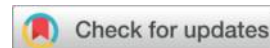


Beyond Digital Boundaries: Embodied Experience and Narrative Practice in the Exhibition Spaces of M+ Museum, Hong Kong

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Abstract

Although contemporary museums are increasingly incorporating digital technologies in exhibition design, there is mounting evidence that visitors would like to engage in ways that transcend what screens and interfaces can achieve. This study investigates the relationship between digital mediation and bodily experience in the exhibition rooms of M+ Museum, Hong Kong, Asia's first global museum of modern visual culture. The study draws on Merleau-Ponty's phenomenology of embodiment and de Certeau's theory of spatial narrative practice to analyse qualitative data collected through ethnographic observation, semi-structured visitor interviews (N = 24) and spatial analysis of M+'s permanent and temporary exhibition design. The three main findings are: (1) Visitors actively negotiate digital and physical thresholds, selectively disengaging from screen-mediated content when bodily presence offers a more immediate aesthetic access; (2) Narrative coherence in the exhibition design of M+ is critically dependent on material and spatial anchors and not digital continuity; and (3) Visitors act as co-authors of exhibition meaning through embodied movement and selective attention. The findings show that the embodied character of the museum experience is a kind of resistance to digital saturation and that narrative practice—understood as the active spatial tale visitors build via movement—should be considered a core design concept. The paper contributes to museum studies, exhibition design theory and digital heritage scholarship by recentring embodied experience as the irreducible basis of meaningful museum engagement.

Keywords

embodied experience; narrative practice; M+ Museum; Hong Kong; exhibition design; digital mediation; museum studies

1. Introduction

The opening of the M+ Museum in Hong Kong's West Kowloon Cultural District in November 2021 was a milestone in Asian cultural infrastructure. Designed by Herzog and de Meuron, M+ is a 65,000 square metre museum with over 6,000 works, which claims to be more than a repository of contemporary visual culture, but an environment where architecture, collection and digital technology come together to produce new forms of visitor engagement. Its iconic LED façade, immersive screening spaces, interactive Mediatheque and digitally integrated Cabinet constitute a serious institutional commitment to what has been called the digital turn in museum practice – the integration of computational interfaces, mobile connectivity and algorithmically curated pathways into the exhibition experience.

But since M+ has invested so much in digital mediation, it offers an extraordinarily fertile ground to study what visitors actually do in the face of the complete spectrum of mediated and unmediated experiences that a contemporary museum may give. The core argument of this paper is that embodied experience – the irreducible presence of a body moving through physical space, apprehending material objects, composing a personal spatial narrative – not only coexists with digital mediation but is the primary register through which museum

meaning is made. Digital technologies work well when they support, rather than compete with or replace, this corporeal encounter.

1.1 Research Context and Aims

This research intends to explore how visitors to M+ Museum navigate the interplay between digital and physical dimensions of exhibition experience and to determine the situations under which embodied, materially grounded interaction takes precedence over digitally mediated engagement. This research is positioned within the wider area of museum studies, adding to conversations on exhibition design, visitor experience and the limitations of digital mediation.

1.2 Research Questions

The study is guided by three research questions: (RQ1) In what ways do visitors cross the line between digital mediation and physical presence in the settings of M+'s exhibition? (RQ2) How do material and spatial anchors help maintain narrative coherence throughout an exhibition visit? (RQ3) How can visitors enact agency as co-authors of exhibition meaning through embodied movement and selective attention?

2. Theoretical Framework

2.1 Embodied Experience in Museum Spaces

The theoretical basis of this paper is the phenomenology of perception by Maurice Merleau-Ponty, who claims that human experience is irreducibly embodied: knowledge, meaning and aesthetic encounter are always already mediated by the sensing, moving body rather than by a disembodied cognitive apparatus [1]. Merleau-Ponty thinks of perception not as a passive reception of impulses from the world but as an active, physical involvement with the world – a reaching out that, even as it is constituted by the observed object, constitutes it. When applied to the context of the museum, this framework implies that the bodily presence of the visitor within the exhibition space – their movement, their proximity to objects, the ambient sensory qualities of the environment – is not a supplementary accompaniment to the intellectual engagement but rather a very condition of possibility [3].

Recent museum studies has applied Merleau-Ponty's approach to analyse how exhibition design enables or constrains the physical interaction that yields meaningful visitor experience [6]. As Sandra Dudley's work on museum materialities shows, objects communicate not only through their visual characteristics or related texts, but through their physical presence, their scale, surface, weight and the spatial interaction they establish with the visiting body [6]. It is via this materialist view of object-visitor interaction that this research reads visitor behaviour in M+'s exhibition spaces at a micro-level.

2.2 Narrative Practice and Spatial Storytelling

Michel de Certeau's idea of spatial practice provides a supplementary paradigm for understanding how visitors create meaning through movement [2]. For de Certeau, space is not a neutral container of activity, but is produced through practice. Walking, pausing, detouring, dwelling, are all narrative acts that change the abstract grid of structured space into a lived, storied, location. The visitor entering an exhibition space does not just receive a narrative pre-composed by curators, but actively develops a spatial tale by the choices they make regarding where to move, what to look at, and for how long [2].

This methodology is particularly effective for evaluating exhibition venues like M+ which provide visitors a great degree of spatial freedom across numerous interconnected galleries, floors and programming zones [7]. The spatial grammar of the physical environment – the placing of thresholds, the scale and orientation of galleries, the material qualities of floors, walls,

and lighting – constitutes what de Certeau would call the “rhetoric of walking” that shapes but does not determine the narrative trajectories that individual visitors compose [7].

2.3 The Digital-Physical Tension in Contemporary Museums

A third line of theory deals with conflicts inherent to the introduction of digital mediation into the rich spatial and material context of the museum [5]. In his work on museums in the digital era, Ross Parry has identified a recurring propensity to treat digital technologies as intrinsically progressive additions to museum experience – as enhancements that increase access, enrich interpretation and democratise engagement [5]. This study takes a more critical view. Proctor argues that in the digital age, the museum must be a platform for visitor experience, with technology as an enabling infrastructure rather than a competing attraction [12].

3. Methodology

3.1 Research Design and Data Collection

This study uses a qualitative research design that blends ethnographic observations, semi-structured interviews and spatial analysis. The fieldwork includes six visits to the M+ Museum between March and July 2024, and resulted in approximately 48 hours of observation. The ethnographic observation methodology focused on patterns of visitor movement, dwell times, moments of disengagement with digital interfaces and moments of embodied lengthy encounter with physical works. Field notes were supported by photographic documentation of spatial layouts and visitor activity.

We employed selective sampling at the exits of M+’s exhibition to recruit 24 visitors for semi-structured interviews, with the aim of achieving a diverse sample in terms of age, cultural background, frequency of museum attendance and awareness of M+ in particular [4]. Interviews were conducted in either English or Cantonese, depending on participant preference, and lasted 25 to 55 minutes. Cantonese interviews were transcribed and translated. They were asked to comment on their experience of several galleries, their usage of digital interfaces and the M+ app, and moments of extraordinary aesthetic intensity or disengagement during their trip.

3.2 Data Analysis

The interview data were analysed using reflective thematic analysis following the paradigm outlined by Braun and Clarke [4]. Coding was initially inductive, with codes sorted into themes through an iterative process of comparison and refining. The spatial analysis is based on Tzortzi’s [7] concept of comprehending the connection between architectural space and museological purpose. It utilizes the methods of spatial configuration analysis to investigate the organization of M+’s permanent collection galleries and select temporary exhibitions.

4. Findings

4.1 Navigating Digital and Physical Thresholds

M+ visitors routinely and often self-consciously negotiate the border between digital and physical modes of engagement, devising individual strategies for managing the relationship between screen-mediated interpretation and direct sensory encounter [3]. The vast majority of interviewees (19 of 24) articulated moments during their visit where they had consciously put the M+ app to one side, walked away from an interactive interface, or declined to scan a QR code, choosing instead to engage directly with a physical work, or simply to occupy the spatial and material characteristics of a gallery environment.

Acts of deliberate disengagement were not seen as failures of the digital supply, but rather decisions that increased rather than degraded the quality of their experience [8]. “The content

is the space itself,” remarked a visitor, a 34-year-old architect who was on his third visit. You don’t need an app to tell you how to feel when you step into M+’s soaring collection galleries. The above testimony implies a larger pattern wherein the physical and spatial qualities of M+’s architecture – its scale, its material richness, the quality of natural light admitted through its carefully proportioned apertures – operate as a form of embodied communication that exceeds what digital mediation can supplement or substitute [10].

4.2 Narrative Coherence and Material Presence

The second important finding concerns the effect of material and spatial anchoring on the maintenance of narrative coherence during the course of an exhibition visit [6]. The visitors who reported the most coherent and satisfying experiences of narrative progression through the M+ galleries were not those who made most systematic use of digital interpretive tools but those whose movement through the museum had been anchored by a series of sustained encounters with physically present works – encounters characterised by proximity, duration and bodily responsiveness to the material qualities of the objects encountered.

Respondents who described the museum as fragmented or overwhelming were overrepresented among those who had tried to maintain constant digital engagement throughout the visit, quickly switching between QR codes, app content, and interactive stations without allowing their bodies to settle into a sustained encounter with any one work or spatial sequence [5]. This finding supports the theoretical premise that narrative coherence in the museum visit is a function of embodied, physically grounded practice, rather than digitally programmed pathway [2]. The visitor’s body, its pace, its reactivity to spatial rhythm and material presence, is the basic instrument by which a visit is given the qualities of a story.

4.3 Visitor Agency and Meaning-Making

A third result concerns mechanisms whereby visitors exert agency as co-creators of exhibition meaning [9]. Repeated analysis of movement patterns and interview testimony arrived at the same conclusion: visitors felt the greatest sense of agency – and, by extension, the greatest depth of engagement – in gallery arrangements that offered spatial freedom and material richness: spaces in which there was much to look at, to move around and to return to, and to experience from different bodily positions and distances.

The permanent collection galleries at M+ were often characterised as venues with strong visitor agency, especially those showing large-scale installation works and architectural remains [11]. For many participants, the most memorable and meaningful facet of their visit was the experience of moving around a big sculptural installation, finding unexpected perspectives, and composing personal viewpoint points – more than any technologically mediated engagement. As Witcomb has suggested, the most impactful museum experiences are those that enable visitors to develop their own interpretative trajectories, rather than follow pre-determined itineraries [9]. At its best, M+’s spatial design does just that, issuing an invitation.

5. Discussion and Conclusion

5.1 Embodied Experience as Design Principle

The results of this study back up the claim that embodied experience ought to be understood not as an additional aspect of designing a museum visit but as the fundamental organising element of it. The research from M+ reveals that visitors are most engaged, narratively pleased and agentive when the physical and spatial qualities of the exhibition environment take precedence over digital mediation. What this is not to say is that digital technologies have no role in the contemporary museum, but rather that their worth is instrumental rather than intrinsic, assisting the physical experience rather than standing in for it.

This recentring of physical experience as the basis for museum meaning-making has direct consequences for exhibition design, display of collections and digital interpretation. Designers and curators who foreground the sensory, spatial and material dimensions of the visitor's bodily encounter – who treat the architecture of the gallery, the placement and scale of works and the ambient qualities of light and sound as primary interpretive instruments – are likely to produce more coherent, more agentive and more meaningful visitor experiences than those who default to digital mediation as the primary vehicle of interpretive communication.

5.2 Implications for Museum Studies

Theoretically, this study contributes to museum studies by showing the ongoing relevance and generative power of phenomenological and practice-theoretical frameworks for the analysis of modern museum experience. Merleau-Ponty's phenomenology of embodiment and de Certeau's theory of spatial practice, developed in very different intellectual contexts, converge productively on the central claim that meaning is made in and through the body's active engagement with a materially and spatially specific environment. This convergence offers a strong theoretical basis for exploring the embodied features of museum contact in different institutional and cultural contexts.

5.3 Limitations and Future Research

There are certain limitations to this study that need to be noted. The qualitative design is suitable to the study questions, but it does not allow statistical generalisation about visitor populations. The findings are contextually relevant to M+ and to the particular visitor cohort recruited during the fieldwork period. Further study could build on this findings with larger scale visitor studies, comparative research across other institutions, or longitudinal studies to follow changes in the digital-physical balance of museum experiences over time. The variance in interview answer between participants of differing national and linguistic origins highlights a particularly fruitful avenue for future inquiry – that of the interaction between cultural background and embodied museum experience.

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