

The rhizomatic visiting experience

A case study of the virtual Palace Museum (Beijing) on WeChat

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Abstract

The integration of digital technologies into museums has redefined public engagement, offering innovative virtual experiences that transcend physical access. Informed by Deleuze and Guattari's rhizome theory, this paper positions virtual museum visiting as recontextualized experience and examines the phenomenon through a case study of the Palace Museum on WeChat. Drawing on collaborative autoethnography with walkthrough elements, we found that these visits construct a new knowledge system that invites self-referential, spontaneous and heterogeneous connections. We therefore argue that the visiting experience drives the virtual museum rhizomorphic thanks to its performance of unpredicted and heterogeneous mapping. By addressing the various mediators involved in virtual museum visiting, this paper calls for a reconceptualization of (dis)connections in the audience's engagement with virtual museums. It offers a novel framework for understanding virtual museum visiting as a lived experience.

Keywords: virtual museum; rhizome; visiting experience; Palace Museum on WeChat

1. Introduction

The integration of digital technologies into the operations of museums worldwide has been a longstanding endeavor aimed at enhancing connections with audiences, fostering public engagement, and generating revenue. A notable trend in recent years is the virtualization of museum functions and experiences by adopting various digitization, virtual reality (VR), and augmented reality (AR) technologies. For instance, the Google Art Project has collaborated with renowned museums globally to provide free digital access to their collections. Utilizing its Street View technology, the platform facilitates virtual walkthroughs of museum interiors, albeit without support for high-resolution images of objects and exhibition boards (Clerkin and Taylor 2021). Notably, on November 26, 2020, the Mauritshuis in the Netherlands launched the world's first fully digitized virtual museum in gigapixel format. In collaboration with MadPixel from Spain, this innovation allows for an intimate examination of nuances that might evade the naked eye in a traditional gallery setting (Art Institutions x Web3 2023). Additionally, the implementation of online

platforms like Roblox has spurred cultural institutions worldwide, including the Metropolitan Museum of Art (The Met), to explore the potential for gamified virtual museum experiences in pixel art style.

Among these developments, the Palace Museum (one of the largest national museum complexes located in the Forbidden City at the heart of Beijing) on WeChat stands out for two reasons. Firstly, it is set up on one of the most popular social media platforms, WeChat. With over 1.3 billion monthly active users worldwide (Thomala 2023), WeChat goes beyond its social and communicative aspects as it gradually integrates a wide range of social functionalities into the platform, including shopping and payment, gaming and entertainment, as well as food delivery and taxi-hailing services, making it deeply embedded in society and capable of addressing individual users' basic needs. The ubiquitous nature of WeChat and its seamless integration into everyday life render it an indispensable tool to which individuals are habitually tethered and upon which they depend (Chen, Mao and Qiu. 2018; Li 2021). Such wide adoption and continuous online presence highlight the potential of WeChat as an ideal platform for cultural institutions like museums to enhance their visibility, engage with their audiences and facilitate online visiting experiences. For instance, the Louvre (France) launched its Mini Program on WeChat in 2021, providing informative guidance for onsite visits and showcasing highlights of its digitalized collection (Global Times 2021).

Compared with its counterparts, the Palace Museum further explores the potential of the Mini Program, essentially 'mini applications' built within and operated on WeChat. It offers a comprehensive virtual visiting experience on WeChat, encompassing exhibitions, audio guides, and tours of the exhibition halls and the architectural complex of the Forbidden City. This distinctive approach is the second reason that makes the Palace Museum's case unique. WeChat creates 'an immersive and unified experience for everyday activities that resembles an operating system' (van der Vlist et al., 2024: 2). Without the need to download additional applications or navigate away from the WeChat platform, audiences are enabled to engage in an immersive museum-visiting experience. Integrating the 'Digitalized Palace Museum' (Tencent 2022) within WeChat offers active users worldwide access to the world's cultural heritage as part of their everyday digital routines, without time or geographical constraints. With the progressive integration of its services and features into WeChat, the virtual Palace Museum has evolved from a mere information provider to a comprehensive public service provider through Mini Programs. This affords the audience virtual access to the museum, alongside features previously available only on the museum's official website, such as ticket booking, live onsite traffic maps, and exhibition updates.

This study aims to critically examine the Palace Museum's Mini Program nested on WeChat to provide insights into the virtual museum (VM) visiting experience. While previous studies have primarily viewed the digital-technologies-enabled experience as complementary to enhance and support physical visits (Sundar et al. 2015; Tallon and Walker 2008), this article argues that social-media-platform-enabled VM infrastructures go beyond being mere assistance to physical visits. Instead, it positions the VM visiting as an integrated and recontextualized experience that potentially challenges conventional museum visitation (Smith 2006). In other words, the VM is not merely supplementary but offers an alternative museum experience, facilitating connected and immersive digital engagements with museum content, transcending the limitations of physical presence for the audiences.

Adopting a methodology inspired by collaborative autoethnography and walkthrough methods, four researchers experienced the virtual Palace Museum Mini Program on WeChat for the first time in 2023, despite prior visits to its physical counterpart at least a decade ago. Between April and October, we observed, documented, and discussed our VM visiting experiences. As a part of a broader project that makes an inaugural effort to explore the VM through the lens of rhizome theory (Deleuze and Guattari 1987), this article analyzes the visiting experience from a rhizomatic perspective that underscores connection, multiplicity, and cartography. It attempts to answer the following question: what kind of VM experience is enabled? To what extent is the VM experience rhizomorphous? By addressing these questions, this paper offers original insights on the VM visiting experience through the lens of the audience and proposes an alternative theoretical and methodological framework for understanding

museums from the perspective of the unprofiled ‘digital public’ (Bettivia and Stainforth 2022) for the current VM study.

2. Literature review

2.1 *Virtual museum and its visiting experiences*

Although not the key concern of the article, it is worth pointing out that the very definition of the virtual museum is debated both within and across disciplines (Pescarin 2014; Bentkowska-Kafel 2020) and has been used interchangeably with the terms digital museum, online museum, electronic museum and web museum (Schweibenz 2004; Pujol and Lorente 2012). Embracing the philosophical stance that emphasizes the virtual as potential (Lévy 1998; Pujol and Lorente 2012), we approach the virtual museum not in opposition to the real (Lévy 1998; Desvallées and Mairesse 2010) and not as an analogous substitute for the physical institution (Gaia et al. 2020; Burke, Jørgensen and Jørgensen 2020). Instead, we adopt a constructive definition of the virtual museum as a virtual space where a body of digital objects are collected and presented so that ‘visitors can communicate between them, and explore, create or modify spaces and (digital or digitalized) objects’ (Pujol and Lorente 2012: 45). Highlighting audiences’ engagement and experience, this definition positions the virtual museum within the extensive intellectual thinking that contemplates on visitors’ critical role in meaning-making. As exemplified by the idea of active audiences (Bourdieu, Darbel and Schnapper 1991; Hall 2001) as well as the concept of the unfinished museum (Carr 2001; Stylianou-Lambert 2010), such an approach challenges institutions’ authoritative power in producing knowledge and curating experience. In addition, to join the scholarly dialogues about the virtual museum (VM), we take on the acronym VM visiting experience to differentiate the visiting experience of virtual museums from the technology-enabled virtual experience in physical museums.

Existing literature on the VM visiting experience tends to focus on two areas: VMs’ interface usability (e.g., Kersten, Tschirschwitz and Deggim 2017; Petridis et al. 2013; Barbieri, Bruno and Muzzupappa 2017; Macdonald 2015) and its implications as an educational tool (e.g., Verde and Valero 2021; Klentien 2022; Kampouroupoulou et al. 2013; Taranova 2020). The former collection of academic endeavors evaluates users’ interaction with digital technologies against the heuristics of immersion (Barbieri, Bruno and Muzzupappa 2017) and presence (Li, Nie and Ye 2022; Styliani et al. 2009), to name two relevant dimensions. Conversely, the latter concerns knowledge acquisition through audiences’ engagement with the exhibited objects and content, underscoring the educational purpose of the museum’s information sharing (Roberts 2013). The two bodies of literature rarely intersect, even though plenty of studies suggest that digital technologies enrich the audience experience in physical museums (Light, Burgess and Duguay 2018; Tallon and Walker 2008). More intriguingly, in their considerations of audience experience, few are dedicated to interrogating the meaning and effect of this new form of connection for audiences, let alone its particular implementation on social networking platforms. Often overlooked is that museum visiting, VM visiting included, is a lived experience with the embodied involvement of the audience’s mind and body (Roberts 2013). If we consider the VM as a virtual space that is more than a collection of digital objects, a more holistic examination of the relations between the VM, audiences, digital interfaces and infrastructure, as well as other mediators, is thus required. Audiences’ engagement with exhibitions and the museum is instrumental in shaping their experience. So are their encounters with the facilities and other post-visit life events (Falk and Dierking 1992).

2.2 *Theorizing virtual museum visiting experiences through the rhizome*

To account for the complexities of the multiple connections involved in shaping the VM visiting experience, we propose the theoretical framework of the rhizome. Introduced by Gilles Deleuze and Félix Guattari in 1980, a rhizome is a non-linear, non-hierarchical and acentred system. As an assemblage of

multiplicities, a rhizome is characterized by six principles: connections, heterogeneity, multiplicity, asignifying rupture, cartography, and decalomania (Deleuze and Guattari 1987). It is conceptualized as an open map, with multiple entryways and any point connectable to anything other ‘in random and unregulated relationships’ (Best and Kellner 1991: 99). With the lines of flight of these entryways and connections, a rhizome deterritorializes and reterritorializes both as and into multiplicities. Set in contrast with the tree-root and radicle systems, a rhizome embodies the notion of heterogeneity and possesses no pivot, universals or genealogies.

The rhizome’s features of fostering heterogeneous connections align harmoniously with contemporary discourse on enhancing the museum visiting experience. In the case of VM studies, the rhizome theory provides a theoretical foundation for the refusal to postulate the VM as an analogous substitute for the physical institution (Deloche 2001; Schweibenz 2004; Gaia et al. 2020). As illuminated by Deleuze and Guattari (1987), the doctrine of analogy is arborescent as it presupposes a transcending one from which the rest develops. It indicates the conformation ‘in varying degrees to a single, eminent term, perfection, or quality as the principle behind the series’ (Deleuze and Guattari 1987: 234). Hence, instead of comparing the VM visiting experience with that of the physical museum, constructing the latter as the privileged reference, we theorize the VM visiting experience in its own terms of connections that deterritorialize and reterritorialize to form multiplicities.

Most cultural institutions might be categorized as conforming to a tree-root structure due to their unparalleled power in governing and stratifying information as well as methods of knowledge-sharing. One significant implication of rhizome theory is that even a root-tree structure can be transformed. Rhizome and tree-root systems are not dualistic binaries or ‘two opposed models’ (Deleuze and Guattari 1987: 20), but tendencies with varied intensities (Buchanan 2007). ‘There exist tree or root structures in rhizomes; conversely, a tree branch or root division may begin to burgeon into a rhizome’ (Deleuze and Guattari 1987: 15). What Deleuze and Guattari are describing is a rhizomatic perspective, with which new connections that are not dictated by an imposed order can be formed to transform the tree into the rhizome, even though only partially. This potential for transformation is termed ‘rhizomorphous’ (Deleuze and Guattari 1987: 15).

With a rhizomatic perspective, audience engagement is discerned to be the vital force that drives the VM to be rhizomorphous. As we will argue in this paper, their interactions, acting as lines of flight, open up the boundaries of the VM and the digital technologies it involves. Following Deleuze and Guattari (1987), we ask: what connections are made possible by the VM? What are their modes? How are they fabricated? Moreover, a non-dualistic rhizomatic perspective invites us to contemplate disconnection to avoid being trapped in an imposed dualism. Recognizing that disconnections are also a necessary and constructive part of the online experience, alluding to the audiences’ agency (Light 2014; Light, Burgess and Duguay 2018), we endeavor to investigate disconnections and ambivalences to yield a more comprehensive understanding.

3. Methodology

Our collaboration is inspired by and adapted from the methodological exploration done by many collaborative autoethnographers (e.g., Chang, Ngunjiri and Hernandez 2016; Roy and Uekusa 2020; Hornsby, Davis and Reilly 2021). As proponents of collaborative autoethnography, Hernandez, Chang and Ngunjiri (2016) defined the methodology as ‘autoethnography that engages two or more autoethnographers in a research team to pool their lived experiences on selected sociocultural phenomena and collaboratively analyze and interpret them for commonalities and differences’ (Hernandez, Chang and Ngunjiri 2017: 251). We were drawn into the method for its ‘multivocality and research rigor’ (Hernandez, Chang and Ngunjiri 2017: 252) that allows the authors (hereafter addressed with their initials as YZ, LJ, FW and BW in this article) to work together as co-creators. Despite all from China and having received higher education to the doctoral level, our research specialties, understanding of museums,

preferences in VM visits, and social media usage habits vary significantly from each other. Our VM visits are at first personal and then become collaborative when we discuss them in meetings and conversations. Our aim is ‘to describe and systematically analyze personal experience in order to understand cultural experience’ of the VM visiting (Ellis, Adams and Bochner 2011: 273).

On the other hand, existing studies on VM visiting experiences often neglect that the researchers are also audiences, and the visiting is also a type of lived experience (Roberts 2013). In this paper, we rely on our collaborative autoethnographical work to enable the researcher’s perspective to be in dialogue with the experience offered by the VM. Taking ourselves as research subjects of this inaugural project of a broader endeavor, we attempt a more holistic consideration of the nuances and subtleties within this emerging space through critical self-reflection and productive collaboration (Roberts 2013).

Our collaborative autoethnographic practice also works with the walkthrough method to explore how the Palace Museum Mini Program on WeChat enables visitors to document the immersive and subjective dimensions of navigating VM space. Instead of cementing an existing and united voice, we embrace the multiplicities derived from a ‘rhizomatic map’ (Stehik 2004: 42). In particular, we accessed the Mini Program through different approaches and considered different aspects during our visits. As such our interactions both with the Mini Program and ourselves are connected with multiple entry points similar to a rhizome (Deleuze and Guattari 1987).

The collaboration was carried out between April and October of 2023, and our data consists of autoethnographic notes on using the Palace Museum WeChat Mini Program, group meeting discussions, and reading group memos. For the first month, we held reading sessions on *A Thousand Plateaus: Capitalism and Schizophrenia* (Deleuze and Guattari 1987) every other week to further explore the possibility of a rhizomatic visiting experience. In the meantime, we started collecting our autoethnographic notes on our VM visits. To thoroughly reflect upon and analyze our visiting experience on WeChat, our autoethnographic work incorporated elements from the walkthrough method. This included engaging with the Palace Museum WeChat Mini Program’s interface and examining its technique features, such as social functions, textual content and tones, symbolic representation, and embedded cultural discourses, to understand how it guides users and shapes experiences (Light, Burgess and Duguay 2018). During this process, we interacted with the VM’s homepage, purchasing page, map navigation, exhibitions, Palace Virtuality, and the Panoramic Palace Museum while engaging with the platform’s various features, such as location-based features, cross-platform connectivity features, and reporting features, and observing the navigation within the exhibition design, and other specifications. We took detailed notes (textual and audio) and captured screenshots, looking for actions the platform requires, encourages, manages, and regulates to visit the museum through its specific affordances. All four of us accessed the app with our own devices, including iPhones, iPads, Android phones, and desktops, and we did this following our personal schedules instead of a set plan.

Once every two weeks, we met via Zoom for a discussion to filter out the themes from the field notes and our readings. We presented our notes to each other and discussed the happenings and feelings of our visits to the Palace Museum Mini Program. Comparing and contrasting our notes, we acknowledged the heterogeneity of our visiting experiences and analyzed them according to the six rhizomatic principles. In this context, our collaborative autoethnographic approach extends to analyzing our engagement with VM on WeChat. With a rhizomatic perspective, this openness to the unpredictable nature of connections and layered engagement reflects the unexpected ways in which our VM visiting experiences are shaped.

4. Discussion

4.1 A note on the Palace Museum on WeChat

Before we present our findings, a brief introduction to WeChat and the Palace Museum’s presence on it will help set the scene. WeChat is an all-inclusive app that consolidates services across diverse aspects

of everyday life, providing a comprehensive and seamlessly integrated user experience. WeChat achieves this by continually establishing connections with external businesses and partners and offering a set of Application Programming Interfaces, which allows developers to build and run their applications on top of WeChat through Mini Programs. Rather than being stand-alone platforms, these are what Tiwana (2014) conceptualizes as ‘nested platforms’, as they are written in WeChat’s proprietary coding languages, and comply with platform guidelines and rules, only existing and operating within the context of WeChat (Plantin and de Seta 2019). This means that WeChat maintains control over the operation of Mini Programs while simultaneously structuring the interactions between the platform and its users. In this sense, WeChat has enabled unprecedented levels of connections between disparate entities, forming an extensive, interconnected network.

The Palace Museum’s engagement with this pervasive, ubiquitous, and widely adopted WeChat represents a significant shift in how museum visiting experiences are organized within social media, with the platform playing a pivotal role in driving these transformations. The integration of the Palace Museum into the WeChat ecosystem of Mini Programs allows the museum to effectively engage with potential audiences and promote its services through a variety of WeChat features. Simultaneously, this reshapes not only how the museum functions and delivers specific services but also influences the dynamics of interaction among audiences. The specific affordances of WeChat bring diverse parties together and govern the relationships among them, shedding light on the properties of a socio-technical environment that enable or constrain certain types of practices and thus shape the visiting experience. It is important to consider how these connections occur through various lines of action, providing specific users with distinct interactions within their immediate visiting environment within the Palace Museum Mini Program and the broader visiting context within and beyond the scope of WeChat. Therefore, users’ visiting experience results from the interplay between technology, user, and context.

4.2 Virtual visiting as the rhizomorphous mapping

Navigating through the virtual Palace Museum, audiences can access virtual exhibitions, digitized archives of artifacts, virtual tours of buildings in the Forbidden City, and online gift shops. During our discussion of the virtual visiting experience, LJ demonstrated great enthusiasm for wandering around the Forbidden City, appreciating its virtual space with uncompromised vividness. She commented, ‘it was so great that I can actually move around freely in the space’ (Meeting Note on May 24, 2023). By ‘freely’, she referred to the relatively comprehensive virtual accessibility of the museum’s architectural space, including gardens, halls, and courtyards. For instance, in the Panoramic Palace Museum, audiences are at liberty to explore anywhere marked with a name label on the Museum’s map without having to follow a planned route (Figure 1). FW, however, disagreed, ‘I found it quite the opposite as I was bound by the designated positioning and routes’ (Meeting Note on May 24, 2023). What she described here was the curation of stitched VR photographs, with interactive panoramas only provided from predefined positions (Figure 2). Similar to Google Street View, directions of progression from these positions are limited, guided by arrows or designed icons. The Hall of Mental Cultivation in the Palace Virtuality is one such example (Figure 3). Once entering the hall, audiences can only follow the arrow on the floor for their tours. Clicking the arrow or aiming at it with a VR headset, the next positional panoramic appears after a zoom-in transition.

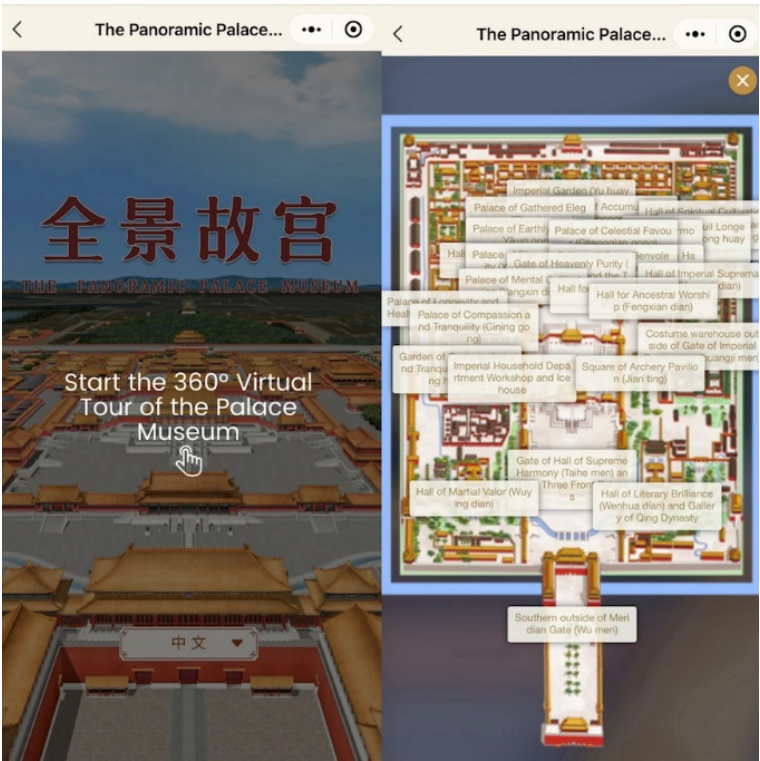


Figure 1. The Panoramic Palace (accessed on November 23, 2023)
Landing page and map page with a great number of places labeled for virtual visits

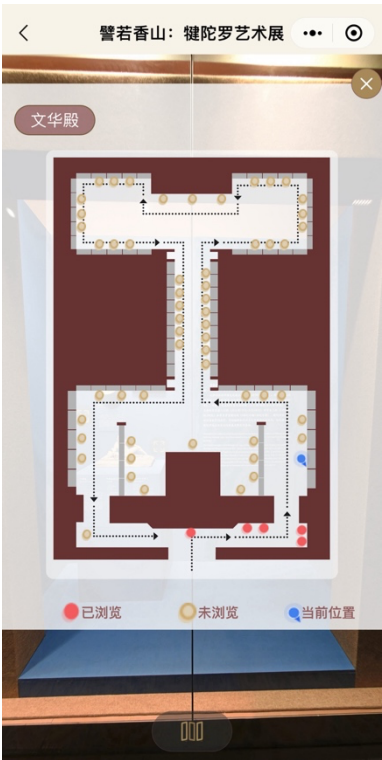


Figure 2. Curated Exhibition Route
An example of the curated route for the virtual exhibition ‘Gandhara Heritage along the Silk Road’



Figure 3. Curated Visiting Experience
The marked arrow on the floor indicates the predefined position

At the root of their disagreement is a concern over the museum's authoritative power over audiences' experience. Whereas LJ remarked on the museum's hospitable offering of plentiful resources at the audiences' disposal at their own will, FW noted the impediments and their effects on framing the audience's journey. This contradiction is encapsulated by Deleuze and Guattari in the rhizome's fifth and sixth principles: cartography and decalcomania. According to them, decalcomania, or the tracing, is associated with the tree-root and aims to reproduce its formations 'on the basis of a centered or segmented higher unity' (Deleuze and Guattari 1987: 16). In contrast, cartography is the creation of a rhizome, or the map. Less clearly defined in its own terms and set in opposition to the tracing, the map is characterized by productive constructions and productions of heterogeneous multiplicities. The juxtaposition of these two contrasting principles as both rhizomatic alludes to Deleuze and Guattari's (1987) rejection of dualism: 'there exist tree or root structures in rhizomes; conversely, a tree branch or root division may begin to burgeon into a rhizome' (15). The dualism here is, therefore, 'methodological rather than ontological' (Adkins 2015: 30). Rather than condemning the tree-tracing and eulogizing the rhizome-map, Deleuze and Guattari intend to propose a way to deterritorialize the centrality, nourish lines of flight and open up rigid structures for transformations, connections, and productions. 'To be rhizomorphic' (Deleuze and Guattari 1987: 15). This tension between reproducing a central order and fostering multiplicity is what FW and LJ have discerned in their virtual visits. It is only evident that the Palace Museum aims to replicate the physical visiting experience with enhanced features and idealizations. This ambition can be perceived in the presentation of virtual exhibitions.

Take 'A Literacy Legacy' (2023) as an example. In its own Mini Program, the exhibition journey starts with a large advertising board of the exhibition, located at the first landing after entering the gate to the West Yanchi Building. Rather than parachuting audiences into the exhibition hall, the Mini Program invites them to click 'forward' eight times and experience the wooden staircase and the hallway of the architecture that housed the exhibition. At particular viewpoints, audiences can 'turn' around to appreciate the surrounding building complexes. By promoting the sense of 'being there,' the museum sets the physical visit as the only reference, through which audiences via the Mini Program are expected to sustain their encounter with the artifacts and cultural heritage site. In this sense, VM visiting is merely another replicating tracing of the physical experience at the Palace Museum in the heart of Beijing. As elucidated by Deleuze and Guattari, a tracing is unproductive and homogenizing. This is precisely what was implied in FW's comments. With predefined positions and curated routes, all audiences' virtual journeys within a particular scenario, for instance, an exhibition, a hall, or a courtyard, are bound to be similar. Different directions might be taken at specific points, but the possibilities are limited. Moreover, all audiences are positioned at the same height during their tours and the same distance from the artifacts and architecture, eradicating individual idiosyncrasies. In a like manner, all the represented spaces are marked by the evacuation of any other individuals (except for a non-player character in a game embedded in the virtual tour of Juan Qin Zhai (the Rest Lodge) and the deprivation of any immediate indication of time, such as change of weather and light. Technology is undoubtedly a reason for these limitations. More importantly, it postulates that a digital duplication of the actual museum will yield only impasses and obstructions. After all, the audiences are NOT at the actual site and will be reminded of this in various instances (Schweibenz 2004). Here, we recall Deleuze and Guattari's caution against setting the dualism between tracing and map, as we also spotted lines of flight in this tracing that could open it up towards a map with multiple entryways and points for unregulated connections. LJ's recognition of the unfettered roaming over the locations on the digital map is one of them. With profuse places accessible for virtual tours, the number of possible visiting routes undergoes exponential growth. The increase is in both extensity and intensity, with an enhanced feeling of empowerment: audiences are bestowed with not only the power to wander around as they like, but also the prospect of a comprehensive visit less affected by temporal and physical limitations. Their participation and engagement deterritorialize the obstructions and drive the VM rhizomorphic.

4.3 The performing of a rhizomorphous map

In terms of planning a visiting journey, our distinct habits of navigating museums and browsing apps played a vital role. When we started to discuss field notes, we instantly noticed that we took an interest in different exhibitions and toured the VM in very different orders. BW's and FW's journeys commenced with the exhibition 'Gold and Jade Artifacts' (2023), for it was the first in the centrally positioned row of exhibitions, while YZ selected 'A Literary Legacy' (2023) as it was advertised in the sliders at the top of the home page. Instead of any exhibitions, LJ started with the bottom banner (including 'Recommendation', 'Visiting the Palace', 'Cultural artifacts', and 'My Profile') (Figure 4). It took us a few meetings to determine if we should formulate a unified visiting plan. Eventually, we decided not to because we not only acknowledged and expected museum visiting to be a heterogeneous experience but also realized that such variations characterized the affordances of the VM. It is these unpredictable variations and multiplicities that we can relate to the rhizomorphous map.



Figure 4. Virtual Palace Museum Home Page Layout (accessed on December 14, 2023)

The top sliders highlight events and activities available on the virtual Palace Museum. The row of squared images includes posters of recent exhibitions.

Moreover, taking advantage of technology, the VM incorporates more interactive activities, including the guided tour in the Rest Lodge, where audiences assume the avatar of an apprentice craftsman in the Qing Dynasty and follow the instructions of an experienced senior to complete a series of challenges. In this process, audiences would learn about the building and traditional crafts. 'It was like that popular adventure role-playing video game that I played in the 2000s,' LJ stated (Meeting Notes on May 24, 2023). If the gamified tour prompts audiences to connect their visiting with childhood memories and other entertaining activities, evoking a sense of nostalgia, features that foster daily engagement, such as *Jiujiu Xiao Han Tu* (the Nine-by-nine Diagram) and *Meiri Gugong* (Palace Museum Every Day), anticipate the integration of museum visiting into audiences' everyday practice. With these experimentations, the VM is recontextualized. It engenders experiences that interweave with the audience's personal context with

enhanced intensity. In this sense, the VM visiting is more of a performance, for it is not just about the capability to comprehend the contents as they were delivered, but also an ongoing process of making sense in relation to our own dispositions. This contrast echoes what Deleuze and Guattari (1987) marked for the map and the tracing. ‘The map has to do with performance, whereas the tracing always involves an alleged “competence”’ (Deleuze and Guattari 1987: 12-13).

It is worth noticing that the rhizomorphous dynamic between a tracing and a map can be found in any museum visiting. On the one hand, any visit is evidently conditioned by what is made possible by the museum, from its history and architectural space to its own social, cultural, and political agendas as an institution. On the other hand, audiences’ distinct perspectives, varied expectations, and diverse habits of navigating museums would induce some lines of flight and elicit very different experiences and memories. It is, however, in this unique case where a VM is constructed on a social media platform that we perceive an intensified tendency to be rhizomorphous. This is primarily manifested in two aspects: one is the enriched unpredictability. Apart from the multiplication of variations in visiting trajectories and experiences, the ubiquity and embeddedness of WeChat in everyday life also contributed to the uncertainties/complexities. As will be addressed in the next section, the VM visiting experience constantly interweaves with and integrates into the audience’s other digital and physical encounters. It is, therefore, impossible to pre-determine the context of visiting except that it could take place anywhere with anyone.

The other aspect is the multiple entryways, which was considered one of the most important characteristics of the map (Deleuze and Guattari 1987). To enhance the accessibility of Mini Programs, WeChat enabled the function of *Recently Used Mini Programs* and *My Mini Programs* in 2018. After the initial entry to the Palace Museum Mini Program via the built-in search function on WeChat, users only need to pull down the main page to select from the head banner for subsequent access (Figure 5). What is more, as the VM is developed and designed through WeChat Mini Programs, many of its features, such as the *Meiri Gugong* (The Palace Museum Every Day) and *Gugong Taoci Guan* (The Porcelain Hall of the Palace Museum), are, in fact, Mini Programs themselves. Consequently, audiences do not have to access them through the VM’s main portal but engage with the preferred museum functions on their own. It should be noted that if they enter a particular Mini Program this way, they cannot access the main portal without returning to the WeChat main page. But again, as Deleuze and Guattari observed, the line of flight can be recaptured by a tree-structure and there could be blockages in rhizomes.

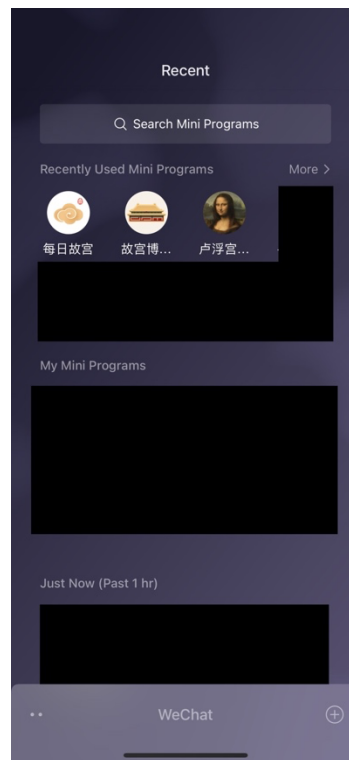


Figure 5. Multiple Entryways to Access Virtual Palace Museum Features

Palace Museum Every Day and The Palace Museum as two distinct Mini Programs shown in Recently Used Mini Programs on WeChat

The enhanced unpredictability and multiple entryways are effective lines of flight with which the map of VM visiting grows, expands, makes new connections and forms heterogeneous multiplicities. The map is only rhizomorphous, with constant deterritorialization and reterritorialization, when the visiting is performed. Integral to this performance are the audience's personal traits, perspectives, and habits regarding digital engagement and museum visiting. Exploiting the VM's rhizomorphous potential is, therefore, essential to yield heterogeneous visiting experiences.

4.4 Reconceptualizing (dis)connections

The ubiquitous 'Share' button was a frequently noted feature in our visits and discussions. It pops up when, for example, checking in different palaces, collecting postcards featuring beautifully crafted and dedicated photos of the museum, saving artifacts to the favorites, and completing a task in a game. Additionally, all the WeChat Mini Programs and pages can be shared to in-app chats. In some nested Mini Programs, such as *Meiri Gugong* (The Palace Museum Every Day) and *Zi Jin Cheng 365* (Forbidden City 365), pages can also be straightforwardly posted to Moments feeds, where audiences' WeChat contacts would be able to see them. Through sharing, connections with prospective audiences, as unregulated lines of flight, were fabricated.

Such an invitation to share is not surprising; the essence of a vibrant social media platform resides in the seamless flow of information between individual nodes, making sharing a structural affordance (Papacharissi and Yuan, 2011; John, 2017). The integration of social media's technical features into the Palace Museum on WeChat indicates a deliberate effort to enhance the overall interactive and dynamic nature of the virtual museum-going experience on WeChat.

However, WeChat's endeavor to foster connections as a social media platform sometimes inadvertently disrupts the visiting experience, engendering disconnections in the seamless exploration of a museum. For instance, constant prompts for social interactions, notifications, or pop-ups may distract users from

the primary objective of the immersive museum-visiting experience. Since WeChat Mini Programs cannot continue running in the background, sharing could cause the program to be halted abruptly in some cases. FW recalled that she was forced out of her visit when a WeChat call from her mom snatched the screen (Meeting Note on May 11, 2023). Disconnected from the museum, she was immediately connected with her personal context: a young woman who lives far from her parents in Europe, which permeated her museum-visiting with social-cultural positionalities.

As a hosting platform, WeChat also configures the perceived range of possible actions linked to the VM visiting experience. One notable example is the technological errors that occurred during our individual visits.

[Meeting on May 11. LJ was absent due to illness.]

YZ: Were you able to use the Little Lion?

WB: Ah, the Little Lion, I can't use it. I thought this was because I'm not in China.

FW: I assumed my phone and the operating system were too outdated for it.

YZ: I was wondering if it was due to location restrictions. If we all can't use them, it's probably that.

[Meeting on June 20]

WB: ...just like the Little Lion, it won't work for virtual visitors!

LJ: Which Little Lion? Where was it? I didn't notice at all...

YZ: Just down the home page, there was a pop-up symbol on the bottom right of the screen. Also, I noticed that Hall of Mental Cultivation in Palace Virtuality didn't work on my Android tablet, but it was fine on my iPhone. Does it work on your systems?

FW: So what was it like [when it didn't work]?

YZ: it says 'there was a problem. Please visit the website.'

[Meeting on July 1]

LJ: There were personalization functions, such as creating your own collection.

YZ: Yes, I saw them, but I couldn't use them.

FW: Where to find them?

YZ: In *Minghua Ji* (Collections of renowned paintings) and *Wenwu Ku* (Artifact archives).

WB: Me neither. It asked me to register with a telephone number from mainland China.

FW: I didn't want to share that information.

LJ: But I can use it...Ah, it must be because I already registered when I tried to book the tickets [to the Palace Museum].

While talking, we navigated the museum to test these functions on our devices. Always prompted by a curiosity about the others' visiting experience – 'does it work for you' and 'I didn't notice, where was it', the digital disconnections - *unable to access* elements of the VM - led to sessions of group visits when we simultaneously accessed the VM and communicated our experience in real-time via Zoom. With the visits and communications, our individual visiting experience was multiplied in a rhizomatic manner, not only in its extensity – as the time of visits multiplied, but also in intensity – as the experience was profoundly transformed in its engagement with the VM, social networking tools (both WeChat and Zoom), and the group.

A similar account of technical disconnection was marked by YZ; only hers was *not to access* the VM:

The exhibition took longer than I had expected. After finishing the first hall at the Meridian Gate, I made instant noodles. After the meal, I resumed visiting, surrounded by the warmth and smell of my food, which prompted me to wonder about other visitors' sensory experiences during their visits. (From YZ's field note on May 10)

Two things are highlighted here. Firstly, due to the digital essence of VM visiting, audiences have to use facilities in their own physical space. From the audiences' perspective, restrooms, cafés, and gift shops are all part of the museum experience, for they perceive 'the museum as a seamless whole' (Falk and Dierking 1992: 93; 2013: 227). In the case of the VM, however, facilities such as toilets, catering, and WIFI are accessed in a physical space entirely separated from the VM's contents, exhibitions, and

displays. Yet, these functions are exactly where the two spaces intersect. The smell of the food, the temperature of the physical space, the noise in that space, and even the way the audiences use the device, all these are ‘possibilities offered by the physical environment for social interaction’ (Gaver 1996: 114), which are going to be part of the memories of visiting the museums.

Rather than complete cut-offs, the *not-to-access* digital disconnection(s) are like scenario switches with interlacing traces, often permeated with identity-related markers, as what one eats and where one goes reveal personal information (Köster 2009). Specifically, YZ’s decision to make instant noodles reflects her cultural origin in East Asia, where instant noodles’ largest markets are found (Li and Chung 2021). Detached from the virtual space, food and toilets become distinct experiences not dictated by the museum or its contractors. In this escape, connections with one’s personal context are derived, underlined by individualization and heterogeneity.

These embedded heterogeneous experiences were acutely picked up by YZ in her curiosity about the experiences of other virtual visitors. Her curiosity is not uncommon. During physical museum visits, one’s behaviors, emotions, and feelings are impacted by other visitors (Casey 2003; Falk and Dierking 2013; Parker and Saker 2020). Physical disconnections with others during VM visiting could, therefore, be made up with the imaginary positioning of fellow audiences in their own spaces. Such curiosity and social imagination are rhizomatic lines of flight as they form new heterogeneous connections and establish multiplicities.

What we have observed in our field notes is, therefore, an ambiguity in defining connections and disconnections in the VM visiting experience. With a rhizomatic perspective, we discern that they are more often interwoven in continuity than discretely separated. With this non-dualistic ponderance, the construction of the audience-museum as the central axis of conceptualizing (dis)connections is displaced. When audiences are disconnected from the VM, they are in connection with other contexts and experiences that will feed back to their VM visiting. Audiences, their actual and imaginary fellows, their mobile devices, the VM, the physical space they occupy, the facilities they utilize, WeChat, and the internet are all strings that fabricate a rhizomatic museum-visiting experience. Given this insight, we advocate a non-individualistic approach to the museum-visiting experience. As our analysis has revealed, not only do one’s cultural-social background and observations play a role in their visiting and meaning-making, but so do the personal context of the other imaginary or actual, current or prospective companions. Beyond the engagement with the VM, these connections should be carefully ‘mapped’ to holistically account for the lived experience of VM visiting.

5. Conclusion

This article carefully reviewed the lived visiting experience of the virtual Palace Museum Mini Program on WeChat. Informed by the rhizome theory of Deleuze and Guattari, we argue that the VM visiting experience is an act of mapping thanks to its ongoing performance of making sense in relation to audiences’ own dispositions. With enriched unpredictability and multiple entryways facilitated by WeChat, the visits drive the VM rhizomorphic and construct a new knowledge system that invites self-referential, spontaneous and heterogeneous connections. In addition, enhanced by the platform’s ubiquity and accessibility, notions of connections and disconnections in the VM visiting experience are often closely interwoven. Such reconceptualization effectively displaced the positioning of the museum-audience as the central axis of the concept of (dis)connections and demanded a non-individualistic approach to fabricating connections.

Rather than attempting to define the Virtual Palace Museum on WeChat as a rhizome, we have discerned some robust tree-like structures in the current VM, such as the obstructed entryways and the limited freedom in an exhibition. With this case study, we would like to advocate rhizomorphic experimentation. In the context of the VM, such experimentation should commence with the notion that it is not aiming for a duplication of the physical museum and museum-visiting experience. New models

of museum audience engagement, in both the physical domain and virtual space, should be explored, for they are the pivotal forces that drive the VM to open up for broader accessibility and heterogeneous affordances. Moreover, we acknowledge that not all experimentation will create something new, as implied by the unpredictable essence of the lines of flight. The outcome cannot be foreseen. However, this ‘can only be known through experimentation’ (Adkins 2015: 30–31).

For the experimentation to be feasible and practical for implementation strategies in museology and cultural policy, we also acknowledge that more research should be done to enhance the generalizability and transferability of our findings. Specifically, further probe into the heterogeneity of the (dis)connections enabled by VM is required. In our collaboration, we noticed many times that our different academic training and social-cultural backgrounds yielded varied expectations and perspectives during our visiting journeys. These insights have steered us to more thorough discussions of the audiences’ visiting behaviors and motivations with a more substantial sample of visitors from different demographic backgrounds and digital literacy in our following studies. To pave the way for these further investigations, we presented our collaboration, with its proposal of an innovative methodological and theoretical framework, as a pilot study for discerning the nuances and subtleties of the insufficiently studied experience of emerging VMs.

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