

A STUDY ON NARRATIVE STRUCTURE AND MULTI-SENSORY RHYTHMIC IMMERSIVE WEDDING SPACE DESIGN: TAKING “WEAVING REALM” AS AN EXAMPLE

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ABSTRACT

Immersive experiences are widely applied in contemporary spatial design, yet systematic research remains scarce on how narrative structures and multisensory experiences jointly construct “emotional rhythms” within wedding ceremony spaces. This study proposes a “narrative structure-emotional rhythm” wedding space design methodology grounded in narrative theory, emotional rhythm models, and multisensory integration mechanisms. Structural analysis is conducted through two international case studies. Building upon this, the methodology is applied to the actual wedding project “Weaving Realm,” undergoing comprehensive validation through questionnaires, scene design, rendering visualization, scale models, and on-site feedback. Findings reveal that narrative structures effectively organize emotional segments within wedding events, while multisensory designs—including light, color, texture, music, and scent—significantly amplify emotional peaks at each stage. Ultimately, this study proposes a replicable immersive wedding space design process, offering methodological insights for future research on intimate ceremonial spaces and experiential environments.

Keywords: immersive design; spatial narrative; emotional rhythm; multisensory experience; wedding space.

INTRODUCTION

In recent years, immersive experiences have emerged as a significant trend in spatial design, finding widespread application in commercial exhibitions, immersive theaters, and experiential installations. However, compared to other immersive settings, wedding spaces—as highly emotional, symbolic, and participatory ceremonial environments—require richer narrative structures and emotional expression. Yet current wedding design practices remain largely confined to visual aesthetics and set decoration, lacking a systematic integrated approach encompassing “narrative logic—emotional rhythm—multisensory experience.”

Existing research predominantly focuses on narrative design within exhibitions, festivals, and brand experiences. Yet, within ceremonial spaces—particularly wedding settings—there remains insufficient in-depth discussion on “how spatial narratives construct emotional rhythms.” The core of a wedding lies not in decoration, but in emotion; emotional transmission stems from the sequence of events within the space, emotional pacing, sensory stimulation, and memory triggers. Therefore, establishing an actionable, verifiable immersive wedding space design methodology has become a critical research need.

To address this gap, this study proposes a “Narrative Structure-Emotional Rhythm” immersive wedding design model through international case analysis, user needs research, and practice-based

design validation. Its feasibility is demonstrated in the real-world project “Weaving Realm.” This research offers valuable insights for wedding designers, spatial planning teams, and the broader field of ceremonial space studies.

METHODOLOGY

This study employs a three-phase methodology comprising “case analysis + user needs research + practical validation,” with the overall process illustrated as follows:

2.1 Comparative Analysis of International Cases

Two representative cross-cultural immersive wedding case studies:

1. Washington Wedding (United States)

— Emphasizes natural lighting, layered aesthetics, and a gentle narrative



Figure1 : Schematic Diagram of Washington's Immersive Wedding Space Narrative

2.Spy Museum Wedding

— Emphasizing architectural depth, reflective materials, and the rhythmic pulse of urban emotion.

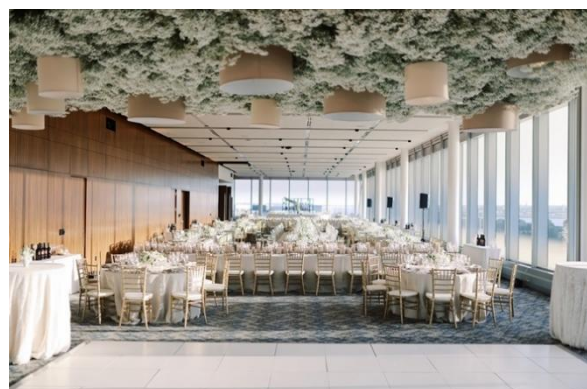


Figure 2 : Spy Museum Wedding — Multilayered Glass Narrative (Swoon Soiree, 2025)

Key analysis points include:

- Narrative structure: Plot sequence, spatial paragraphs
- Emotional rhythm: Emotional peaks and transitions
- Multisensory mechanisms: Light, sound, texture, color, scent
- Emotional triggers and memory nodes

This analysis serves to construct the “narrative emotion model” for this study.

2.2 User Surveys and Requirements Extraction

Prior to initiating design practice, this study conducted one-on-one questionnaires and interviews with brides as core users to identify key emotional needs and aesthetic preferences within wedding ceremonies. Research areas encompassed:

- (1) Aesthetic Orientations (e.g., elegance, crystal elements, rose-pink tones)
- (2) Emotional Expectations (desired emotional highlights and points to avoid)
- (3) Memory Triggers (personal experiences, symbolic objects, significant events)
- (4) Ceremonial scene aspirations (moments to emphasize, interpersonal relationships)

Through thematic analysis of questionnaire data, the study distilled four core design requirements: sense of display, crystal symbolism, rose-pink tones, and overall elegance. These findings were further mapped into narrative structures and multisensory design strategies, serving as key input variables for the study's practical validation.

2.3 Practice-Based Research

To validate the proposed “narrative structure-emotional rhythm” framework, this study employs the actual wedding project “Weaving Realm” as an experimental field, utilizing a practice-based research methodology. The specific process includes:

- (1) Narrative Structure Construction: Based on user needs, wedding content is divided into three narrative chapters: “Memory Evocation—Emotional Deepening—Family Resonance.”
- (2) Multisensory Rhythm Design: Constructed an emotional rhythm chain corresponding to narrative segments, integrating visual, auditory, olfactory, tactile, and thermal sensations.
- (3) Visualization Validation: Pre-validated design elements—spatial hierarchy, lighting effects, material textures—through renderings and a 1:30 scale model.
- (4) On-site Implementation and Feedback:

Renderings and models were cross-referenced at the actual wedding venue, achieving over 90% accuracy. Post-ceremony emotional responses and experiential feedback were documented to validate the design framework's effectiveness.

This methodology enables systematic validation of theoretical models within real ceremonial spaces, ensuring the research's operational feasibility and replicability.

RESULTS

The findings of this study are organized into three sections:

- (1) The narrative structure and emotional rhythm patterns of international case studies;
- (2) The narrative structure and multisensory rhythm design outcomes of the "Weaving Realm" wedding practice;
- (3) Visual validation and on-site emotional feedback.

3.1 Narrative Structure and Emotional Rhythm Characteristics of International Wedding Case Studies

This study aims to investigate how animal imagery in fashion photography functions as a semiotic tool for environmental communication, and how it can enhance public awareness and engagement with ecological issues.

(1) Washington Wedding: A Three-Part Progressive Narrative Rhythm



Figure 3 : Schematic Diagram of Washington's Immersive Wedding Space Narrative

Case analysis reveals that this wedding employs natural lighting and soft color palettes to create a "progressive emotional curve." Its narrative structure unfolds in three phases:

- Phase 1: Warm-up

Soft yellow lighting and pale floral arrangements cultivate a welcoming and stable atmosphere.

- Phase 2: Ceremony (Peak)

Central axis lighting, white tones, and vertical structures enhance sacredness, creating an emotional peak.

- Phase 3: Banquet (Release)

Warm lighting and relaxing music bring emotions back down.

The emotional rhythm follows a pattern of gentle rise → ceremonial climax → tender conclusion.

(2) Spy Museum Wedding: A Dramatic Rhythm Driven by Spatial Depth



Figure 4 : Spy Museum Wedding

This wedding employs architectural structures and reflective materials to construct a highly dramatic “exploratory narrative”:

- Exploration:

Corridors and glass interfaces create uncertainty and anticipation.

- Reveal:

Open spaces and highly reflective materials generate a stunning effect, reaching an emotional peak.

- Bonding:

The fusion of metal and warm lighting creates an urban romantic atmosphere, stabilizing the emotional state.

Results indicate that spatial depth, material reflection, and tonal transitions are the key mechanisms shaping the narrative rhythm.

(3) Case Summary: Narrative structure determines the pacing framework, while multi-sensory elements amplify emotional peaks.

By synthesizing the two case studies, the following principles emerge:

- The narrative structure (paragraph division, movement lines, event sequence) determines the “main curve” of emotional rhythm.
- Lighting, color, texture, and sound define the “intensity and texture” of rhythm.
- Emotional peaks typically occur at “narrative turning points” (Reveal, Vow, First Look).

This provides a reference model for constructing rhythm in practical design.

3.2 The Narrative Structure Design Outcomes of “Weaving Realm”

Based on the bride questionnaire and wedding content, this study breaks down the narrative structure into three chapters, each corresponding to distinct emotional segments:

Memory Trigger

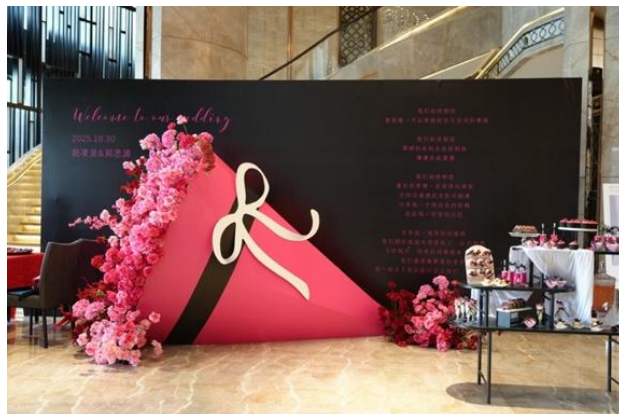


Figure 5 : Weaving Realm Wedding

- The concept originates from the symbolic memory of the “first bouquet.”
- Layered floral arrangements and light reflections create a psychological transition akin to an “entrance ritual.”
- Soft, warm tones evoke an emotional focus on “reminiscence and connection.”

Deepening Emotions



Figure 6 : Weaving Realm Wedding



Figure 7 : Weaving Realm Wedding

- Create a “warming sensation” through rose-pink hues, crystal refractions, and dynamic light effects.
- Build an emotional crescendo using materials (crystal stones, silk), colors (rose-pink to mauve), and lighting effects (flickering).
- Narrative objective: Convey the tension and energy of a love story.

Chapter Three: Family Resonance

- Family bouquets, embraces, and other rituals become emotional peaks.

- Warm lighting, soft focus, and floral scents combine to create “emotional diffusion.”
- Emotional objectives are “warmth, belonging, and strength.”

Results Summary:

The three-part narrative structure successfully establishes an emotional rhythm of “arousal—escalation—resonance,” aligning with the rhythmic patterns observed in international case studies.

3.3 Multisensory Rhythm Design Outcomes

To enhance the perceptibility of the narrative structure, this study constructs a rhythmic chain based on the five senses:

(1) Visual (Lighting, Color Temperature, Layering)

• Entrance: Soft Warm Light □ Ceremony: Cool White Light □ Banquet: Warm Light Reintroduction

- Color temperature shifts align precisely with narrative segments
- Visual elements serve as the most potent “emotional rhythm driver”

(2) Auditory (Music and Soundscape)

• Groom's performance creates the emotional peak

• Musical styles before and after form a “introduction- development- transition- conclusion” structure

(3) Olfactory (Floral Scents and Memory Triggers)

- Rose fragrance serves as the underlying emotional scent throughout
- Enhanced scents at specific points reinforce the “chapter transition” sensation

(4) Tactile (Textures, Sense of Distance, Temperature)

- Silk, petals, and crystal textures deliver emotional nuance
- Cool crystal □ Warm floral elements create tactile rhythm

(5) Temperature and Light Sensation

- Warm light – Cool light – Warm light mirrors the emotional “waveform curve”

Conclusion:

Synchronized multisensory elements forge an emotional rhythm chain with “chapter-like” structure, transforming the wedding into a structured emotional journey.

3.4 On-site Visualization and Emotional Feedback Validation

To validate the feasibility of the “narrative structure- emotional rhythm” design framework in actual wedding settings, this study compared rendered images with on-site arrangements to assess the fidelity of key elements such as spatial ambiance, light- and- shadow layering, floral arrangements, and color rhythms. Additionally, emotional feedback from guests was collected.

(1) On-site Visualization Validation (Rendering □ Implementation)

Practical results demonstrate that the on-site arrangements closely matched the design-phase renderings in terms of light control, spatial layering, and color transitions. Specific findings include:

- High Reproducibility of Light Rhythm:

The warm lighting ambiance during the entrance sequence, neutral color temperature in the ceremony area, and heightened brightness during emotional climaxes were all accurately rendered.

- Consistent floral and material layering:

Key visual elements—including suspended floral arrangements, tabletop blooms, and crystal accents—maintained high fidelity to the design blueprint in the final execution.

- Clear color-emotion progression:

The rose-pink to lilac-purple emotional build-up achieved a smooth gradient effect through coordinated lighting and floral arrangements.

- Coherent spatial narrative:

On-site pathways and sightlines aligned with the design plan, allowing the narrative structure to unfold naturally within the physical space.

Overall, the execution successfully recreated the key emotional milestones from the design phase, demonstrating strong predictability and implementability.

(2) On-site Emotional and Experiential Feedback

Feedback collected through on-site observation and interviews with the bride and guests indicates:

- The vast majority of participants clearly perceived the “emotional transitions” within the space.

- The groom's performance and the family bouquet exchange were universally recognized as emotional peaks.

- Multisensory synchronization (lighting, fragrance, flickering candlelight, floral textures) significantly enhanced immersion.

- The bride specifically noted that “the on-site atmosphere perfectly matched my ideal vision,” validating the effectiveness of pre-wedding visualizations for communication and expectation management.

Overall guest feedback confirmed the wedding space possessed distinct narrative flow, rhythmic pacing, and unified emotional expression, substantiating the efficacy of this research-based design methodology.

Summary of Research Findings

The “narrative structure-emotional rhythm” design framework proposed in this study has been validated as effective through international case studies and practical applications. Its multisensory integration significantly enhances the emotional experience within wedding spaces, enabling the ceremony to unfold as a structured, immersive emotional journey.

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