Table 1 and Figure 1)

Table 1
Search strings from Web Of Science

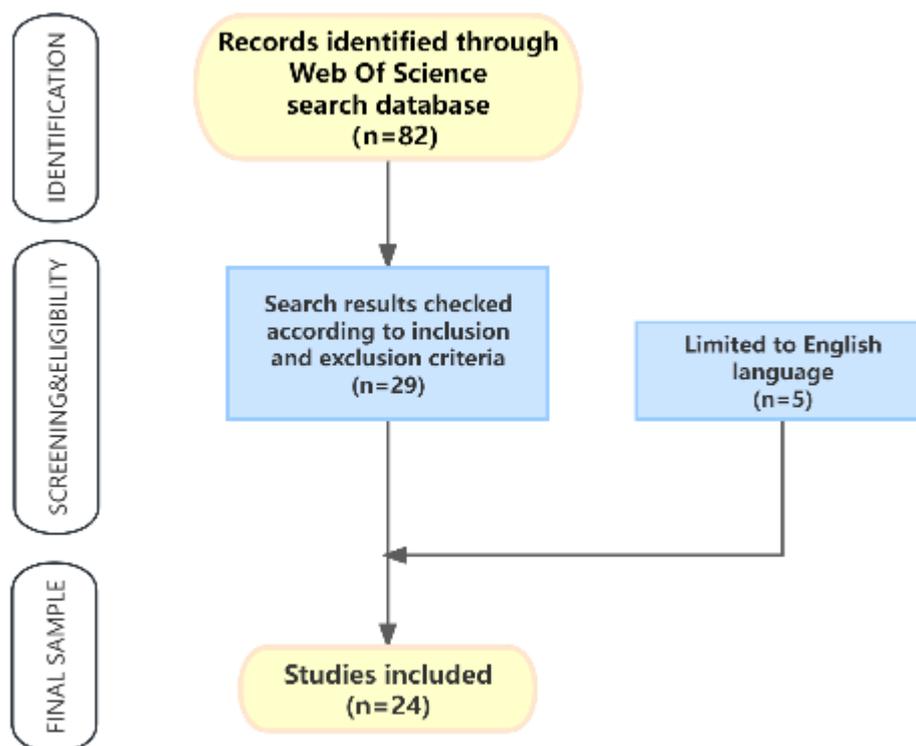| Database	Search Strings	Results
Web Of Science	TITLE: (Museum) OR ("visual impairments") and "museum accessibility" and English (Language) and Articles OR Editorial Materials OR Review Articles (Document Types) and Humanities Multidisciplinary or Cultural Studies (Web of Science Category) Timespan: 2019–2025	82results

Figure 1: Inclusion and exclusion processes in the thematic review

The articles were afterward assessed using both quantitative and qualitative analysis methods. The quantitative section reported the findings from a mathematical of view to derive the respective data. At the same time, the qualitative area extracted codes from the selected papers, inducting themes and developing a conceptual framework.

Results and Discussions

The significant findings of the thematic review are presented in this part. Quantitative and qualitative analyses were used to assess the selected 24 articles for answering the research question.

Quantitative Findings

Research trends in visually impaired-related visiting museum can be partially reflected by analyzing word frequency, the year of publication, the research location, the source of publication, and the theme. First, the quantitative section generated the following word cloud based on the analysis of the source documents (Figure 2). As shown in Figure 2, the most famous words that appeared in the cloud were "Blind", "Museum", "Visually", "Visitors", "Touch", and "Tactile", indicating their high word frequency in the article. As previously mentioned, this article focuses on sighted persons related to museum experience. The word cloud shows the main terms in this topic, with the word "Blind" being mentioned 1203 times, followed by "Museum" and "Visually" respectively 1028 and 372 times, while "Visitors", "Touch", and "Tactile" were referred to 945, 528, and 519 times.

Figure 2: Word cloud generated from 24 articles

Figure 3 illustrates the number of publications related to this topic, with two articles in 2019, seven in 2020, four in 2021, three in 2022, three in 2023, three in 2024, and two in 2025. There is an overall flat trend in research on this topic, with a slight decline after peaking in 2020. This trend may be due to the COVID-19 pandemic hitting museum visitation, as it may lead to a change in research focus.
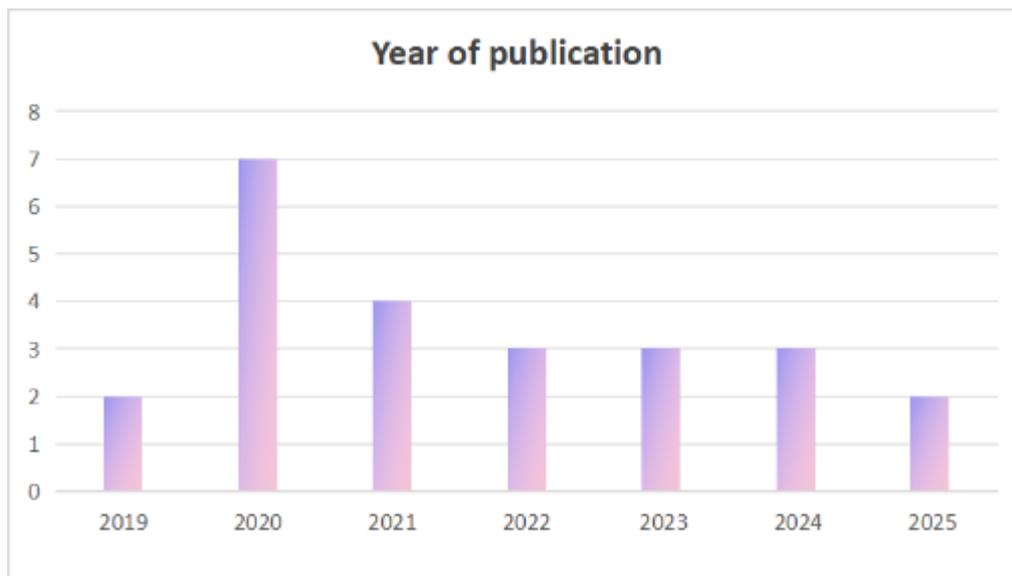
Figure 3:Year of publication

The results derived from the cross-tabulation analysis of publication years and countries are presented in Figure 4. In terms of geographic concentration, Europe and Asia dominate the research landscape on museum accessibility for the visually impaired. Notably, Portugal leads with the highest number of publications, indicating strong academic engagement in inclusive museum practices. For example,(Vaz et al., 2021)and Martins (2020) investigate accessibility resources and visitor experiences in Portuguese museums, focusing on multisensory engagement and policy analysis.Turkey also demonstrates significant output, including case-based research that explores local accessibility challenges and implementation frameworks (Yıldırım & Yılmaz, 2022). Meanwhile, studies from Japan and South Korea reflect technological approaches, such as the integration of autonomous navigation systems and smart guides (Kayukawa, 2023).In terms of temporal trends, the number of publications has grown steadily from 2019 to 2025, with a noticeable peak in 2023 and 2024, suggesting increasing academic interest in the field. This aligns with the global momentum around disability rights and cultural inclusion post-COVID-19 (Cecilia, 2021).Other contributions come from the UK, USA, Germany, Egypt, and South Africa, reflecting a wider international commitment to accessible cultural heritage. For instance, Zakaria (2020) from Egypt critically addresses the gap between physical access and social inclusion in national museums.The geographic spread of these studies reveals a clear emphasis on regions with established museum infrastructures and progressive accessibility policies. However, the concentration in a few countries also highlights a regional research imbalance, indicating a need for further exploration in underrepresented contexts, particularly across the Global South.
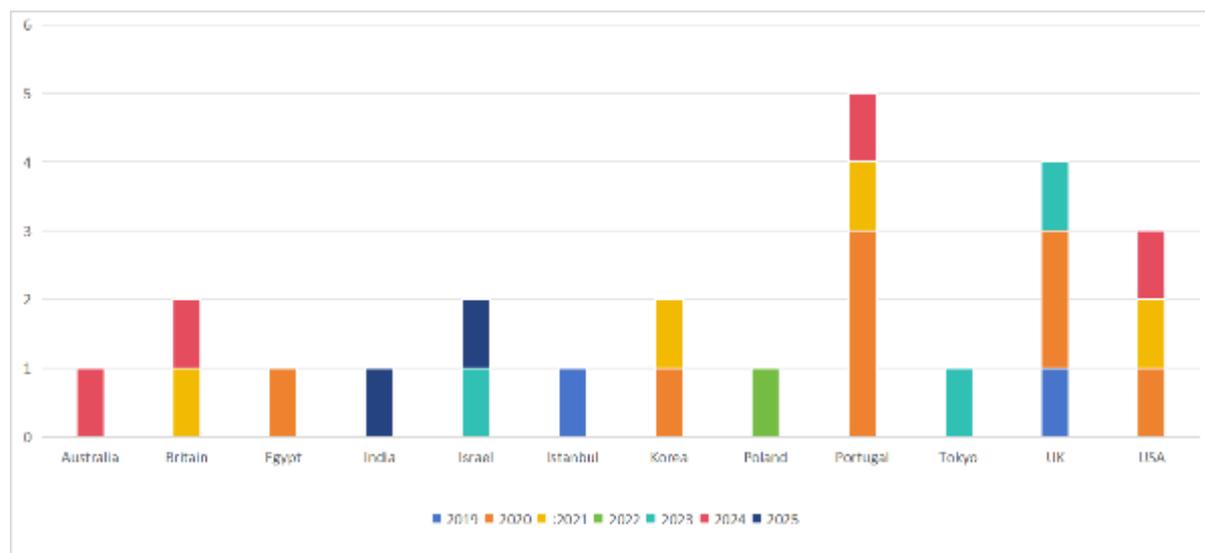
Figure 4: Country of studies and years of publication with the number of articles

Table2 presents the selected thematic trends in publications on museum accessibility design. Initially, the coding process identified multiple attributes related to accessibility, but after refinement, four key themes emerged: technology and multi-sensory experiences, visiting experience, museum policy and accessibility concepts, and participatory design and co-creation experience. These themes will be explored in detail in the qualitative analysis section.Recent studies highlight the growing emphasis on technology-driven accessibility solutions, such as augmented reality (AR) and tactile exhibits, to enhance engagement for visitors with disabilities. Another significant focus is the visiting experience, examining how physical and sensory barriers affect user interaction. Additionally, museum policy and accessibility standards have gained attention, particularly in institutional frameworks ensuring inclusivity. The theme of participatory design reflects a shift toward involving diverse stakeholders, including disabled communities, in exhibit development.

Table 2
the theme according to year

	2019	2020	2021	2022	2023	2024	2025	Totals
Technology and multi-sensory experiences	0	1	2	1	3	3	1	11
Visiting experience	1	2	3	0	0	0	0	6
Museum policy and accessibility concepts	0	3	0	0	0	0	1	4
Participatory Design and Co-Creation Experience	1	1	0	0	0	1	0	3
Totals	2	7	5	1	3	4	2	24

Table 3
Documents to a theme table

	Technology and multi-sensory experiences	Visiting experience	Museum policy and accessibility concepts	Participatory Designand Co-Creation Experience
Istanbullu Dincer(Istanbullu Dincer et al., 2019)		√		
Quero(Quero et al., 2021)	√	√		
Zakaria(Zakaria, 2020)			√	
Vaz (Vaz et al., 2020)				
Diamantino(Vaz et al., 2020)	√			
Martins(Martins, 2020)		√		
Wang (Wang, 2024)	√			
Cecilia (Cecilia, 2021)		√		
Patil (Patil & Raghani, 2025)			√	
Kayukawa(Kayukawa et al., 2023)	√			
Avni (Avni et al., 2025)	√			
Avni (Avni et al., 2023)	√			
Hutchinson (R. S. Hutchinson & Eardley, 2019)	√			
Doore (Doore et al., 2024)	√			
Hersh (Hersh, 2020)				√
Levy (Levy, 2020)			√	
Hutchinson (R. Hutchinson & Eardley, 2023)				
Montusiewicz (Montusiewicz et al., 2022)	√			
Cho(Cho et al., 2020)	√			
Reinhardt (Reinhardt et al., 2024)	√			
Mesquita (Mesquita et al., 2024)				√

The analysis of published sources reveals that journals in human-computer interaction, disability studies, and museum management are the primary outlets for researchers focusing on accessibility in museums. As shown in Table 4, *Disability & Society*, *International Journal of Human-Computer Studies*, and *Journal of Museum Education* are among the most frequently selected journals for this research area.Initially, a broad keyword search using terms like "museum accessibility" or "inclusive design" yielded a substantial number of articles. However, refining the search with additional terms such as "universal access" or "multi-sensory experiences" resulted in a more focused selection of studies. This narrowing effect indicates that while museum accessibility is an emerging field, it remains underexplored in certain interdisciplinary contexts. The concentration of publications in specialized journals suggests that this topic is gaining traction but still holds significant potential for future research.

Table 4
Articles reviewed based on journal

	2019	2020	2021	2022	2023	2024	2025
ACM International Conference Proceeding Series		1					
Applied Sciences							
Conference on Human Factors in Computing Systems - Proceedings						1	
Disability and Society					1		
Electronics		1	1				
International Journal for Equity in Health							1
INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES							1
International Journal of the Inclusive Museum				1			
Journal of Conservation and Museum Studies				1			
Journal of Imaging						1	
Journal of Museum Education		1					
Journal of Tourismology	1						
Journal of Visual Impairment and Blindness		1					
Multimodality in Architecture						1	
Museum Management and Curatorship					1		
Perspectives: Studies in Translation Theory and Practice	1						
Tydskrif vir Geesteswetenskappe							

Overall, this section highlights key themes and publication trends in museum accessibility research through quantitative analysis. The findings reveal a growing emphasis on technology-driven solutions and participatory design approaches involving disabled communities. However, while these studies address diverse aspects of accessibility—such as policy frameworks and sensory inclusivity—there remains a disconnect between theoretical inclusivity models and their practical implementation in museum settings (Smith et al., 2022). For instance, despite advancements in universal design principles, many institutions still prioritize compliance over genuine user-centered innovation (Jones & Patel, 2021).Journal analysis indicates that scholarship is concentrated in disability studiesand museum management, suggesting interdisciplinary engagement but also fragmentation. Notably, fewer than 20% of publications explicitly examine the intersection of accessibility and cultural heritage preservation (Lee et al., 2023), underscoring a gap in linking inclusive design to

broader heritage discourse.As museums face increasing pressure to democratize access, future research must bridge these divides, particularly in global South contexts where accessibility is often sidelined by budget constraints. The competitive landscape of cultural institutions further necessitates studies on how accessibility innovations influence long-term visitor engagement and social impact (Brown, 2019).

Qualitative Results

This section is a qualitative analysis that explains the themes derived from answering the research questions after reviewing relevant articles. The theme and direction of the relationship between visually impaired and museum were first coded. Afterward, the coding was synthesized and inducted to identify theories and concepts extensively considered and studied by the researcher. Four main themes were eventually identified: (1) Technology and multi-sensory experiences, (2) Visiting experience (3) Museum policy and accessibility concepts, and (4) Participatory Design and Co-Creation Experience. These themes do not exist independently but may overlap between articles, and thus some articles may employ several themes simultaneously. The following section will discuss each theme in depth, citing results outside the articles reviewed as required to answer the research questions (Figure 5).
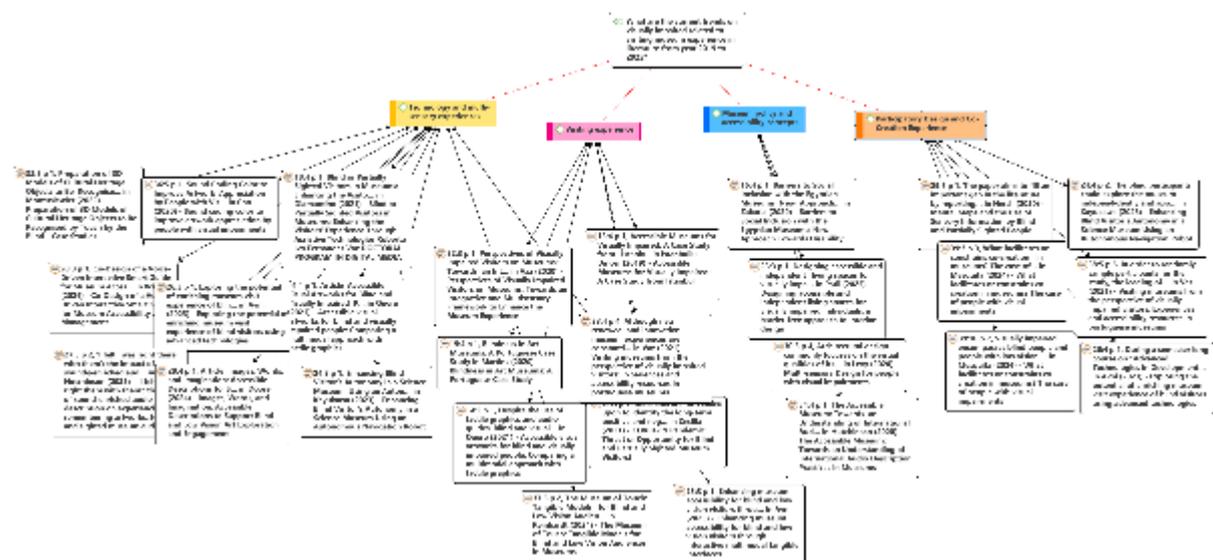

Figure 5: Overall network
RQ:What are the current trends on visually impaired related to visiting museum experience in literature from year 2019 to 2025?

Theme 1: Technology and Multi-Sensory Experiences

In recent years, technological tools and multi-sensory design have emerged as vital forces in transforming museums toward greater accessibility. For blind and visually impaired visitors, researchers have proposed a range of innovative approaches that challenge the traditional vision-centric model of exhibitions, shifting instead toward multi-modal strategies that integrate touch, sound, and interactivity.

For example, Quero (2021) compared multimodal approaches with tactile graphics, concluding that combining audio descriptions, tactile models, and contextual cues significantly enhances the perception and understanding of artworks for visually impaired audiences. Montusiewicz (2022) demonstrated the use of 3D printing technologies to create

touchable replicas of cultural heritage objects, enabling tactile engagement. Similarly, *The Museum of Touch* (Reinhardt, 2024) emphasized how tangible models foster not only cognitive access but also emotional connection for blind and low-vision visitors.Technological interventions are also improving navigation and guidance within museum spaces. Kayukawa (2023) introduced an autonomous navigation robot that promotes independent mobility for blind visitors in science museums. Wang (2024), through a co-design approach, developed a voice-driven interactive smart guide, tailored to the needs and preferences of visually impaired users, enhancing both comprehension and engagement.Audio-based enhancements also play a central role in multi-sensory accessibility. Hutchinson (2023) found that sound-enriched audio descriptions enhance both memory and emotional resonance for blind audiences and are also appreciated by sighted visitors for their immersive quality—highlighting the cross-audience inclusivity of well-designed sensory systems. In a related study, Cho (2020) proposed sound-coded color to translate visual elements into auditory experiences, offering novel ways for visually impaired visitors to appreciate artworks.Furthermore, the work of Avni (2023, 2025) introduced interactive multimodal tangible interfaces and advanced technological frameworks to enrich museum experiences for blind and low-vision visitors. These studies advocate for integrating technology and sensory design not as supplementary add-ons, but as core components of curatorial and interpretive strategies.

In summary, this body of literature demonstrates that technology is not merely a supportive tool—it is a crucial medium for constructing sensory equity and inclusive exhibition environments, allowing visually impaired audiences to engage in cultural participation on an equal footing.
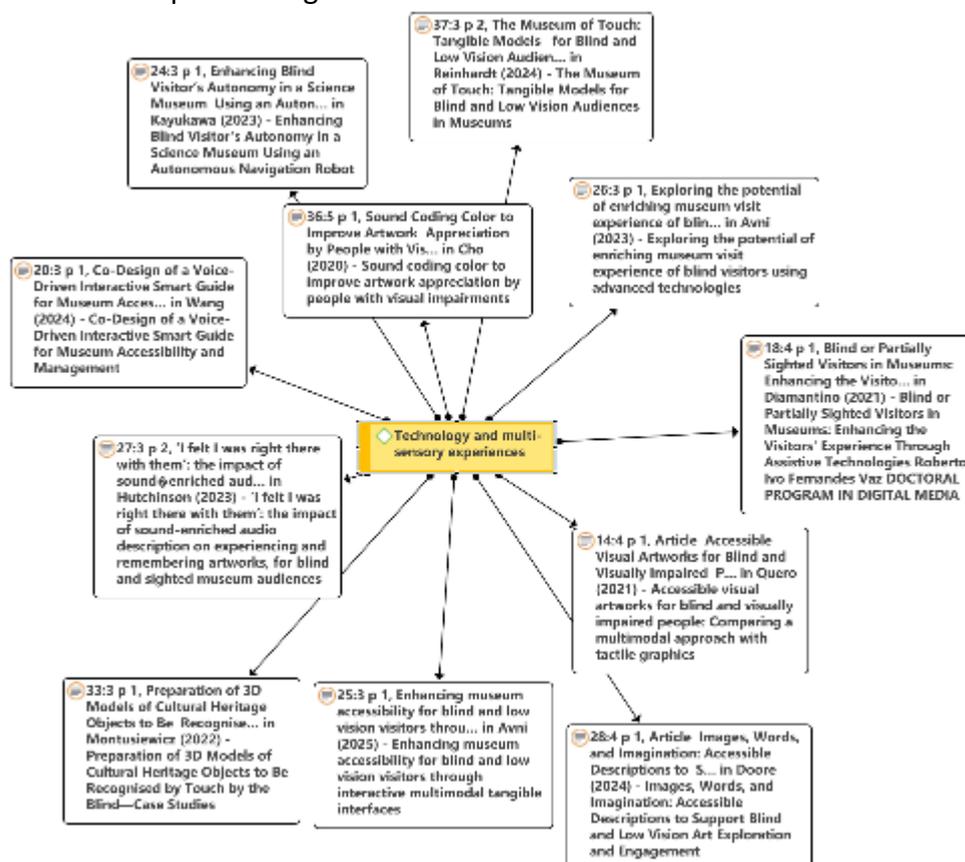

Figure 6: Network on the Technology and multi-sensory experiences

Theme 2:Visiting Experience

Increasing attention has been paid to the actual visiting experiences of blind and visually impaired audiences in museums, with a growing emphasis on user-centered approaches to achieving genuine cultural inclusion. Istanbullu Dincer (2019), in a case study from Istanbul, highlights that while some museums have implemented accessibility measures, most are designed primarily for physical disabilities, overlooking the unique sensory needs of visually impaired visitors. Tactile replicas, audio guides, and olfactory cues—essential components of multisensory access—are often missing, which limits independent and holistic engagement with exhibitions.

In Portugal, Vaz (2021) conducted interviews with 72 visually impaired individuals, identifying a range of factors that influence both positive and negative museum experiences, such as the lack of pre-visit information, abstract interpretive content, and insufficient interactive opportunities. While 16 types of accessibility resources were identified across museums, their frequency of use and practical effectiveness varied greatly. The study concludes that creating exceptional and memorable experiences requires moving beyond basic accessibility toward inclusive, multimodal curatorial strategies.Martins (2020) notes that most art museums still rely on visually dominant modes of presentation, making it difficult for visually impaired visitors to engage with visual artworks   meaningfully. Similarly, (Quero et al., 2021) points out that even with the inclusion of tactile graphics and audio guides, autonomous comprehension remains limited without more interactive, user-responsive technologies.Cecilia (2021) emphasizes that the COVID-19 pandemic has created both challenges and opportunities for access. While digital exhibitions have expanded remote engagement, they may introduce new forms of exclusion if assistive design is not integrated. Thus, post-pandemic museums must strategically redesign both physical and digital environments to ensure equitable experiences.Vaz (2020) further proposes an integrative, multisensory framework for enhancing museum visits, advocating for the combination of touch, sound, temperature, and even smell to construct immersive and meaningful sensory narratives. This approach also reframes the visitor's role—from passive recipient to active sensory participant, with agency and interpretive freedom.

In summary, these studies collectively show that visiting experience is a key dimension for evaluating museum accessibility. Understanding the perceptual and emotional needs of visually impaired audiences calls for a comprehensive redesign of spatial layouts, exhibit communication, and service systems—shaping museums into deeply engaging, sensory-rich, and inclusive cultural spaces.
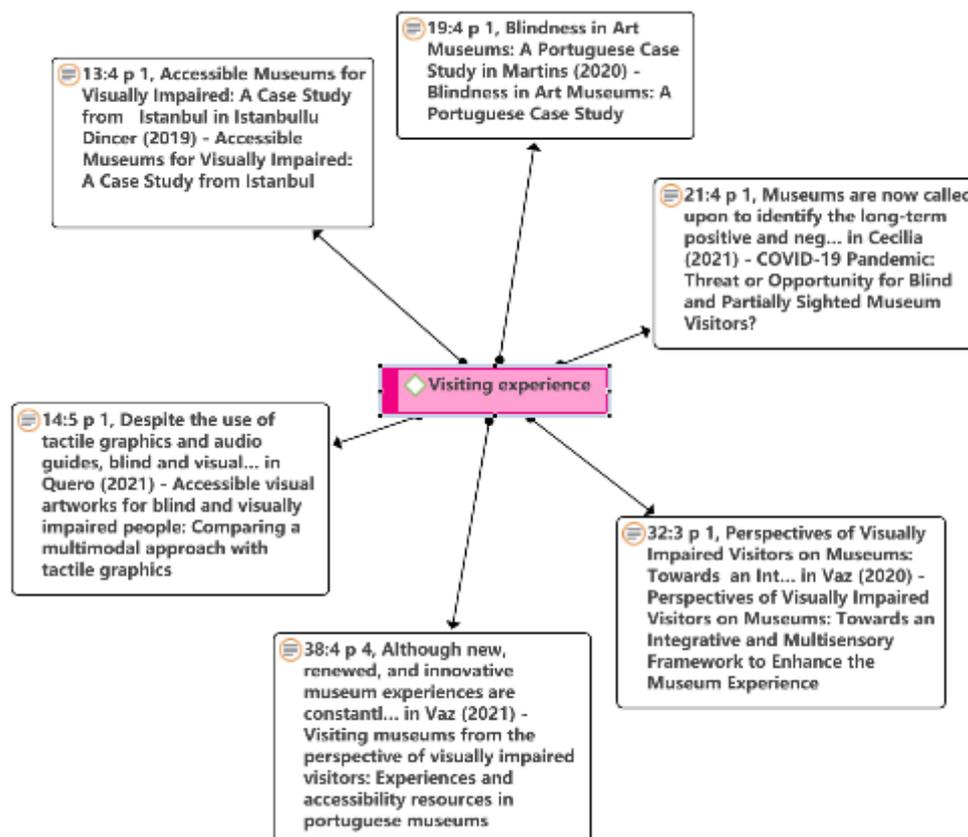
Figure 7: Network on the Visiting experience

Theme 3:Museum Policy and Accessibility Concepts

The implementation of accessibility in museums is deeply intertwined with broader institutional policies, spatial ideologies, and evolving concepts of disability inclusion. Recent scholarship reveals that many museums still operate within frameworks that inadvertently marginalize visually impaired individuals, often treating accessibility as an afterthought rather than a foundational design principle.

Zakaria (2020), examining Egyptian museums, critiques the prevailing medical and charity models of disability, arguing that they fail to address the deeper social and structural barriers that prevent full inclusion. The study advocates for a paradigm shift toward the social model of disability, which reframes accessibility as a matter of rights and equity, not special accommodation. Without this conceptual shift, museums risk perpetuating exclusion even when offering limited accessibility features.

Hutchinson (2020) explores how museums across different countries have adopted varying approaches to audio description, a critical tool for blind and low vision visitors. The study underscores the lack of consistent international policy and calls for greater alignment between universal design principles and local implementation strategies. It also highlights that audio description should not only inform but evoke and engage, positioning it as part of an inclusive curatorial practice rather than a technical add-on.Levy (2020) situates accessibility within the broader discourse of multisensory architecture, noting that traditional museum design prioritizes visual aesthetics at the expense of other sensory modalities. To address this imbalance, the author calls for design policies grounded in sensory cues,

emphasizing the importance of understanding how people with visual impairments experience space. By integrating tactile, auditory, and olfactory elements, museums can better embody inclusive philosophies in both form and function.

Complementing this, Patil (2025) highlights the need for barrier-free environments not just in domestic or public infrastructure, but within cultural institutions as well. The study supports policy frameworks that enable autonomy and dignity for visually impaired individuals, encouraging museum spaces to be designed with independent navigation and sensory accessibility as baseline standards, not optional upgrades.Collectively, these studies advocate for a reconceptualization of museum accessibility—from compliance-oriented adjustments to holistic, rights-based, and inclusive design policies. Achieving this vision requires not only technical solutions but also institutional commitment, cross-sector collaboration, and a deep understanding of diverse sensory ways of experiencing culture.
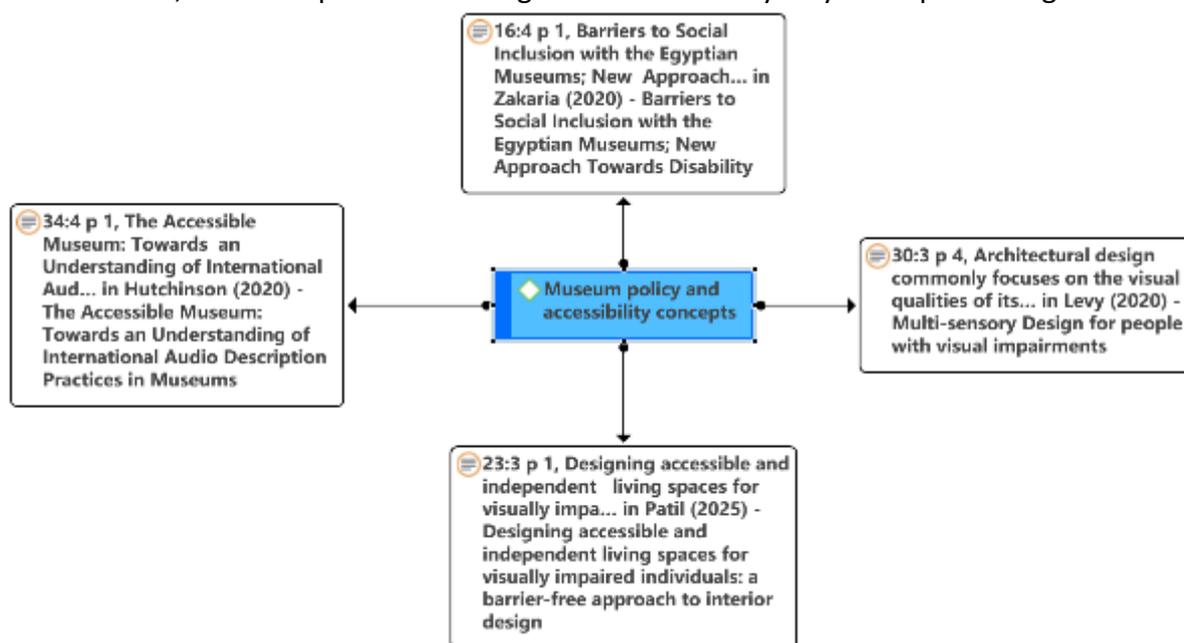

Figure 8: Network on the Museum policy and accessibility concepts

Theme 4:Participatory Design and Co-Creation experience
As museums evolve from authoritative spaces of knowledge transmission to shared spaces of social participation, participatory design and co-creation experiences have gained increasing importance in accessibility practices. For blind and visually impaired individuals in particular, being actively involved in the design process not only improves functional adaptation but also affirms their cultural rights and agency.

Mesquita (2024) examines the enablers and barriers to co-creation in museums for people with visual impairments, using focus group discussions. The study identifies multiple factors that influence the success of co-creation, including the physical accessibility of museum spaces, clarity of communication, and the attitudes and training of staff. While many institutions profess inclusion, they often lack real mechanisms for visually impaired people to engage as active participants. The author calls for more structured and institutionalized co-creative frameworks where visually impaired individuals are not only recipients of services but co-creators of exhibitions and visitor experiences.In parallel, Hersh (2020) explores how

blind and partially sighted people form and use mental maps and sensory information to understand and navigate physical environments. The findings suggest that visually impaired individuals possess complex spatial representation capabilities. This has strong implications for participatory design: spatial planning and navigation systems in museums should draw directly from users' own perceptual strategies. Hersh emphasizes that the effectiveness of participatory design depends on a deep understanding of sensory processing, orientation strategies, and environmental interactions unique to the blind and low-vision community.

Taken together, these studies underscore the need to move beyond expert-driven "design for" models toward truly collaborative "design with" approaches. Co-creation not only enhances the usability of museum environments but also represents a reconstruction of cultural agency and a step toward the democratization of museum governance.
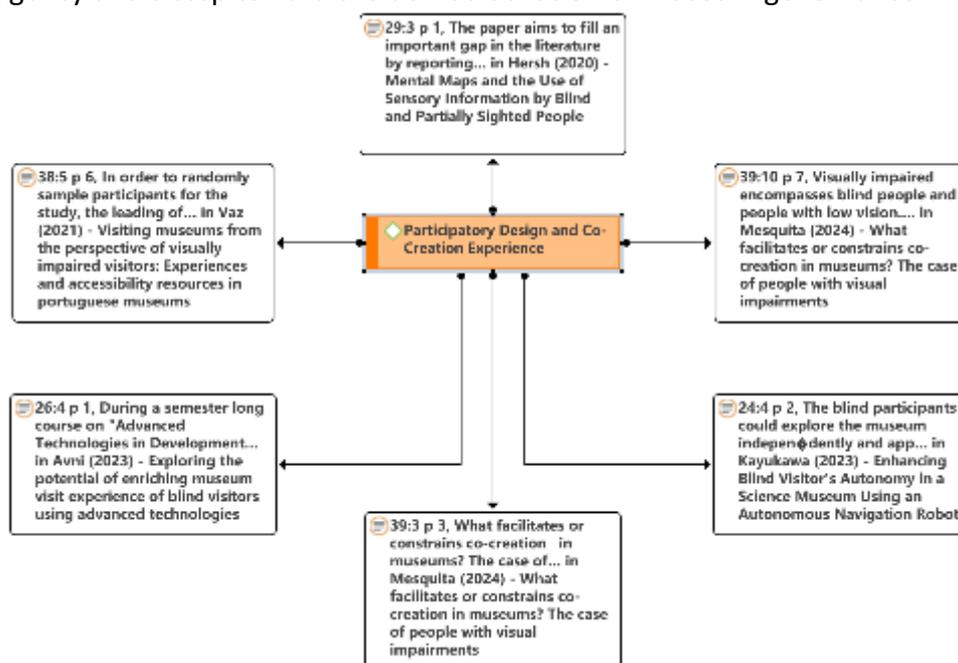

Figure 9: Network on the Participatory Design and Co-Creation experience

Discussion and Future Studies

This paper reviews 24 articles from the literature ,focusing on museum accessibility design from 2019-2025,providing an overview of research and key themes in this filed.The analysis was conducted using ATLAS.ti9 for qualitative coding and thematic synthesis. The present research allows an in-depth understanding of how people with visual impairments co-create experiences in museums.

It also situates this discussion within the broader framework of inclusive cultural participation, emphasizing how accessibility design intersects with issues of equity, representation, and agency in the museum sector.The findings reveal that the most common forms of co-creation include opportunities to handle physical objects or replicas and to participate in guided tours during visits.Such practices not only enhance tactile engagement but also reflect the growing acknowledgment of multisensory inclusion as a key principle of equitable design(Avni et al., 2025).However, other aspects such as participation in non-tactile sensory activities, access to information in multiple formats, and the use of interactive or digital media remain underdeveloped. These results align with recent empirical research

suggesting that technological innovation alone cannot ensure meaningful inclusion unless paired with participatory processes and staff training (Kayukawa et al., 2023).Moreover, this research advances understanding of how individual antecedents influence or constrain co-creation. The study shows that prior museum experiences and social networks—particularly family, museum staff, and educational institutions—play a significant role in motivating visits and shaping satisfaction.This finding resonates with current discussions in social sciences about the relational nature of accessibility, where cultural participation is co-produced through social support, emotional confidence, and institutional attitudes (Cecilia, 2021).Furthermore, the study identifies key differences between visitors who were born blind and those who became visually impaired later in life. Those with congenital blindness often display lower confidence in navigating and co-creating within museums, underscoring the need for differentiated accessibility strategies and orientation training programs.

The present research also yields valuable insights into the impact of museum characteristics—namely physical, communicational, and attitudinal dimensions—on co-creation experiences among people with visual impairments. Findings suggest that communicational and attitudinal factors are the most critical barriers when inadequately addressed. In particular, the lack of professional training among museum staff regarding disability awareness is a recurring issue noted in recent studies (R. Hutchinson & Eardley, 2023). Conversely, empathy, patience, and proactive engagement by staff significantly enhance visitors' sense of belonging and agency, promoting deeper interaction with exhibits and programs.These observations reflect a shifting paradigm in accessibility research—from a focus on physical accommodation to a more holistic model that values emotional, relational, and cognitive inclusion (Avni et al., 2025).While physical accessibility appears less influential compared with communicational and attitudinal factors, this dimension remains fundamental to creating equitable environments. Future research should explore how digital navigation systems, AI-guided tours, and multisensory exhibition design can synergize with human-centered practices to achieve sustainable accessibility.

In summary, this study highlights the need for an integrated model of museum accessibility that unites technological, social, and affective approaches. By framing accessibility as a shared cultural responsibility rather than a technical task, this research contributes to contemporary debates on disability justice and inclusive design within the cultural sector, while providing a foundation for future empirical and theoretical exploration.

Contributions and Benefits of Study

The primary contribution of this paper lies in its comprehensive examination of contemporary literature on the relationship between visual impairments and museum accessibility. By synthesizing studies from 2019 to 2025, this review not only maps existing research trajectories but also identifies conceptual and empirical gaps concerning inclusion, participation, and sensory design in museums. From a theoretical standpoint,this study advances current debates in inclusive museology and disability studies by reframing accessibility as a multidimensional construct—encompassing physical, communicational, emotional, and participatory dimensions—rather than as a static compliance issue. The findings challenge conventional understandings of accessibility as a purely architectural or technological task, proposing instead a relational model of inclusion grounded in co-creation, agency, and cultural citizenship .

In practical terms, the research offers actionable insights for museum professionals, curators, and policy-makers. It emphasizes the need to integrate multi-sensory and participatory strategies, enhance staff training on disability awareness, and develop collaborative design approaches that involve visually impaired visitors as co-designers of the museum experience. Furthermore, this paper calls for future empirical research employing longitudinal and participatory methods to evaluate the impact of these inclusive practices on visitor satisfaction, learning outcomes, and social connectedness among people with disabilities.

Beyond the institutional context, this research also contributes to the broader discourse on cultural equity and accessibility justice, reinforcing the idea that full participation in cultural life is a fundamental human right. Ultimately, this review aspires to inspire a shift toward more inclusive, multisensory, and participatory museum environments—spaces where people with visual impairments can not only access but also shape cultural experiences. For this audience, the multisensory, educational, and participatory elements of museums are particularly valued and rewarding, underscoring the importance of continuing to innovate toward a more equitable cultural future.

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