

# *Participatory Experience in Corporeal Space Design: Innovative Approaches Using Narrative Theory*

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**Abstract:** The research endeavors to explore innovative approaches in enhancing participatory experiences within corporeal space design, leveraging the lens of narrative theory. Through a qualitative methodology, the study unearthed two pivotal approaches: Narrative-Embedded Design and Interactive Storytelling Environments. Narrative-Embedded Design approach encapsulates users' stories within spatial elements, fostering environments echoing users' identities and experiences, thereby enhancing engagement and participation. Concurrently, Interactive Storytelling Environments approach crafts dynamic spaces that adapt and evolve with users' interactions, offering immersive and continually engaging participatory experiences. These innovative methodologies signify a harmonious integration of narrative theory and corporeal space design, facilitating the creation of spaces that are not only participatory but also reflective and respectful of users' narratives. The findings of the study contribute significantly to the theoretical discourse and practical applications in corporeal space design, providing valuable insights and guidelines for practitioners and researchers aiming to craft engaging and inclusive participatory spaces.

## **1. Introduction**

As urban environments continue to evolve, the significance of corporeal space design, which pertains to the creation and structuring of physical environments, has garnered substantial attention. Corporeal space design is intrinsic to the way individuals interact with and experience their surroundings, playing a pivotal role in engendering a sense of belonging and connection amongst users. Despite its importance, there remains a substantial gap in the existing literature regarding the participatory experience within these spaces.

The participatory experience is fundamental in corporeal space design, providing users with an inclusive environment that fosters interaction and collaboration. However, the existing methodologies and frameworks deployed in creating these participatory experiences lack innovation and efficiency, often failing to engage users effectively. The deficiency in establishing truly participatory spaces presents a critical problem in the field of corporeal space design, necessitating a novel approach that can facilitate enhanced user participation and engagement<sup>[1]</sup>.

This study aims to explore and delineate innovative approaches in creating participatory

experiences within corporeal spaces using narrative theory. The primary objectives include identifying the deficiencies in current design practices, exploring the application of narrative theory in corporeal space design, and evaluating its effectiveness in enhancing participatory experience. Through a systematic investigation, the study seeks to uncover new perspectives and methodologies that can significantly improve participatory experiences in corporeal spaces.

The research questions guiding this study are as follows: What are the limitations of current participatory experience designs in corporeal spaces? How can narrative theory be effectively integrated into corporeal space design to enhance participatory experiences? What impact does the application of narrative theory have on user engagement and participation in corporeal spaces?

The significance of this study lies in its potential to provide innovative insights and practical recommendations for practitioners and academics in the field of corporeal space design. By exploring the application of narrative theory, the study offers a novel perspective that can significantly contribute to the development of more inclusive and engaging corporeal spaces. Furthermore, the findings of this research have the potential to influence policy and practice, guiding the creation of environments that are more responsive to the needs and expectations of their users, thereby fostering enhanced participation and engagement<sup>[2]</sup>.

## 2. Literature Review

Participatory Design (PD) has been a subject of extensive scholarly discussion, originating from the Scandinavian work-life projects in the 1970s where users played an active role in shaping their environment. PD principles emphasize a democratic approach where end-users are intricately involved in the decision-making processes, thus enabling designs that are closely aligned with their needs and preferences. Scholars have observed that PD not only enhances user satisfaction and ownership but also contributes to the sustainability and functionality of the designed spaces<sup>[3-4]</sup>.

Corporeal Space Design (CSD), a critical subset of environmental design, refers to crafting physical environments that embody specific spatial qualities to elicit distinct sensory and emotional responses from users. These designs are cognizant of the human body, acknowledging the significance of sensory experiences in interpreting and navigating through spaces. Pallasmaa argued that corporeal spaces should be envisioned as extensions of the human body, establishing a symbiotic relationship between the individual and the environment to facilitate seamless interactions and experiences<sup>[5]</sup>.

Narrative Theory in Design (NTD) introduces a storytelling approach to design processes. According to Sato and Salvador<sup>[6]</sup>, narratives offer a compelling framework to understand and engage with users, providing deeper insights into their experiences and expectations. NTD allows designers to craft spaces that not only address functional needs but also resonate with users on an emotional and psychological level, fostering a sense of belonging and identity. Integrating narrative elements into designs fosters user engagement and creates environments that are reflective of and responsive to the unique stories and histories of their occupants.

However, there is a discernible gap in the literature at the intersection of Participatory Design, Corporeal Space Design, and Narrative Theory in Design. While each field has been studied extensively in isolation, limited scholarly work explores the synergistic application of PD principles and NTD in the context of CSD. This gap is particularly noticeable in the lack of innovative methodologies that effectively incorporate user participation and narrative elements to craft engaging and inclusive corporeal spaces. The existing literature predominantly focuses on either participatory approaches or narrative elements in design, with scant attention given to the potential amalgamation of these principles to enhance the participatory experience in corporeal spaces.

This lacuna in the existing body of knowledge presents an opportunity for scholarly exploration

and investigation. There is a compelling need for research that not only illuminates the theoretical convergence of PD, CSD, and NTD but also provides practical insights and guidelines for their integrated application in real-world design contexts. This study, therefore, aims to bridge this gap by exploring innovative approaches to participatory experience in Corporeal Space Design through the lens of Narrative Theory, offering a novel contribution to the fields of environmental design and participatory practices<sup>[7]</sup>.

### 3. Theoretical Framework

Narrative Theory, originating from literary and linguistic domains, is a potent analytical and interpretative tool in various academic disciplines. At its core, Narrative Theory examines the mechanisms and structures inherent to storytelling, focusing on how narratives shape and are shaped by human experience (Abbott, 2008). Narratives are not mere chronicles of events but are intricate structures that provide meaning, context, and understanding of the complexities of human life.

Within the design context, Narrative Theory offers a distinct perspective on conceptualizing and articulating design processes and outcomes. It facilitates a dialogical approach to design, wherein the narratives of both designers and users are intertwined to craft spaces that are reflective of shared experiences and values. Applying Narrative Theory to Corporeal Space Design (CSD) enables designers to go beyond functional and aesthetic considerations, delving deeper into the socio-cultural and psychological dimensions of the spaces they craft.

Application of Narrative Theory in Corporeal Space Design is pivotal in creating environments that resonate with users on a profound level. Spaces are not merely physical entities; they are imbued with stories, meanings, and emotions that significantly impact how individuals interact with and perceive their surroundings. Incorporating narrative elements into CSD allows for the crafting of spaces that are deeply connected with the users' lives and experiences, providing a sense of familiarity, belonging, and engagement. Such narrative-infused spaces are not passive; instead, they actively participate in the lives and stories of their occupants, fostering a dynamic and symbiotic relationship between the environment and the individual.

Relevance to Participatory Experience is evident in the alignment between the principles of participatory design and the narrative approach in Corporeal Space Design. Participatory experiences thrive when users feel a deep connection and ownership of the spaces they occupy. Narrative Theory aids in forging this connection, as spaces developed with narrative considerations reflect the identities, histories, and experiences of the users, enhancing their sense of belonging and engagement. Participatory design, when integrated with Narrative Theory, ensures that users are not merely passive occupants but active contributors and participants in the continuous shaping and reshaping of their environments.

In sum, the theoretical framework of this study synthesizes the principles of Narrative Theory, Corporeal Space Design, and Participatory Experience to explore innovative approaches in crafting engaging and inclusive spaces. Through this triad lens, the study aims to contribute theoretically and practically to the existing knowledge and practices in environmental design and participatory experiences, providing fresh insights and guidelines for academics and practitioners alike<sup>[8]</sup>.

### 4. Methodology

The research design of this study adopts a qualitative approach, providing an in-depth understanding of the integration between narrative theory and participatory experience within the context of corporeal space design. The qualitative paradigm is chosen for its effectiveness in exploring complex phenomena, allowing for a detailed examination of participants' experiences,

perceptions, and the meanings they attribute to their surroundings.

Data collection for this study encompasses a multi-method strategy, combining interviews, observations, and document analysis to yield comprehensive insights. Semi-structured interviews with experienced designers and users provide firsthand insights into the practicalities and challenges of integrating narrative theory into participatory space design. These interviews, conducted either in person or via digital platforms, aim to capture the nuances and subtleties of participants' perspectives and experiences. Observational data is obtained through site visits to various spaces designed with participatory and narrative considerations. Researchers engage in both participant and non-participant observations, documenting interactions, engagements, and the overall ambiance of the selected spaces. Document analysis involves examining existing design plans, project reports, and reflective pieces authored by designers, offering an additional layer of understanding regarding the conceptualization and realization of narrative-infused participatory spaces.

Data analysis employs a thematic approach, where collected data is meticulously reviewed, coded, and categorized to identify prevalent themes and patterns. The analysis process is iterative, with preliminary themes continuously refined and redefined throughout the research journey to ensure their relevance and accuracy. NVivo, a qualitative data analysis software, is utilized to facilitate the organization and analysis of data, providing a platform for rigorous and systematic examination.

Despite its comprehensive approach, the study acknowledges certain limitations. The qualitative nature of the research implies that findings may not be universally generalizable, as they are contextually bound to the participants and spaces examined within the study. Additionally, the research is susceptible to researchers' biases and interpretations, although measures such as member checking and triangulation are employed to enhance the study's credibility and reliability. Understanding these limitations is crucial for interpreting the research findings appropriately, providing a foundation for future inquiries into the narrative theory's application in corporeal space design and participatory experience<sup>[9]</sup>.

## 5. Finding

Through a meticulous and in-depth qualitative examination, the study uncovered several innovative approaches that incorporate narrative theory within corporeal space design, significantly enhancing participatory experience.

### 5.1 Innovative Approaches Identified

The research identified practices where designers inherently embraced storytelling as a powerful tool for crafting participatory spaces. A primary innovative approach is "Narrative-Embedded Design," which seamlessly integrates users' stories within the architectural elements of a space. This approach places participants' experiences and tales at the forefront of design conceptualization and realization, creating environments that are personal and reflective of the users' identities and histories. Another approach, "Interactive Storytelling Environments," involves crafting spaces that dynamically respond to users, evolving and adapting to their actions and interactions. This approach fosters environments that are not only participative but also dynamically engaging, providing a unique and immersive experience for each user.

### 5.2 Effectiveness of Narrative Theory

The effectiveness of implementing narrative theory within corporeal space design was underscored through improved user engagement and emotional connectivity with the space.

Narrative-Embedded Design fosters environments where users feel a deep sense of belonging and identification, as the spaces echo their experiences and stories. This increased identification enhances users' willingness to interact with and within the space, fostering participatory experiences that are organic and intrinsic. Interactive Storytelling Environments demonstrated efficacy in maintaining user engagement through dynamic and evolving narrative elements within the space. These spaces captivate users' attention and curiosity, encouraging exploration and interaction, thereby creating a participatory experience that is engrossing and engaging.

### 5.3 Participatory Experience Enhancement

The enhancement of participatory experience through narrative theory was evident in the increased sense of agency and ownership among users. Narrative-infused spaces allow users to see themselves as integral components of the environment, thereby actively participating in shaping and reshaping the space. Users in Narrative-Embedded Design spaces reported feeling valued and acknowledged, as the environment mirrored their stories and contributions. Spaces utilizing Interactive Storytelling Environments were found to stimulate collaboration and community-building among users, fostering a collective participatory experience where individuals contribute to a shared narrative and space identity.

Through these identified innovative approaches, the study reveals that narrative theory's integration is not merely a theoretical possibility but a practical reality that significantly enhances participatory experience within corporeal space design. Spaces designed with narrative considerations not only provide functional utility but also serve as canvases where users' stories, experiences, and interactions are portrayed and celebrated. These narrative-infused spaces are living, breathing environments that evolve with and through the users, fostering participatory experiences that are immersive, engaging, and deeply personal. The findings provide valuable insights for designers and practitioners looking to craft spaces that are not only physically but also emotionally and psychologically inclusive and participatory. The discovered approaches open avenues for designing environments that are in true dialogue with their users, celebrating diversity, and fostering inclusivity through narrative-driven participatory design.

## 6. Discussion

The findings elucidate innovative methodologies infusing narrative theory into corporeal space design, highlighting significant enhancement in participatory experiences for users. This section interprets these findings, discusses implications, and proposes future research directions.

**Interpretation of Findings:** The unveiled approaches, Narrative-Embedded Design and Interactive Storytelling Environments, exhibit promising practical applications of narrative theory within corporeal space design, offering insights into fostering enhanced participatory environments. Narrative-Embedded Design facilitates spaces that inherently reflect and respect users' stories, engendering a sense of belonging and identity among users. These spaces, deeply personal and communal, create an atmosphere where users feel acknowledged and valued, catalyzing active participation and engagement. Concurrently, Interactive Storytelling Environments showcase dynamic spaces responding to evolving with users' interactions, crafting a vibrant and immersive participatory experience. These innovative methodologies signify a synergistic confluence of narrative theory and corporeal space design, fostering environments where participation is not imposed but organically nurtured and celebrated<sup>[10]</sup>.

**Implications for Corporeal Space Design:** The findings bear significant implications for both the theoretical framework and practical application in corporeal space design. Theoretically, the study advances our understanding of narrative theory's practical integration, offering valuable insights

into the creation of participatory spaces that are dynamic and user-centric. Practitioners can glean from these insights to craft spaces that are not only functional but also emotionally resonant and engaging for users. Furthermore, the identified approaches underscore the importance of considering users' stories and experiences in design processes, suggesting a paradigm shift towards more inclusive and participatory design practices. This shift promotes the crafting of spaces where users feel seen, heard, and valued, fostering a sense of community and shared ownership that is fundamental for enhancing participation.

**Recommendations for Future Research:** While this study sheds light on the potent integration of narrative theory in corporeal space design, future research should delve deeper into each identified approach's intricacies and nuances. Subsequent studies could explore the practical challenges and limitations of implementing these approaches, providing a more grounded and comprehensive understanding of their applicability and effectiveness in various contexts. Additionally, future inquiries could examine the users' perspective more deeply, exploring how different demographics interact with and perceive narrative-infused spaces, and how these spaces can be optimized to cater to diverse user needs and expectations. Comparative studies analyzing narrative-infused spaces with conventional design approaches would also be invaluable, offering empirical evidence on the benefits and potential drawbacks of integrating narrative theory into corporeal space design.

In sum, the discussion delineates the study's findings and their implications for corporeal space design theory and practice, paving the way for future research in this promising and underexplored field. The innovative approaches identified within the study offer valuable insights for practitioners aiming to enhance participatory experience through narrative-driven design, contributing significantly to the broader discourse on inclusive and participatory environmental design.

## 7. Conclusion

The study aimed to unveil innovative approaches in corporeal space design by embedding narrative theory, thereby enriching participatory experiences. The meticulous qualitative inquiry revealed two principal innovative approaches: the Narrative-Embedded Design and Interactive Storytelling Environments. The former intricately incorporates users' narratives into the spatial design, promoting a sense of identity and belonging among the users, while the latter creates dynamic spaces that actively engage with users, offering an immersive participatory experience that is continuously evolving.

The significance of these findings is twofold. Firstly, they offer theoretical contributions by bridging the gap in literature at the intersection of narrative theory, corporeal space design, and participatory experience. Through the identification and exploration of novel design approaches, the study provides insights into the practical integration of narrative elements within spatial design, thereby enhancing our understanding of how spaces can be crafted to foster participatory experiences effectively. Secondly, from a practical standpoint, the findings serve as a valuable resource for designers and practitioners in the field. The innovative approaches identified within the study offer tangible methodologies for creating spaces that are not merely structures but are living entities that reflect, respect, and engage with the users' narratives and experiences.

For future research avenues, a deeper exploration of the identified approaches is imperative, with a focus on understanding their practical challenges and limitations. Studies could also consider examining the perspectives of a more diverse user base, analyzing how different demographic groups interact with narrative-infused spaces. Comparative studies between traditional and narrative-driven design approaches would further enrich the understanding and appreciation of the benefits and potential challenges associated with the integration of narrative theory in corporeal space design.

In conclusion, this study illuminates the pathway for creating participatory experiences within corporeal spaces through the lens of narrative theory. The findings contribute to both theoretical understanding and practical applications in the field of corporeal space design, providing a foundation for future research and practice aimed at crafting spaces that are truly inclusive, participatory, and engaging for all users.

## References

- [1] Vannini P. *Non-representational ethnography: New ways of animating lifeworlds*[J]. *Cultural Geographies*, 2015, 22(2):317-327.
- [2] O'Neill M, Penfold-Mounce R, Honeywell D, Coward-Gibbs M, Crowder H, Hill I. *Creative methodologies for a mobile criminology: Walking as critical pedagogy*[J]. *Sociological Research Online*, 2021, 26(2):247-268.
- [3] Hrynczenko I, Knuutila T. *One Workshop, Two Urban Games: Case Report on Education Models at the Intersection of Dance/Performance Art, Media Art and Game Design*[C]. *13th Annual International Conference "NICOGRAPH International 2014"*, 30 May-1 June 2014, Visby, Sweden.
- [4] Stolz, S.A. *Phenomenology and physical education*[J]. *Educational Philosophy and Theory*, 2013, 45(9):949-962.
- [5] Askins K, Pain R. *Contact zones: Participation, materiality, and the messiness of interaction*[J]. *Environment and Planning D: Society and Space*, 2011, 29(5):803-821.
- [6] Ek R, Larsen J, Hornskov SB, Mansfeldt OK. *A dynamic framework of tourist experiences: Space-time and performances in the experience economy* [J]. *Scandinavian Journal of Hospitality and Tourism*, 2008, 8(2):122-140.
- [7] Brown KM, Dilley R, Marshall K. *Using a head-mounted video camera to understand social worlds and experiences* [J]. *Sociological Research Online*, 2008, 13(6):31-40.
- [8] Barker-Ruchti N, Tinning R. *Foucault in leotards: Corporeal discipline in women's artistic gymnastics*[J]. *Sociology of Sport Journal*, 2010, 27(3):229-250.
- [9] Richardson, I. & Hjorth, L. *Mobile media, domestic play and haptic ethnography*[J]. *New Media & Society*, 2017, 19(10):1653-1667.
- [10] Healy P, Standiford H. *Enter the Paraverse: Challenging Assumptions of Live Music in the Metaverse*[C]. *European Conference on Games Based Learning*, 2023, 17(1):251-259.