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Article

Decoding Emotional Reactions to Architectural Heritage: A Comparison of Styles

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Abstract

Research has identified how heritage elicits emotional responses that significantly affect the tourist destination image. In this vein, this study explores how people emotionally react to architectural heritage by examining five representative styles in Spain—Gothic, Renaissance, Baroque, Modernism, and Contemporary. In an experimental design, participants observed visual stimuli depicting seven types of urban infrastructure, such as buildings, streets, bridges, façades, quarters, squares, and churches, and their emotional responses were recorded using automated facial expression recognition. The system classified eight core emotions: neutral, happiness, sadness, surprise, fear, disgust, anger, and contempt. Gender differences were also analyzed to identify possible variations in emotional activation. The results show that architectural forms—whether historical or contemporary—evoke distinct emotional patterns that help explain how people perceive and value historical heritage. By bringing together concepts from heritage tourism, environmental psychology, and user experience studies, this research highlights the relevance of emotions as a key element in understanding the relationship between people and the architectural spaces they inhabit or visit.

Keywords: emotional responses; cultural heritage; architectural styles; facial-expression recognition; heritage tourism; environmental psychology

1. Introduction

Architectural heritage is one of the destination’s most powerful cultural assets, shaping not only its visual identity but also the emotional and symbolic meanings visitors construct as they engage with its spaces (Cheng et al., 2024; Cusumano, 2024). Across centuries, monuments, buildings, and urban infrastructures have served as tangible narratives of collective memory, embodying historical trajectories and aesthetic values that transcend generations. Beyond their material dimension, these spaces influence how individuals interpret, feel, and remember the places they visit, often generating emotional responses that endure long after the experience has concluded (Battini et al., 2024; Authors, 2023).

Although heritage tourism has been studied extensively from economic, cultural, and managerial perspectives, a notable gap persists in understanding the emotional processes triggered by architectural environments. In many destinations, decisions about heritage preservation, tourism development, and urban planning continue to rely on cognitive or functional assessments, with limited attention to the emotional responses that built heritage can evoke. Yet, emotions fundamentally shape how individuals perceive authenticity, beauty, safety, and cultural value—dimensions that directly influence tourist satisfaction and their willingness to revisit or recommend a site (Li et al., 2024).

Research has shown that emotional reactions to heritage can operate as powerful mediators between the visitor and the cultural environment. Positive emotions such as happiness, fascination, or surprise tend to strengthen attachment to heritage sites and encourage pro-preservation behaviours. Conversely, emotions like fear, discomfort, or sadness may reduce interest in certain destinations or alter the perceived attractiveness of urban spaces (Battini et al., 2024). Understanding these emotional mechanisms is therefore essential for developing heritage strategies that resonate with diverse audiences and contribute to the sustainable promotion and conservation of historical assets.

However, despite the relevance of emotions in the tourism experience, their scientific assessment remains a methodological challenge. Traditional tools—mainly self-report surveys, interviews, or post-visit questionnaires—depend heavily on memory, introspection, and subjective interpretation, which limits their capacity to capture the immediacy and complexity of emotional reactions as they occur (Shi et al., 2021). Emotions are dynamic and often subtle; they fluctuate within milliseconds and are influenced by visual, spatial, and contextual cues that participants may not consciously recognize or articulate. As a result, conventional methods may not adequately represent the authentic emotional experience triggered by architectural heritage.

To address these limitations, the present study employs automated facial-expression recognition—a neuroscience-based tool that enables objective, real-time measurement of emotional activation. This technology offers a precise classification of basic emotions, allowing researchers to observe spontaneous reactions without interrupting or influencing the participant's perceptual flow. In the context of architectural heritage, such an approach provides an opportunity to uncover how design elements, stylistic features, or historical connotations can elicit distinct emotional patterns (Wang et al., 2024).

The study focuses on five of the most influential architectural styles that define the cultural landscape of Spain and many other European countries: Gothic, Renaissance, Baroque, Modernism, and Contemporary. Each style embodies unique aesthetic principles, symbolic meanings, and spatial compositions. Gothic architecture, for example, is characterized by verticality, shadows, and dramatic spatial tension; Renaissance forms emphasize balance and proportion; Baroque architecture seeks movement, ornament, and sensory richness; Modernism incorporates organic lines and symbolic abstraction; and Contemporary architecture often challenges traditional expectations through innovation and conceptual experimentation. Although previous works have addressed cognitive or aesthetic evaluations of these styles, the emotional responses they elicit remain insufficiently explored (Authors, 2023).

This research builds upon a growing body of neuromarketing literature suggesting that sensory stimuli, cognitive and emotional processes significantly shape the interpretation of historical heritage (Authors, 2021). While earlier studies have relied on electroencephalography (EEG) or eye-tracking to understand attention, cognitive load, visual engagement or emotional responses, the present study advances this line of inquiry by incorporating automated facial-expression analysis as a complementary tool for identifying precise emotional states (Authors, 2023). This methodological innovation allows for capturing the nuances of human emotional experience within architectural spaces, expanding the analytical possibilities of heritage, tourism and emotions research.

The primary objective of this study is to examine how different architectural styles evoke specific emotional responses in observers, considering both the type of infrastructure presented and potential gender-based variations in emotional activation (Rucka & De Cock, 2024). This emphasis on real-time emotional data enables a more comprehensive understanding of the psychological impact of built environments, contributing new theoretical and empirical insights. Such knowledge is essential for heritage professionals, architects, destination managers, and policymakers seeking to design experiences and conservation strategies that connect meaningfully with visitors (Xu, 2024).

Ultimately, this study addresses and advances in this line of emotional reactions to heritage research by integrating advanced facial-recognition technology with the analysis of emotions in architectural heritage settings. Through this multidisciplinary approach, the research enhances

existing frameworks in heritage tourism, environmental psychology, and user experience studies, and introduces a more robust methodology for investigating how cultural environments shape human emotions (Li et al., 2024). By demonstrating the value of emotional responses in understanding and promoting architectural heritage and tourism, the study contributes to a deeper, more human-centered interpretation of the built world.

2. Literature Review and Hypotheses Setting

The academic literature on cultural tourism, architectural heritage, environmental psychology, and emotional responses to architecture provides the conceptual foundation for this study. Although each of these fields has produced important theoretical and empirical advances, a gap persists in understanding much better how tourists emotionally engage with architectural heritage—particularly when emotional responses are measured through emerging technologies such as automated facial-expression recognition. As Hosany and Gilbert (2010) argue, tourist experiences extend far beyond the physical act of visiting a place; they involve emotional, psychological, and multisensory dimensions that shape how individuals interpret and interact with cultural environments. Emotions, therefore, function not as peripheral reactions but as core drivers influencing both immediate impressions and long-term destination perceptions and images (Hosany, Prayag, Deesilatham, & Odeh, 2015).

Heritage tourism research has expanded significantly in recent years, emphasizing how visitors engage with historical and cultural landmarks (Bastiaansen et al., 2018; Flavián, Ibáñez-Sánchez, & Orús, 2021; Graziano & Privitera, 2020; Kang et al., 2020; Kim, Lee, & Jung, 2020; Lakshmi & Ganesan, 2010; Authors, 2023; Trang et al., 2023; Yuce et al., 2020). In this context, architectural heritage represents a particularly powerful stimulus due to its ability to evoke aesthetic, symbolic, affective, and identity-based reactions (Shi et al., 2021). Recent studies highlight that heritage sites can trigger a broad spectrum of emotions—from admiration, awe, and nostalgia to discomfort, fear, or sadness—depending on the architectural style, historical context, and personal associations of the viewer (Battini et al., 2024; Authors, 2023). These emotional responses have been shown to influence satisfaction, attachment, and behavioral intentions such as revisitation or recommendation (Li et al., 2024).

Despite these insights, the literature remains limited in explaining how specific architectural elements produce emotional reactions, and even fewer contributions have incorporated objective measurement techniques. Traditional tools such as surveys or interviews often fail to capture spontaneous, low-intensity, or unconscious emotional expressions. In contrast, facial-recognition technologies can capture fine-grained emotional responses in real time, providing a more accurate and ecologically valid representation of how individuals emotionally experience architectural environments (Poyraz et al., 2024; Weismayer & Pezenka, 2024).

Environmental psychology offers a complementary perspective by examining how built environments shape human perception, behavior, and emotion. Architectural aesthetics—including the verticality of Gothic cathedrals, the symmetry of Renaissance façades, or the ornamental richness of Baroque structures—have been linked to differentiated emotional reactions influenced by personal, cultural, and contextual factors (Moon & An, 2024; Authors, 2023). Yet, as multiple scholars note, much of the literature still relies on subjective or retrospective self-report techniques, which may overlook the immediacy and dynamism of emotional experience (Wang et al., 2024). This limitation underscores the need for methodological innovation capable of capturing both conscious and unconscious emotional activation.

Parallel to these developments, the digitalization of architectural heritage has gained traction in research and practice. Digital modeling and virtual reconstructions support preservation efforts, expand educational possibilities, and enable immersive tourism experiences (Fascia et al., 2024). When combined with automated facial-expression analysis, these technologies permit unprecedented precision in studying emotional engagement with architectural spaces, strengthening the analytical depth of heritage tourism research (Weismayer & Pezenka, 2024).

Recent contributions demonstrate the potential of integrating technological tools into affective heritage research. Studies using facial-expression recognition reveal subtle emotional reactions that traditional methods may overlook, offering a more nuanced understanding of how individuals connect with cultural environments (Rawnaque et al., 2020). Such insights are particularly relevant for heritage conservation, museum and exhibit design, tourism experience development, and destination management (Rucka & De Cock, 2024).

A well-established body of literature also links emotional responses to the formation of destination image. Emotional activation has been shown to shape the cognitive and affective components of destination image (Beerli-Palacio & Martín-Santana, 2017; Elliot & Papadopoulos, 2016; Hosany, Martin, & Woodside, 2021; Huete-Alcocer et al., 2019; Kani et al., 2017; Lai, Wang, & Khoo-Lattimore, 2020). Hosany, Ekinci, and Uysal (2006) found that destination personality is significantly related to destination image, with emotional components explaining most of the variance in personality dimensions. These findings underscore the importance of emotions not only for interpreting heritage environments but also for effectively promoting and managing cultural destinations.

By incorporating facial-recognition technologies, the present study contributes to the broader academic debate on emotional engagement in heritage tourism and expands the methodological toolkit available for analyzing affective responses in built environments (Authors, 2021). Prior literature suggests that emotional reactions are shaped by both individual factors—such as personality, lifestyle, prior experience, and socio-demographics—and broader normative or social contexts (Izaguirre-Torres et al., 2020). Together, these factors interact with sensory stimuli, activating the nervous system and triggering cognitive processes that lead to emotional states guiding decision-making and behavioral responses (Garczarek-Bąk et al., 2021; Authors, 2023).

Taken together, the reviewed literature highlights the need to explore architectural heritage through the lens of emotional response and demonstrates the potential of advanced technologies to uncover previously unobserved dimensions of the visitor experience. The conceptual relationships emerging from this body of work are summarized in figure 1, which illustrates the proposed emotional-processing model underlying visitor responses to architectural heritage.

Historical and ornamental architectural styles—including Gothic, Baroque, and Renaissance—are characterized by dramatic ornamentation, monumental scale, verticality, equilibrium, and rich symbolic meaning, often eliciting intense emotions such as awe, surprise, admiration, and fear due to their sensory richness and historical resonance (Li et al., 2024; Battini et al., 2024; Cai et al., 2023; Caniato & Caniato, 2023; Cusumano, 2024; Wang et al., 2024). In contrast, Modernist and Contemporary architectural styles emphasize simplicity, functional clarity, minimal ornamentation, and openness, generally generating calmer affective states such as tranquility, neutrality, or mild happiness (Ren & Djabarouti, 2023; Fascia et al., 2024; Moon & An, 2024; Zolotovskiy, 2023). Given these marked differences in emotional elicitation, stronger and more intense emotional responses are expected for older architectural styles compared to their modern counterparts, with older styles (Baroque, Renaissance, and Gothic) evoking emotions such as surprise and fear, whereas Modernist and Contemporary styles will be associated with happiness and neutrality. Therefore, the following hypothesis is established:

H1: older architectural styles (Baroque, Renaissance, and Gothic) will evoke stronger emotional responses—particularly surprise and fear—than Modernist and Contemporary styles, which will be associated with calmer emotions such as happiness and neutrality.

Different structures carry distinct symbolic, functional, and experiential meanings. Churches and other sacred buildings often evoke heightened emotional states—such as awe, reverence, or tranquillity—due to their historical, cultural, and spiritual significance (Caniato & Caniato, 2023; Higuera-Trujillo et al., 2021; Shi et al., 2021; Walter, 2023). In contrast, urban structures such as streets, squares or façades tend to generate more moderate emotions associated with daily use or social interaction (Ren & Djabarouti, 2023). Architectural features such as scale, lighting, materiality, and

ornamentation further modulate emotional responses (Walter, 2023). Therefore, the next hypothesis is set:

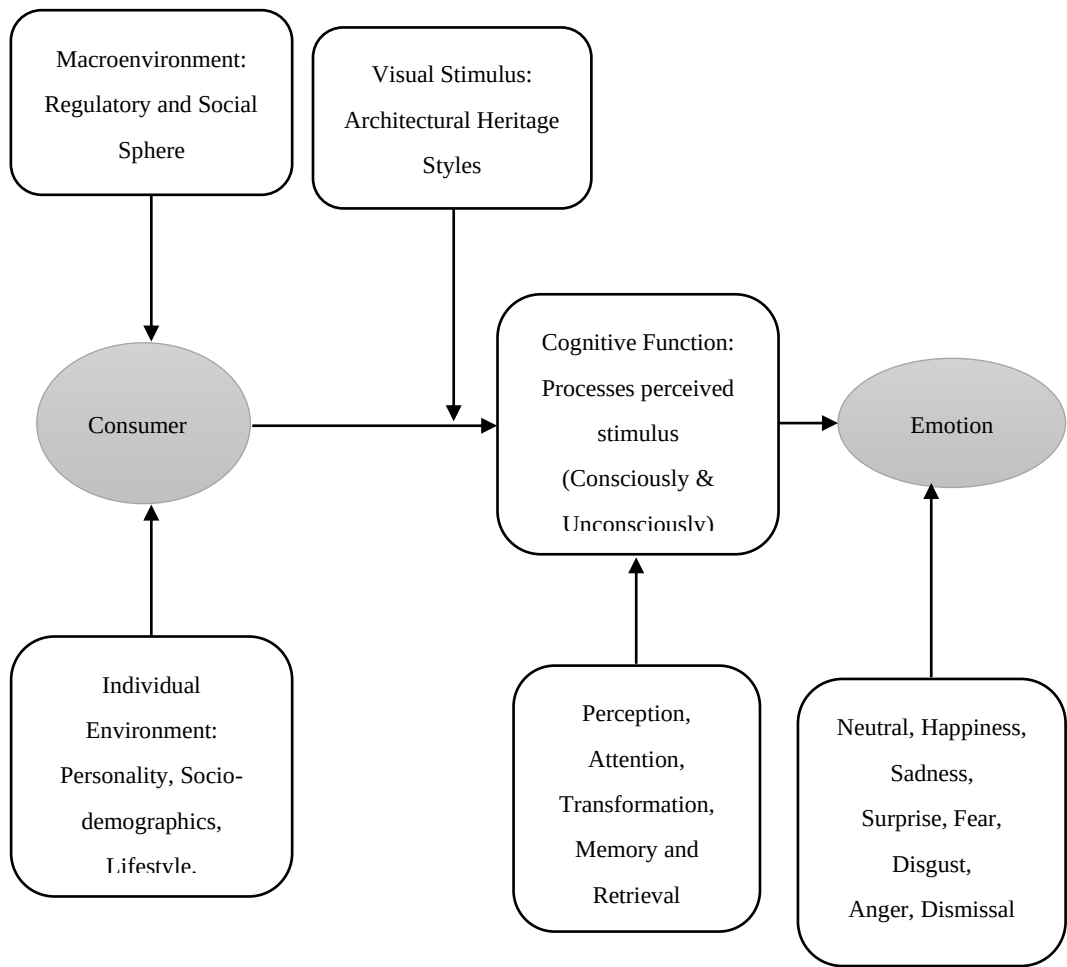


Figure 1. Emotional response antecedents.

H2: Emotional responses to architectural heritage will vary significantly depending on the type of architectural asset. Historical Religious architecture, such as cathedrals or churches, elicits more intense emotional responses than historical civil architecture, such as streets, bridges, squares, quarters or façades.

Research also shows that men and women may perceive, express, and regulate emotions differently within cultural contexts. These differences stem from biological, cognitive, and sociocultural mechanisms that shape emotional sensitivity and regulatory strategies (Fischer et al., 2018; Goubet & Chrysikou). Individuals who more effectively reappraise or restructure negative stimuli tend to demonstrate greater flexibility in managing emotions in complex environments such as heritage sites (Giuliani & Gross, 2007; Gross & John, 2003). Consequently, gender is expected to moderate emotional responses to architectural stimuli (Frontiers in Psychology, 2019) and the following hypothesis is proposed:

H3: Men and women have different emotional responses to architectural heritage.

3. Materials and Methods

This study employed a non-probabilistic judgmental sampling strategy, selecting participants based on their socioeconomic characteristics and their availability and willingness to engage in the experiment. Although this non-probabilistic approach presents inherent limitations, specific efforts were made to diversify the sample by including individuals of different ages, genders, and cultural backgrounds. This approach yielded a heterogeneous participant pool suitable for empirical research

and capable of providing preliminary insights that future studies may generalise more robustly. Sample size was determined through a priori power analysis to ensure adequate statistical power (0.80) to detect emotional differences across architectural styles at an alpha level of 0.05. The analysis indicated that a minimum of 200 participants was required to achieve reliable and interpretable effects. Finally, we gathered a sample of 645 individuals for the study. The sample profile can be seen in table 1.

Table 1. Sample profile by gender.

<i>Sample</i>	<i>N</i>
<i>Female</i>	318
<i>Male</i>	327
<i>Total</i>	645

Emotional responses were classified into eight categories—neutral, happiness, sadness, surprise, fear, disgust, anger, and contempt—which represent core universal emotions validated across cultures. These emotional categories have been extensively documented in environmental psychology and neuromarketing research as relevant affective reactions elicited by architectural and spatial stimuli (Authors, 2023). Emotions such as surprise and fear often arise from encounters with dramatic or unfamiliar architectural forms, while happiness or sadness may emerge from personal memories or cultural associations. Their inclusion is therefore theoretically grounded and aligned with previous research on emotional responses in built environments (Rawnaque et al., 2020).

Participants were exposed to standardised images of selected architectural heritage sites in a controlled laboratory setting. Each stimulus was displayed for 15 seconds in randomized order to minimize sequence bias. Facial-expression recognition software recorded real-time emotional responses throughout the viewing period. All participants provided informed consent prior to participation and received instructions emphasising attention to the emotional and aesthetic qualities of the images. Rest intervals were incorporated between stimulus sequences to mitigate fatigue and ensure stable emotional readings. All procedures adhered to ethical principles outlined in the Declaration of Helsinki (Shrestha & Dunn, 2019). (A detailed description of the architectural stimuli categories is provided in Appendix A.)

To maintain experimental rigor, environmental conditions were tightly controlled. Lighting, temperature, and ambient noise were standardized across sessions, ensuring that observed emotional responses could be attributed solely to the architectural stimuli rather than contextual distractions. Before exposure to the stimuli, participants completed a short questionnaire assessing baseline mood, familiarity with the architectural styles, and prior experience with heritage environments. These measures allowed for the control of individual predispositions and potential confounding variables. (See figure 2)

The facial-recognition software employed in the study has been validated in prior academic research for accuracy and reliability in detecting spontaneous emotional expressions (Rawnaque et al., 2020). Following data collection, emotional scores were processed and statistically analysed. ANOVA tests were conducted to examine differences in emotional responses across architectural styles, structural types, and gender. When significant effects were detected, Tukey’s HSD post hoc tests were performed to identify specific group differences. The combined use of objective emotional-recognition metrics and subjective self-reports enhanced the robustness of the findings and provided a comprehensive framework for understanding affective engagement with architectural heritage.

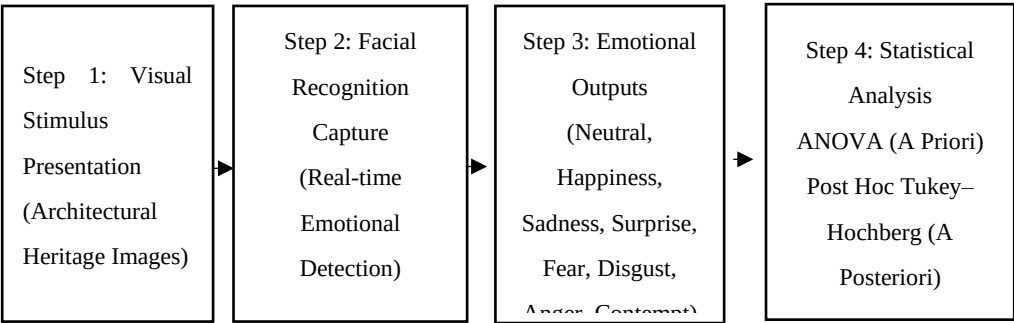


Figure 2. Methodological Process.

3. Results

This section presents the empirical findings derived from the ANOVA analyses conducted to test the proposed hypotheses. The results are organized according to the hypotheses formulated in Section 2, explicitly indicating whether each hypothesis is supported by the data. References to the corresponding tables are provided to facilitate interpretation. (Complementary descriptive statistics are reported in Appendix B.)

Regarding Hypothesis H1, which proposed that older architectural styles (Baroque, Renaissance, and Gothic) would evoke stronger emotional responses—particularly surprise and fear—than Modernist and Contemporary styles, results revealed meaningful patterns in the emotional responses elicited by different architectural styles, although not all emotions exhibited statistically robust distinctions (see Table 2). For Neutral, the p-value ($p = 0.0521$) suggested a marginal trend toward significance, with the Modernist style eliciting more neutral reactions and the Baroque style eliciting fewer. Although the post hoc comparisons did not yield statistically significant pairwise differences, the pattern indicates a potential stylistic influence that warrants further examination in future studies.

In contrast, Happiness demonstrated clear and statistically significant variation across architectural styles ($p = 0.000297$). Participants reported higher levels of happiness when viewing Modernist architecture, followed by Gothic elements, whereas Renaissance and Baroque styles produced comparatively lower happiness levels. These differences were supported by post hoc tests, confirming the robustness of the effect.

For Sadness, the ANOVA showed a trend toward significance ($p = 0.086$), with Modernist architecture surprisingly eliciting higher levels of sadness and Gothic architecture the lowest. However, as with Neutral, post hoc analyses did not detect significant pairwise differences, suggesting that the observed variation may be subtle or context dependent.

The emotion Surprise exhibited one of the strongest effects in the analysis ($p < 0.001$). Baroque architecture elicited the highest levels of surprise, followed by Gothic and Renaissance, whereas Modernist architecture generated markedly lower levels of surprise. Post hoc comparisons confirmed the magnitude and direction of these differences, highlighting the expressive and ornate character of historical styles as key emotional drivers.

Similarly, Fear also displayed a highly significant effect ($p < 0.001$). Baroque architecture produced the strongest fear responses, followed by Renaissance and Gothic, while Modernist architecture consistently generated the lowest levels of fear. These differences remained significant in post hoc analyses, reinforcing the role of stylistic complexity and historical symbolism in eliciting stronger negative affect.

For Disgust, the ANOVA again showed a highly significant effect ($p < 0.001$). Renaissance architecture produced the highest disgust responses, followed by Baroque and Gothic, with Modernist architecture eliciting the lowest levels. This pattern suggests that certain stylistic features may provoke aversive or discomfort-related reactions, consistent with prior findings on emotional valence in built environments.

Finally, Contempt also showed statistically significant variation across architectural styles ($p < 0.001$), indicating that stylistic differences influence even more subtle forms of negative affect. These findings collectively demonstrate that architectural style plays a substantial role in shaping the emotional landscape of observers, with historical styles generally producing more intense emotional reactions—both positive and negative—than more modern architectural styles such as Modernist expressions.

Table 2. ANOVA Results by Architectural Style.

Emotion		Df	Sum Sq	Mean Sq	F value	Pr(>F)	Architectural Style	N	Mean	SE
Neutral	Style	3	0.221	0.07377	2.587	0.052	Gothic	645	0.275	0.0133
							Renaissance	645	0.268	0.0133
							Modernist	645	0.309	0.0133
	Residuals	640	1,82E+04	0.02851			Baroque	645	0.260	0.0133
Happiness	Style	3	0.325	0.10829	6.363	< 0.001*	Gothic	645	0.1167	0.0103
							Renaissance	645	0.0794	0.0103
							Modernist	645	0.1305	0.0103
	Residuals	640	1,09E+04	0.01702			Baroque	645	0.0801	0.0103
Sadness	Style	3	0.057	0.019021	2.208	0.086	Gothic	645	0.0927	0.00732
							Renaissance	645	0.1008	0.00732
							Modernist	645	0.1185	0.00732
	Residuals	640	5,51E+03	0.008615			Baroque	645	0.1008	0.00732
Surprise	Style	3	0.704	0.23460	32.21	< 0.001*	Gothic	645	0.0908	0.00673
							Renaissance	645	0.0836	0.00673
							Modernist	645	0.0486	0.00673
	Residuals	640	4,66E+03	0.00728			Baroque	645	0.1412	0.00673
Fear	Style	3	0.1606	0.05353	18.3	< 0.001*	Gothic	645	0.0559	0.00426
							Renaissance	645	0.0646	0.00426
							Modernist	645	0.0282	0.00426
	Residuals	640	1,87E+04	0.00293			Baroque	645	0.0688	0.00426
Disgust	Style	3	1,14E+03	0.3790	28.47	< 0.001*	Gothic	645	0.1176	0.00909
							Renaissance	645	0.1731	0.00909
							Modernist	645	0.0645	0.00909
	Residuals	640	8,52E+03	0.0133			Baroque	645	0.1578	0.00909
Anger	Style	3	0.0364	0.012148	2.642	0.049*	Gothic	645	0.0790	0.00534
							Renaissance	645	0.0905	0.00534
							Modernist	645	0.0984	0.00534
	Residuals	640	2,94E+04	0.004597			Baroque	645	0.0824	0.00534
Dismiss	Style	3	0.79	0.26346	7.561	< 0.001*	Gothic	645	0.172	0.0147
							Renaissance	645	0.140	0.0147
							Modernist	645	0.202	0.0147
	Residuals	640	22.30	0.03484			Baroque	645	0.109	0.0147
Signif. Codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1; confidence level used: 0.95										

The influence of architectural style on emotional activation becomes particularly evident when examining the patterns across specific emotions. Modernist architecture generated pronounced emotional variability, eliciting both the highest levels of happiness and unexpectedly elevated levels of sadness and disgust. This duality suggests that its minimalist aesthetic may evoke positive affect in some observers while simultaneously triggering negative reactions in others, perhaps due to its perceived coldness or lack of ornamentation. In contrast, Baroque architecture emerged as the strongest elicitor of high-arousal emotions such as surprise and fear, reflecting its dramatic visual complexity and symbolic intensity. Renaissance architecture, meanwhile, was associated with comparatively higher levels of disgust and lower levels of happiness, indicating a more ambivalent or less affectively engaging response profile. Taken together, these results reinforce prior findings demonstrating the substantial impact of architectural form on emotional experience (Rucka & De Cock, 2024) and further highlight the differentiated affective signatures of historical versus modern styles (see table 2).

Overall, the results provide strong empirical support for Hypothesis H1. Older architectural styles—particularly Baroque and Gothic—elicited significantly higher levels of high-arousal

emotions such as surprise and fear, whereas Modernist architecture was predominantly associated with more neutral or positive emotional states, such as happiness. These findings confirm that architectural style is a key determinant of emotional intensity and valence in heritage perception.

Results did not support Hypothesis H2 (see table 3). The ANOVA examining emotional responses across different types of architectural structures revealed that, for most emotions, the type of heritage site did not produce statistically significant variation. For Neutral, the p-value ($p = 0.907$) indicated a complete absence of differences among buildings, streets, bridges, façades, neighborhoods, squares, and churches, with adjusted means ranging narrowly from 0.262 (building) to 0.294 (square). Post hoc analyses confirmed the lack of meaningful distinctions.

Table 3. ANOVA Results by Type of Heritage Structure.

Emotion		Df	Sum sq	Mean sq	F value	Pr(>f)	Type of structure	N	Mean	Se
Neutral	Heritage	6	0.062	0.01025	0.355	0.907	Building	645	0.262	0.0177
							Street	645	0.279	0.0177
							Bridge	645	0.275	0.0177
							Facade	645	0.274	0.0177
	Residuals	637	1,84e+04	0.02890			Neighborhood	645	0.275	0.0177
							Plaza	645	0.294	0.0177
							Church	645	0.288	0.0177
Happiness	Heritage	6	0.097	0.01615	0.925	0.476	Building	645	0.0946	0.0138
							Street	645	0.0946	0.0138
							Bridge	645	0.1255	0.0138
							Facade	645	0.1063	0.0138
	Residuals	637	1,11e+04	0.01746			Neighborhood	645	0.1104	0.0138
							Plaza	645	0.0869	0.0138
							Church	645	0.0934	0.0138
Sadness	Heritage	6	0.044	0.007413	0.854	0.528	Building	645	0.0929	0.00971
							Street	645	0.0960	0.00971
							Bridge	645	0.0975	0.00971
							Facade	645	0.1188	0.00971
	Residuals	637	5,53e+03	0.008676			Neighborhood	645	0.1027	0.00971
							Plaza	645	0.1103	0.00971
							Church	645	0.1041	0.00971
Surprise	Heritage	6	0.126	0.021001	2.553	0.0189 *	Building	645	0.1081	0.00946
							Street	645	0.0844	0.00946
							Bridge	645	0.0811	0.00946
							Facade	645	0.0767	0.00946
	Residuals	637	5,24e+03	0.008226			Neighborhood	645	0.1087	0.00946
							Plaza	645	0.0748	0.00946
							Church	645	0.1035	0.00946
Fear	Heritage	6	0.0116	0.001930	0.608	0.724	Building	645	0.0559	0.00587
							Street	645	0.0587	0.00587
							Bridge	645	0.0488	0.00587
							Facade	645	0.0572	0.00587
	Residuals	637	2,02e+04	0.003173			Neighborhood	645	0.0560	0.00587
							Plaza	645	0.0469	0.00587
							Church	645	0.0570	0.00587
Disgust	Heritage	6	0.069	0.01147	0.762	0.6	Building	645	0.142	0.0128
							Street	645	0.134	0.0128
							Bridge	645	0.115	0.0128
							Facade	645	0.132	0.0128
	Residuals	637	9,59e+03	0.01505			Neighborhood	645	0.112	0.0128
							Plaza	645	0.137	0.0128
							Church	645	0.125	0.0128
Anger	Heritage	6	0.0063	0.001057	0.226	0.968	Building	645	0.0922	0.00712
							Street	645	0.0890	0.00712
							Bridge	645	0.0833	0.00712
							Facade	645	0.0889	0.00712
	Residuals	637	2,97e+04	0.004666			Neighborhood	645	0.0844	0.00712
							Plaza	645	0.0848	0.00712
							Church	645	0.0904	0.00712

Dismiss	Heritage	6	0.083	0.01388	0.384	0.889	Building	645	0.152	0.191
							Street	645	0.164	0.191
							Bridge	645	0.173	0.191
							Facade	645	0.147	0.191
	Residuals	637	2,30e+04	0.03612			Neighborhood	645	0.151	0.191
							Plaza	645	0.165	0.191
							Church	645	0.138	0.191
							Signif. Codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1; confidence level used: 0.95			

Similarly, Happiness did not differ significantly across structure types ($p = 0.476$), despite minor fluctuations in adjusted means—bridges elicited the highest average happiness (0.1255), whereas squares elicited the lowest (0.0869). These differences were not statistically meaningful, as confirmed by post hoc tests. A comparable pattern emerged for Sadness ($p = 0.528$), where adjusted means were again closely aligned, ranging from 0.0929 (building) to 0.1188 (façade), with no significant pairwise contrasts.

In contrast, Surprise was the only emotion to exhibit statistically significant variation among structure types ($p = 0.0189$). Neighborhoods generated the highest adjusted mean (0.1087), while squares produced the lowest (0.0748). However, although the omnibus test indicated an overall effect, post hoc analyses did not identify statistically significant pairwise differences, suggesting that the observed variation may be diffuse rather than attributable to specific structural categories.

Other emotions—including Fear, Disgust, Anger, and Contempt—did not show significant differences across structure types, indicating that emotional responses in this study were influenced more strongly by architectural style than by the functional category of the built environment.

Finally, and regarding hypothesis H3 (see tables 4 and 5), the analysis examining the interaction between architectural style and emotional responses, segmented by gender, revealed significant differences across several emotional dimensions in the case of men (see table 3). Architectural style exerted a strong influence on sadness ($p < 0.001$), surprise ($p < 0.001$), disgust ($p < 0.01$), and anger ($p < 0.001$). Specifically, Modernist architecture was associated with higher levels of sadness, whereas Baroque architecture elicited markedly stronger surprise responses. Renaissance architecture generated the highest mean levels of disgust, and anger was most strongly expressed in response to Modernist stimuli, suggesting that stylistic features linked to minimalism or stark geometric design may intensify certain negative affective reactions.

These results indicate that, contrary to expectations derived from the literature, the functional type of heritage structure plays a limited role in shaping emotional responses when compared to architectural style. As such, the hypothesis related to structural typology is not supported, with the partial exception of surprise, which exhibited a modest overall effect without clear pairwise differences.

Table 4. ANOVA Results by Architectural Style (Men Only).

Variable		Df	Sum Sq	Mean Sq	F value	Pr(>F)	Destination	N	Mean	SE
Emotion Neutral	Style	3	0.099	0.03286	1.18	0.317	Gothic	327	0.295	0.0191
							Renaissance	327	0.266	0.0190
	Residuals	322	8,96E+03	0.02784			Modernist	327	0.278	0.0214
							Baroque	327	0.250	0.0158
Emotion Happiness	Style	3	0.0193	0.006457	0.971	0.407	Gothic	327	0.0823	0.00935
							Renaissance	327	0.0785	0.00929
	Residuals	322	2,14E+04	0.006640			Modernist	327	0.1305	0.01043
							Baroque	327	0.0851	0.00770
Emotion Sadness	Style	3	0.3342	0.11141	17.57	< 0.001*	Gothic	327	0.1084	0.00914
							Renaissance	327	0.1012	0.00908
	Residuals	322	2,04E+04	0.00634			Modernist	327	0.1809	0.01020
							Baroque	327	0.0935	0.00753
Emotion Surprise	Style	3	0.4049	0.13498	20.99	< 0.001*	Gothic	327	0.0658	0.00920
							Renaissance	327	0.0778	0.00914
	Residuals	322	2,07E+04	0.00643			Modernist	327	0.0532	0.01027
							Baroque	327	0.1388	0.00758

Emotion Fear	Style	3	0.0211	0.007045	2.448	0.0637	Gothic	327	0.0582	0.00615
							Renaissance	327	0.0710	0.00611
							Modernist	327	0.0519	0.00687
	Residuals	322	0.9266	0.002878			Baroque	327	0.0713	0.00507
Emotion Dislike	Style	3	0.234	0.07808	5.196	0.00162 **	Gothic	327	0.146	0.0141
							Renaissance	327	0.186	0.0140
							Modernist	327	0.106	0.0157
	Residuals	322	4,84E+03	0.01503			Baroque	327	0.163	0.0116
Emotion Anger	Style	3	0.0842	0.028077	5.563	< 0.001*	Gothic	327	0.1017	0.00815
							Renaissance	327	0.1033	0.00810
							Modernist	327	0.1343	0.00910
	Residuals	322	1,63E+04	0.005047			Baroque	327	0.0882	0.00671
Emotion Contempt	Style	3	0.054	0.01807	0.885	0.449	Gothic	327	0.143	0.0164
							Renaissance	327	0.130	0.0163
							Modernist	327	0.117	0.0183
	Residuals	322	6,57E+03	0.02041			Baroque	327	0.110	0.0135
Signif. Codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1; Confidence level used: 0.95										

¹ Tables may have a footer.

In contrast, emotions such as neutrality, happiness, fear, and contempt did not vary significantly by architectural style. This pattern indicates that although style plays a prominent role in shaping high-arousal or negatively valenced emotions, its capacity to modulate more neutral or positive emotional states appears comparatively limited. These findings are consistent with previous research suggesting that architectural forms tend to evoke stronger emotional differentiation in reactions associated with surprise, awe, or discomfort, whereas their influence on positive affect is more subdued and context dependent.

In the analysis segmented by women (see table 5), architectural style exerted a significant influence on a wide range of emotional responses. Neutrality, happiness, surprise, fear, disgust, and contempt all varied significantly as a function of style. For Neutrality ($p < 0.05$), Modernist architecture elicited the highest levels, followed by Baroque, whereas Gothic and Renaissance styles yielded lower neutrality scores, suggesting increased affective engagement with historical forms. Happiness ($p < 0.01$) was more pronounced in response to Modernist and Gothic styles, while Baroque architecture elicited comparatively lower levels of positive affect.

The emotion Surprise ($p < 0.001$) was most strongly associated with Baroque architecture, followed by Gothic, whereas Modernist structures generated the least surprise, reflecting the stylistic exuberance and ornamentation of historical forms. A similar pattern emerged for Fear ($p < 0.001$), with Baroque styles producing the highest fear responses and Modernist styles eliciting significantly lower levels, further underscoring the emotional potency of dramatic historical aesthetics.

Table 5. ANOVA Results by Architectural Style (Women Only).

Variable	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Destination	n	Mean	SE	
Emotion neutral	Style	3	0.262	0.08727	3.012	0.0303 *	Gothic	318	0.2575765	0.01846231
							Renaissance	318	0.270331	0.01857188
							Modernist	318	0.327514	0.01702141
	Residuals	314	9,10E+03	0.02897			Baroque	318	0.2830776	0.0243163
Emotion happiness	Style	3	0.426	0.14207	5.387	0.00126 **	Gothic	318	0.14739059	0.01761347
							Renaissance	318	0.09228214	0.017718
							Modernist	318	0.162209	0.01623882
	Residuals	314	8,28E+03	0.02637			Baroque	318	0.0687102	0.02319831
Emotion sadness	Style	3	0.0654	0.021808	2.257	0.0818	Gothic	318	0.07873294	0.010662708
							Renaissance	318	0.10042619	0.010725989
							Modernist	318	0.08039	0.009830531
	Residuals	314	3,03E+04	0.009664			Baroque	318	0.11730816	0.014043616
Emotion surprise	Style	3	0.3975	0.13249	16.69	< 0.001*	Gothic	318	0.11307176	0.00966348
							Renaissance	318	0.08896905	0.00972083
							Modernist	318	0.045805	0.008909288
	Residuals	314	2,49E+04	0.00794			Baroque	318	0.1466	0.012727554
Emotion fear	Style	3	0.1353	0.04508	16.07	< 0.001*	Gothic	318	0.05377176	0.005745968

Emotion dislike	Residuals	314	0.8812	0.00281	24.63	< 0.001*	Renaissance	318	0.05866548	0.005780069		
							Modernist	318	0.013805	0.00529752		
							Baroque	318	0.0631102	0.007567886		
							Gothic	318	0.09253612	0.01123004		
	Style	3	0.792	0.26400			Renaissance	318	0.161375	0.01129669		
							Modernist	318	0.039279	0.01035359		
							Baroque	318	0.14600204	0.01479084		
							Gothic	318	0.05863412	0.006360729		
Emotion anger	Residuals	314	1,08E+04	0.003439	2.062	0.105	Renaissance	318	0.07878452	0.006398478		
							Modernist	318	0.076522	0.005864302		
							Baroque	318	0.06924694	0.008377574		
							Gothic	318	0.1982862	0.02360399		
Emotion contempt	Style	3	0.907	0.30244			6.386	< 0.001*	Renaissance	318	0.1491667	0.02374407
									Modernist	318	0.254476	0.0217618
									Baroque	318	0.1059449	0.03108829
Signif. codes: 0 '****' 0.001 *** 0.01 ** 0.05 . ' ' 1; Confidence level used: 0.95												

Disgust ($p < 0.001$) was predominantly triggered by Renaissance architecture, followed by Baroque, while Modernist architecture produced the lowest levels of this emotion. Finally, Contempt ($p < 0.001$) was most strongly evoked by Modernist structures, followed by Gothic, whereas Baroque and Renaissance styles elicited comparatively lower contempt responses.

Collectively, these results demonstrate that architectural style has a pronounced impact on women’s emotional processing of built environments. Modernist architecture tends to evoke more extreme responses—particularly contempt and neutrality—whereas Baroque architecture generates heightened levels of surprise and fear. These findings highlight a clear emotional differentiation across styles and align with prior research suggesting that stylistic features of architecture possess varying capacities to evoke intense emotional reactions (Authors, 2023).

Taken together, these findings provide support for Hypothesis H3, confirming that men and women exhibit significantly different emotional responses to architectural heritage. Moreover, the results suggest that women display greater emotional sensitivity across a broader range of emotions, whereas men show stronger differentiation primarily in high-arousal and negatively valenced emotions. Thus, Hypothesis H3, which proposed gender-based differences in emotional responses to architectural heritage, is supported.

4. Discussion

The findings of this study support two of the proposed hypotheses. In particular, Hypothesis H1 was confirmed, demonstrating that architectural style—especially historical styles—plays a decisive role in emotional activation. Likewise, Hypothesis H3 was supported, revealing clear gender-based differences in emotional processing of architectural heritage. The results suggest that gender differences are more pronounced in high-arousal and negatively valenced emotions.

The findings of this study offer valuable insights into the emotional responses elicited by different architectural styles, providing empirical support for the proposed hypotheses H1 and H3. Emotions such as surprise, fear, disgust, and happiness varied significantly across architectural styles, whereas neutrality, sadness, and contempt exhibited weaker associations. These patterns align with prior work in heritage tourism and environmental psychology, which emphasizes the capacity of built environments—particularly those rich in historical symbolism and aesthetic complexity—to trigger differentiated emotional reactions.

Implications for Heritage Site Management and Visitor Experience Design. - A central contribution of this study lies in its practical applicability to the management, interpretation, and experiential design of heritage sites. Understanding how architectural styles shape emotional activation enables heritage managers and tourism operators to curate experiences that resonate more deeply with visitors. Styles such as Baroque and Gothic, which consistently evoke high-arousal emotions like fear and surprise, can serve as focal points for thematic tours that foreground the dramatic, spiritual, or historical narratives embedded in these structures. Guided routes emphasizing

verticality, ornamentation, and symbolic richness may thereby enhance emotional engagement and strengthen visitors' appreciation of these sites.

Conversely, modern architectural elements—associated in this study with more neutral or positive emotional states—can be strategically employed as moments of emotional decompression within tourism circuits. Incorporating minimalist or contemporary spaces into heritage itineraries could provide visitors with psychological relief between encounters with more intense historical environments. Thoughtfully designed rest areas, viewing platforms, or interpretive centers inspired by modernist principles may thus help balance the emotional rhythm of the visitor experience.

Designing Tours to Maximize Positive Emotional Outcomes. - The results also highlight opportunities to intentionally structure tours to maximize positive affective responses. Given that Modernist architecture elicited higher happiness levels among participants, tour designs might begin or conclude with modern or contemporary spaces to generate a sense of emotional elevation or closure. Additionally, the integration of interactive technologies—such as multimedia installations, projection mapping, or augmented reality—could amplify emotions like surprise and admiration in spaces where these responses are most naturally triggered, such as Gothic cathedrals or Baroque squares.

Such strategies align with experiential tourism frameworks that emphasize emotional peaks, narrative coherence, and sensory immersion as drivers of visitor satisfaction and memorability.

Strategies for Heritage Conservation and Communication. - The emotional impact of architectural styles also carries important implications for heritage conservation. Styles capable of evoking stronger emotional activation—particularly Baroque and Gothic—may foster deeper psychological attachment among visitors, strengthening public support for preservation initiatives. Heritage managers may leverage these emotional connections in communication campaigns, emphasizing the expressive and symbolic dimensions of architectural heritage to cultivate stewardship and advocacy.

Furthermore, understanding how different types of built heritage influence emotional responses can inform interpretive strategies. Although structural typology did not significantly affect emotional intensity in this study, H2 was not supported by results, churches and other religious sites nonetheless emerged as emotionally salient spaces in prior literature. Emphasizing historical narratives, sacred symbolism, or sensorial elements (e.g., acoustics, lighting) may therefore enhance emotional engagement even when quantitative differences across infrastructure types are minimal. For heritage types that elicited relatively subdued emotional reactions—such as bridges or façades—interpretive enhancements like audiovisual guides, artistic lighting, or curated storytelling could enrich visitor experience and foster a stronger affective bond with the site.

Implications for Urban Design and Heritage Tourism Planning. - At the broader urban scale, the findings underscore the potential to design tourism circuits that intentionally orchestrate emotional variation. Cities with diverse architectural heritage can develop routes that oscillate between the awe-inspiring intensity of Gothic or Baroque landmarks and the calm or happiness associated with Modernist or Contemporary spaces. This emotional pacing may improve visitor satisfaction and sustain engagement throughout longer visits.

In addition, public spaces adjacent to heritage sites—parks, squares, promenades—can incorporate contemporary design elements to facilitate emotional transitions, allowing visitors to process and integrate the intense experiences of monumental architecture. As the typology of heritage structures showed limited influence on emotional responses, these auxiliary spaces offer flexibility in design without compromising their role within the heritage tourism ecosystem.

Emerging Technologies and the Future of Heritage Experience Design. - The integration of emerging technologies such as virtual reality (VR) and augmented reality (AR) opens new avenues for applying these findings. VR and AR can recreate lost or inaccessible architectural environments, allowing visitors to experience emotions such as awe or surprise that physical constraints might otherwise limit. Similarly, emotion-driven personalization—where VR/AR systems adapt content

based on the styles that elicit stronger responses in each visitor—could revolutionize heritage interpretation and educational programs.

These technologies also offer possibilities for simulating restorations, visualizing architectural changes over time, or enhancing storytelling with emotional cues aligned with the aesthetic and symbolic features of architectural styles.

In sum, this study advances the understanding of how architectural styles shape emotional responses within heritage tourism contexts. By identifying the emotional signatures associated with different styles and highlighting their relative influence compared with structural typology, the findings provide a foundation for more emotionally informed management, conservation, and experience-design strategies. The integration of emotional analytics into heritage tourism development represents a promising direction for both academic research and practical innovation, contributing to a richer, more affectively engaging understanding of architectural heritage.

5. Conclusions

This study demonstrates that architectural heritage exerts a meaningful and measurable influence on visitors' emotional responses, with specific architectural styles functioning as key determinants of both emotional intensity and valence. The findings show that styles such as Baroque and Renaissance are particularly potent in eliciting high-arousal emotions—most notably surprise and disgust—while Modernist architecture is associated with more neutral states and elevated levels of happiness. These results underscore the role of architecture as a powerful emotional mediator within the heritage tourism experience, offering new insights into the psychological mechanisms through which built environments shape visitor engagement.

From a theoretical perspective, this research contributes to the growing body of work on the emotional dimensions of heritage tourism by integrating real-time emotion measurement through facial recognition technology. This methodological innovation enhances the precision and ecological validity of emotional assessment and provides a valuable framework for examining the affective impact of architectural styles. The identification of gender-based differences in emotional responses further enriches theoretical understanding by revealing how distinct demographic groups interact with and interpret cultural heritage, broadening the conceptual foundations of emotion-driven tourism research.

The study also carries significant practical implications. Heritage tourism managers, planners, and conservation specialists can leverage the emotional signatures identified here to design more engaging, strategically structured visitor experiences. Architectural styles that evoke positive emotions—such as happiness, awe, or admiration—can be emphasized within interpretive narratives or tour sequencing, while emotionally intense styles such as Baroque may be highlighted to create memorable experiential peaks. These emotional insights can also inform conservation priorities, supporting architectural preservation strategies that reinforce visitors' affective connection to heritage sites and foster long-term stewardship.

Despite its contributions, the study presents several limitations. The sample consisted of participants from a single nationality, which may limit the generalizability of the findings across diverse cultural contexts where architectural meaning and emotional expression may vary. Additionally, the study did not account for contextual moderators such as environmental conditions, personal memories, or prior knowledge of the sites, all of which may influence emotional responses. Addressing these limitations in future research will provide a more comprehensive and culturally sensitive understanding of emotional engagement with architecture.

Future studies should expand the cultural diversity of participant samples, incorporate multisensory methodologies (e.g., soundscapes, textures, or virtual reconstructions), and investigate the long-term emotional effects of repeated or prolonged exposure to architectural environments. Such extensions would deepen the theoretical and practical relevance of emotion research in heritage tourism, enabling a more holistic understanding of how architectural heritage shapes human experience. By pursuing these avenues, future work can build upon the foundations established in

this study, enhancing the effectiveness of heritage interpretation, management, and conservation strategies while advancing the academic discourse on the emotional power of architecture.

Finally, key limitation of this study lies in the uneven representation of religious and civil architectural heritage. While civil heritage was represented by multiple structural categories, religious heritage was limited to a single type of asset (church). This imbalance may have reduced the analytical sensitivity required to detect meaningful emotional differences between religious and civil architecture.

6. Future Research Directions

Cross-Cultural Expansion and Sample Diversity. - Future research should replicate this study across culturally diverse populations to examine how geographical, historical, and social differences shape emotional responses to architectural styles. Such comparative analyses would help determine whether emotional reactions to heritage architecture are universal or culturally contingent. Expanding demographic diversity would deepen theoretical understanding while enhancing the external validity of emotional models within built environments.

Contextual and Environmental Modulators. - Emotional responses to architecture are likely influenced by contextual variables such as lighting conditions, weather, seasonality, time of day, and the contrast between urban and rural settings. Future studies should explore how these factors modulate sensory perception and emotional activation in heritage spaces. Integrating environmental psychology perspectives would allow heritage managers and architects to optimize visitor experiences under varying environmental conditions.

Temporal Dynamics of Emotional Experience. - Longitudinal research examining how emotional responses evolve over repeated exposures or extended interactions with heritage environments would provide valuable insights into emotional adaptation and memory formation. Initial affective reactions may differ significantly from long-term evaluations, with implications for how individuals develop attachment, familiarity, and place identity. These findings could inform planning strategies for sustained engagement with heritage sites.

Multisensory Integration in Architectural Experience. - Given that human emotional experience is inherently multisensory, future research should incorporate auditory, olfactory, and tactile stimuli to develop a more holistic understanding of how individuals perceive architectural heritage. Soundscapes, ambient smells, or textural cues may amplify emotional resonance and contribute to more immersive visitor experiences. Such approaches would support the development of sensory-rich architectural and interpretive designs.

Emotion Across Demographic Segments. - Future studies should systematically examine how demographic factors—such as age, education, professional background, or socioeconomic status— influence emotional responses to architecture. These insights could guide the design of more inclusive and adaptive heritage conservation and tourism strategies, tailored to the needs and preferences of different population groups.

Emerging Technologies and Digital Emotional Reconstruction. - Virtual reality (VR), augmented reality (AR), and mixed reality (MR) technologies offer transformative opportunities for exploring how digital simulations of architectural spaces evoke emotional responses. Comparative studies between physical and virtual encounters with heritage architecture could shed light on the fidelity of emotional replication in digital environments. These findings may support innovative models for remote heritage education, accessibility, and preservation.

Comparative Analysis of Natural and Built Environments. - A promising avenue for future inquiry lies in comparing emotional responses to architectural settings with those elicited by natural environments. Understanding how nature and built form interact to influence emotional well-being may enrich architectural and urban design practices. Research grounded in biophilic design principles—integrating natural elements into constructed spaces—could reveal strategies for enhancing positive emotional outcomes within heritage and non-heritage contexts alike.

Future research should address this limitation by incorporating a broader and more balanced range of religious architectural assets, such as cathedrals, monasteries, convents, or pilgrimage sites. Comparing multiple religious structures with an equivalent number of civil heritage assets would allow for a more robust examination of emotional differences and may reveal effects that were not observable in the present study.

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Abbreviations

The following abbreviations are used in this manuscript:

ANOVA	Analysis of Variance
AR	Augmented Reality
EEG	Electroencephalography
HSD	Honestly Significant Difference
MR	Mixed Reality
VR	Virtual Reality

Appendix A. Supplementary Methodological Information

Appendix A.1

This appendix provides supplementary methodological details that support the reproducibility and transparency of the study without interrupting the flow of the main text. Specifically, it includes additional information regarding the classification of architectural stimuli and the structure of the dataset used for statistical analysis.

The architectural stimuli were organized into seven categories representing different types of built heritage: Building, Street, Bridge, Façade, Neighborhood, Plaza, and Church. Each stimulus was presented in video format under controlled conditions to ensure consistency in duration, resolution, and visual framing.

The dataset comprised emotional response scores automatically extracted through facial emotion recognition software and aggregated at the participant–stimulus level prior to analysis. These data were subsequently analyzed using one-way ANOVA and post hoc Tukey HSD tests, as described in the Methods section.

Table A1. Architectural heritage categories used as experimental stimuli.

Heritage Category	Description
Building	Isolated architectural structures with heritage value
Street	Urban streetscapes with historical significance
Bridge	Heritage bridges representing civil infrastructure
Façade	Architectural façades of historic buildings
Neighborhood	Heritage urban areas and districts
Plaza	Public squares with cultural and historical relevance
Church	Religious architectural heritage sites

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