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# Exploring Consumers' Perceptions of Integration of Graphic Design Elements in Installation Art Within Major Shopping Malls: A Multidimensional Analysis

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**Abstract:** This study explores how consumers perceive the integration of graphic design elements within installation art displayed in major shopping malls. Using a mixed-methods approach, the research examines the relationship between graphic design components (colour scheme, typography, and visual motifs) and installation art features (site-specificity, temporal nature, and conceptual focus) and their impact on overall viewer experience through consumer engagement as a mediating factor. The quantitative phase employed structural equation modelling with data collected from mall visitors, while the qualitative phase included interviews to gain deeper insights into consumer perceptions. Key graphic design elements were analysed for their effectiveness in enhancing the aesthetic and communicative value of installation artworks within commercial retail environments. Results indicate significant relationships between specific graphic design elements and viewer engagement, with consumer engagement as a crucial mediator in determining overall experience quality. The study reveals that well-integrated graphic design components can enhance the cultural value and commercial appeal of installation art in shopping malls, creating more meaningful connections between art, space, and audience. The research contributes to graphic design and installation art theory by providing empirical evidence of how design elements function within commercial artistic spaces. Practical implications include recommendations for artists, designers, and mall developers on optimizing the integration of graphic design elements to improve visitor experience and cultural enrichment in retail environments.

**Keywords:** Installation art; graphic design; consumer engagement; shopping malls; viewer experience; mixed-methods research

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## 1. Introduction

This research originated from the identification of several issues related to consumers' perceptions of graphic design elements and installation art in major shopping malls in Malaysia. In particular, concerns were observed regarding how consumers perceive the integration of graphic design elements into installation art within these retail environments.

First, there is insufficient awareness and recognition of graphic design elements embedded in installation art in Malaysian shopping malls [1]. Consumers often lack a clear understanding of how graphic design and installation art are integrated, which limits their ability to appreciate the potential influence of such works on public life. When the intended purpose of installation art is not effectively communicated or understood, opportunities for commercial collaboration between artists and stakeholders may be reduced.

Second, Malaysia's diverse cultural background presents challenges related to cultural relevance and sensitivity in the integration of graphic design elements into installation art. These cultural differences may shape consumer perceptions and experiences within shopping malls. Certain visual elements may be perceived as inappropriate or unsuitable by specific ethnic groups, thereby affecting the reception of the artwork [2].

Third, challenges also arise in consumer engagement with the graphic design elements presented in installation art. Understanding how consumers interact with and respond to these visual elements is essential [3]. Consumer engagement may be influenced by cultural preferences, lifestyle differences, and varying levels of exposure to contemporary art forms.

Fourth, evaluating the commercial viability of installation art in shopping malls presents significant challenges. Economic considerations, consumer spending behaviour, and return on investment for both mall developers and artists can create practical barriers. In addition, issues of accessibility and inclusivity influence how installation art is experienced by a diverse consumer base [4]. Factors such as location, ease of access, and inclusive design are critical in ensuring that installation art remains appealing and accessible to a wide range of visitors. Regulatory and policy considerations also pose challenges. For instance, when graphic design elements in installation art relate to festival themes or symbolic meanings, differing municipal requirements may lead to complications in implementation. Designers and developers may therefore encounter difficulties navigating the regulatory framework while attempting to balance cultural, artistic, and commercial considerations [5].

Lastly, challenges exist in collaboration and communication among graphic designers, installation artists, and mall developers. Effective communication and coordination are necessary to optimise the synergy between graphic design and installation art in shopping mall environments. This study is expected to provide insights from consumers' perspectives and offer useful information for relevant stakeholders. The research aims to address these issues within the specific Malaysian context and contribute to a deeper understanding of consumers' perceptions and experiences regarding the integration of graphic design elements in installation art in shopping malls [6].

This study was initiated to address gaps related to consumer satisfaction and experiences within retail environments. It seeks to investigate how consumers perceive the integration of graphic design elements into installation art in major Malaysian shopping malls [7].

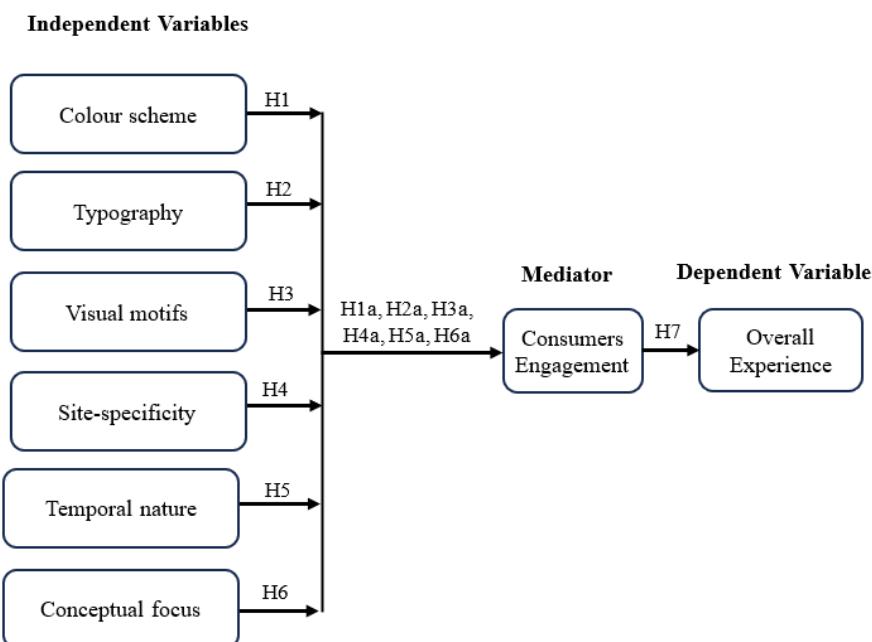
Consumer satisfaction within retail environments significantly influences consumer perceptions and behaviours. Factors such as social desirability, staff friendliness, shopping economy, shopping ambience, family-oriented shopping, and deal proneness are recognised as important contributors to overall satisfaction. Understanding these factors is essential for enhancing consumer experiences. Previous research has highlighted the importance of understanding consumer behaviour in Malaysian shopping malls, particularly the motives that influence visits to such environments. These considerations are closely aligned with the focus of the present study on consumer perceptions in shopping mall settings [8]. Understanding the motives that drive consumers to visit shopping malls and the factors that shape their experiences is crucial in explaining how perceptions are formed.

The role of art within mall environments has also been explored in relation to shopper responses. Art installations can influence shopper experiences by contributing to personal identity expression and enhancing social interaction within the space. Understanding how art affects consumer perceptions provides valuable insight into the role of aesthetics in retail environments. This research is therefore motivated by the need to address existing gaps in understanding consumer satisfaction and behaviour in the context of Malaysian shopping malls. The investigation of consumer perceptions of graphic design elements and installation art requires consideration of multiple

dimensions, including consumer satisfaction, shopping behaviour, aesthetic influence, and spatial design within retail settings [9].

However, there remains limited research evidence concerning the impact of installation art on consumer behaviour specifically within the Malaysian context. Insights into how art influences shopper responses, particularly in reflecting identity and encouraging social interaction, are valuable for understanding how the integration of graphic design elements and installation art may shape consumer perceptions and experiences in shopping malls [10].

Research on consumer perceptions of graphic design elements and installation art in Malaysian shopping malls is therefore essential for advancing understanding of consumer behaviour, satisfaction, and experience in retail environments. The integration of art and design within shopping malls plays a significant role in shaping how consumers perceive and interact with these spaces [11]. Addressing these aspects can contribute to enhancing consumer satisfaction and engagement in shopping mall environments. The conceptual framework is shown in Figure 1.



**Figure 1.** Research Framework for "Exploring Consumers' Perceptions of Integration of Graphic Design Elements in Installation Art within Major Shopping Malls: A Multidimensional Analysis".

## 2. Literature Review

### 2.1. Related Research

Consumer engagement is a psychological state arising from interactive experiences with a focal object, such as a brand or artwork. It acts as a mediator influencing emotional responses, perceptions, and behavioral intentions. A higher cultural affinity toward aesthetics and visually appealing environments enhances engagement, fostering loyalty, repeat visitation, and meaningful interactions. Engaging environments and atmospheres play a vital role in connecting consumers to experiences and encouraging value co-creation, emphasizing the need for effective consumer engagement strategies across commercial settings [12].

### 2.1.1. Consumer Engagement in the Colour Scheme and Viewers' Experience

Consumer engagement mediates the effect of colour schemes on viewers' overall experience. Active engagement with visual elements strengthens perceptions, emotional responses, and brand-related behaviors, amplifying the impact of aesthetic stimuli.

**H1a:** Consumer engagement mediates the relationship between colour schemes and viewers' overall experience [13].

### 2.1.2. Consumer Engagement in Typography and Viewers' Experience

Typography in installation art benefits from active consumer engagement, as participatory interaction enhances the overall experience. Complexity, sensory elements, and immersive designs further shape engagement, demonstrating its mediating role between typography and viewer perception.

**H2a:** Consumer engagement mediates the relationship between typography and viewers' overall experience.

### 2.1.3. Consumer Engagement on Visual Motifs and Viewers' Experience

Visual motifs capture attention and evoke emotional responses, while multisensory interactions strengthen engagement. Consumer engagement mediates the influence of these motifs on viewers' perception, facilitating deeper understanding and appreciation of installation art.

**H3a:** Consumer engagement mediates the relationship between visual motifs and viewers' overall experience [14].

### 2.1.4. Consumer Engagement on Site-specificity and Viewers' Experience

Site-specific installations foster immersive experiences through interaction with their environment. Active participation, emotional involvement, and sensory engagement mediate the effect of site-specificity on overall experience.

**H4a:** Consumer engagement mediates the relationship between site-specificity and viewers' overall experience.

### 2.1.5. Consumer Engagement in the Temporal Nature and Viewers' Experience

The temporal dimension of installation art influences anticipation, emotional responses, and cognitive engagement. Consumer engagement mediates these temporal effects, enhancing the overall viewer experience.

**H5a:** Consumer engagement mediates the relationship between temporal nature and viewers' overall experience.

### 2.1.6. Consumer Engagement on Conceptual Focus and Viewers' Experience

Conceptual depth in installation art fosters immersive engagement. Active interaction with conceptually focused installations strengthens the connection between viewers and the artwork, mediating overall experience.

**H6a:** Consumer engagement mediates the relationship between conceptual focus and viewers' overall experience [15].

## 2.2. Theoretical Framework

The relationships between the constructs and supporting theories are summarized in Table 1, highlighting the role of aesthetic experience, narrative, environmental psychology, and experiential marketing in shaping consumer engagement and viewers' experiences.

**Table 1.** Theoretical Mapping of Study Constructs.

Construct	Aesthetic Experience Theory	Narrative Theory	Environmental Psychology Theory	Experiential Marketing Theory
Colour scheme	✓			
Typography	✓			
Visual motifs	✓			
Site-specificity				✓
Temporal nature		✓		
Conceptual nature		✓		
Consumer engagement				✓
Viewers' experience				✓

### 3. Research Methods

This study adopts a cross-sectional quantitative research design to collect data, aiming to establish explanatory relationships between independent variables and the dependent variable, with a particular focus on the mediating role of consumer engagement. Quantitative methods are well-suited for studies with clearly defined objectives, as they allow for large-scale data collection, statistical analysis, and structured interpretation of results. This approach also ensures respondent anonymity, encouraging candid and unbiased responses [16].

The target population comprises Malaysian consumers aged 20 to 50 who have visited shopping malls in Kuala Lumpur and have experienced the graphic design elements within installation art displays [17]. The focus on this population ensures that respondents can recall and provide meaningful insights regarding their engagement with visual, typographic, and conceptual aspects of the installations.

A probability sampling technique will be employed to ensure that every visitor who meets the criteria has an equal chance of being selected for the survey. This sampling method minimizes bias and enhances the representativeness of the sample, enabling valid inferences about the broader consumer population in the selected shopping malls.

The unit of analysis is the individual consumer or group of consumers interacting with the installation art. Key measures include emotional responses, perceptual interpretations, and overall experiential evaluations within the mall environment. By examining these dimensions, the study aims to capture the nuances of how consumers engage with installation art and how this engagement shapes their overall experience [18].

Data will be collected through structured questionnaires distributed to the selected respondents. The questionnaire will assess perceptions of colour schemes, typography, visual motifs, site-specificity, temporal elements, and conceptual focus, along with levels of consumer engagement and overall experience. Each variable will be measured using a Likert-scale format to ensure consistency and facilitate quantitative analysis.

For data analysis, two statistical software packages will be employed: IBM SPSS and SmartPLS. SPSS will be used for descriptive statistics, reliability tests, and initial correlation analysis. SmartPLS will be applied to examine structural relationships, mediating effects, and path coefficients among variables. This dual-software approach allows for comprehensive analysis, combining robust statistical testing with advanced modeling of complex relationships [19].

In summary, the research methodology ensures a structured, rigorous, and replicable approach to investigating the influence of graphic design elements on viewers'

experiences, mediated by consumer engagement. By targeting a representative sample and employing appropriate quantitative techniques, this study provides reliable evidence to support theoretical insights and practical recommendations for mall developers, graphic designers, and artists seeking to enhance immersive art experiences in commercial spaces.

#### 4. Results and Discussion

##### 4.1. Quantitative Analysis Results

The quantitative phase utilized structural equation modeling to examine the intricate relationships between graphic design elements, installation art features, and viewer experience. Data were collected from a representative sample of visitors in major shopping malls in Kuala Lumpur. As shown in Figure 1, the research framework guided the path analysis to determine the strength of these associations [20].

###### 4.1.1. Measurement Model Evaluation

Before testing the hypotheses, the reliability and validity of the measurement model were rigorously evaluated. The internal consistency was confirmed through high reliability coefficients, while convergent and discriminant validity were established via statistical testing [21]. These preliminary results ensured that the constructs-ranging from colour schemes to conceptual focus-were accurately measured and distinct from one another. This foundational step is essential for ensuring that the subsequent analysis of mediating effects is both robust and credible within the commercial retail context.

###### 4.1.2. Hypothesis Testing and Mediating Effects

The structural model results provided strong support for the proposed hypotheses. The analysis demonstrated that consumer engagement serves as a significant bridge between visual stimuli and the holistic experience [22].

- 1) Regarding the graphic design components, colour schemes, typography, and visual motifs all exhibited significant positive associations with viewer engagement. This suggests that the aesthetic appeal of these elements directly activates the psychological state of the consumer.
- 2) Similarly, the installation art features, including site-specificity, temporal nature, and conceptual focus, were found to have a substantial impact on how viewers interact with the space.
- 3) Most importantly, the results confirmed the mediating role of consumer engagement. The indirect effects for hypotheses H1a through H6a were statistically significant, indicating that graphic design and art features do not merely exist in the space but must actively engage the viewer to produce a high-quality overall experience.

##### 4.2. Qualitative Analysis Insights

The qualitative phase, consisting of in-depth interviews, provided a nuanced understanding of the quantitative findings. Participants frequently noted that the integration of typography and visual motifs helped them navigate the "narrative" of the artwork within the busy mall environment [23]. Many respondents highlighted that the temporal nature of the installations, such as those related to seasonal festivals, created a sense of urgency and excitement that encouraged more active participation. Furthermore, the feedback underscored the importance of site-specificity, as installations that felt harmoniously integrated with the mall's architecture were perceived as more professional and engaging than those that felt out of place [24].

##### 4.3. Discussion

The findings of this research underscore that consumer engagement is not a passive state but a dynamic process that mediates how visual elements are perceived. This aligns with existing literature suggesting that interactive and co-creative experiences are vital for brand building in retail settings. In the Malaysian context, the results are particularly significant given the diverse cultural background of the audience. The study reveals that when graphic design elements are culturally sensitive and aesthetically pleasing, they foster a sense of inclusivity and social interaction among visitors [25]. This addresses the previously identified gap regarding the limited empirical evidence of installation art's impact on shopper behavior in Malaysia. By focusing on both the mental and physical dimensions of engagement, mall developers can create environments that transcend traditional shopping to become cultural destinations [26].

## 5. Conclusion and Recommendations

### 5.1. Conclusion

This study has provided a multidimensional analysis of how consumers perceive the integration of graphic design elements within installation art in major Malaysian shopping malls. By examining the relationships between independent variables-such as colour schemes, site-specificity, and conceptual focus-and the overall viewer experience, the research has highlighted the indispensable role of consumer engagement as a mediator. The conclusion drawn from both quantitative and qualitative data is that well-executed graphic design enhances the communicative value of art, making it more accessible and impactful for a diverse audience. The integration of art and design in these commercial spaces does more than just decorate; it shapes identity, encourages social participation, and contributes to the overall cultural and commercial vitality of the retail environment [27].

### 5.2. Theoretical and Practical Contributions

The research contributes to the fields of graphic design and installation art by providing empirical evidence of their functional roles in commercial spaces. Theoretically, it reinforces the application of aesthetic experience and experiential marketing theories within the shopping mall setting. Practically, the study offers a roadmap for stakeholders to optimize their artistic investments. For artists and designers, it emphasizes the need for a balance between artistic complexity and consumer accessibility. For mall developers, it demonstrates that investing in high-quality, conceptually focused art can lead to increased dwell times and enhanced brand loyalty.

### 5.3. Recommendations

To maximize the efficacy of installation art in retail environments, the following recommendations are offered:

- 1) Collaboration between graphic designers and installation artists should be initiated at the earliest stages of project development to ensure a seamless integration of visual and spatial elements.
- 2) Designers must prioritize cultural relevance and sensitivity to avoid visual elements that might be perceived as inappropriate by specific ethnic groups in Malaysia's multicultural society.
- 3) Mall management should consider the temporal and site-specific nature of installations to ensure they remain fresh, engaging, and relevant to the surrounding environment and seasonal themes.
- 4) Future installations should leverage multisensory interfaces, such as sound or tactile elements, to further deepen the level of consumer engagement and emotional resonance.

### 5.4. Limitations and Future Research

Despite the insights gained, this study is not without limitations. The research focused primarily on consumers in Kuala Lumpur, which may not represent the perceptions of visitors in other regions of Malaysia. Additionally, the cross-sectional nature of the data provides a snapshot in time rather than a longitudinal view of how engagement evolves. Future research could investigate the role of digital technologies, such as interactive screens or augmented reality, in further mediating the viewer experience. Longitudinal studies could also explore how repeat exposure to installation art influences long-term consumer loyalty and mall brand perception.

## References

1. B. M. Mohsen, and M. A. Ghazwan, "Modernism in graphic design," *Journal of Namibian Studies*, vol. 34, 2023.
2. N. A. Z. Z. Abidin, and A. A. Aziz, "Window display compositions: its influences on youths in Malaysia," *Procedia-Social and Behavioral Sciences*, vol. 38, pp. 355-361, 2012. doi: 10.1016/j.sbspro.2012.03.357
3. T. K. Abu-Snoubar, I. Aldowkat, Y. Al-Shboul, M. A. Atiyat, and H. Al-Hyari, "The attitudes of Jordanian English language and literature undergraduate students toward open-book exams," In *Frontiers in Education*, December, 2022, p. 1050587. doi: 10.3389/feduc.2022.1050587
4. S. E. Adewoye, and A. Du Plessis, "Early adolescent bystanders' experiences of school bullying in a South African school," *Journal of Education (University of KwaZulu-Natal)*, no. 85, pp. 111-127, 2021.
5. K. Adhikari, and R. K. Panda, "The role of consumer-brand engagement towards driving brand loyalty: Mediating effect of relationship quality," *Journal of Modelling in Management*, vol. 14, no. 4, pp. 987-1005, 2019.
6. H. Agoushi, "A contemporary temple: designing a centre to promote mindfulness," 2023.
7. R. Ganoti, and I. Laskari, "The importance of Environmental Graphic Design in urban spaces," In *E3S Web of Conferences*, 2023, p. 12013. doi: 10.1051/e3sconf/202343612013
8. Z. U. Ahmed, M. Ghingold, and Z. Dahari, "Malaysian shopping mall behavior: an exploratory study," *Asia Pacific Journal of Marketing and Logistics*, vol. 19, no. 4, pp. 331-348, 2007. doi: 10.1108/13555850710827841
9. S. Akhtar, J. M. Martins, P. N. Mata, H. Tian, S. Naz, M. Damaso, and R. S. Santos, "Assessing the relationship between market orientation and green product innovation: the intervening role of green self-efficacy and moderating role of resource bricolage," *Sustainability*, vol. 13, no. 20, p. 11494, 2021.
10. B. P. Alant, and O. O. Bakare, "A case study of the relationship between smallholder farmers' ICT literacy levels and demographic data wrt their use and adoption of ICT for weather forecasting," *Helijon*, vol. 7, no. 3, 2021.
11. S. Al-Haddad, A. A. A. Sharabati, M. Al-Khasawneh, R. Maraqa, and R. Hashem, "The influence of corporate social responsibility on consumer purchase intention: the mediating role of consumer engagement via social media," *Sustainability*, vol. 14, no. 11, p. 6771, 2022.
12. S. Ali, M. Mishra, and H. M. U. Javed, "The impact of mall personality and shopping value on shoppers' well-being: moderating role of compulsive shopping," *International Journal of Retail & Distribution Management*, vol. 49, no. 8, pp. 1178-1197, 2021. doi: 10.1108/ijrdrm-07-2020-0272
13. Y. A. Alomi, and I. H. A. A. Rayah, "Reliability and Validity of Biostatistical Analysis used for Pharmacy Research Questionnaire in Saudi Arabia," *PTB Reports*, vol. 6, no. 3, 2020.
14. Y. A. Alomi, and A. Sadeq, "Reliability and Validity of Pharmacy Research Knowledge Questionnaire in Saudi Arabia," *PTB Reports*, vol. 6, no. 2, 2020.
15. I. Al-Sulaiti, "Mega shopping malls technology-enabled facilities, destination image, tourists' behavior and revisit intentions: Implications of the SOR theory," *Frontiers in Environmental Science*, vol. 10, p. 965642, 2022. doi: 10.3389/fenvs.2022.965642
16. A. Althubaiti, "Sample size determination: A practical guide for health researchers," *Journal of general and family medicine*, vol. 24, no. 2, pp. 72-78, 2023. doi: 10.1002/jgf2.600
17. J. Ainsworth, and J. Foster, "Comfort in brick and mortar shopping experiences: Examining antecedents and consequences of comfortable retail experiences," *Journal of Retailing and Consumer Services*, vol. 35, pp. 27-35, 2017. doi: 10.1016/j.jretconser.2016.11.005
18. E. Appiah-Twumasi, C. Agyemang, Y. Ameyaw, and I. K. Anderson, "Development and validation of questionnaire for physics learning self-efficacy among Ghanaian senior high schools," *East African Journal of Education and Social Sciences*, vol. 3, no. 1, pp. 8-18, 2022.
19. J. L. Arthur, E. Owusu, K. Amofah, S. D. Arthur, K. Nsiah-Gyabaah, and K. Kumah, "Environmental impacts of petroleum emissions: an exploration of TOR's exposures and experiences," 2023. doi: 10.21203/rs.3.rs-2806055/v1
20. A. Ashour, and Z. Hassan, "Nursing involvement and safety participation among secondary health care nurses in Jordan: the mediating effect of work environment," *International Review of Management and Marketing*, vol. 9, no. 5, p. 104, 2019.
21. S. N. Atasoy, "The role of graphic design in the COVID-19 global outbreak," *New Trends and Issues Proceedings on Humanities and Social Sciences*, vol. 8, no. 1, pp. 52-69, 2021. doi: 10.18844/prosoc.v7i4.5791

22. P. Atkinson, and F. Parsayi, "Video games and aesthetic contemplation," *Games and culture*, vol. 16, no. 5, pp. 519-537, 2021. doi: 10.1177/1555412020914726
23. Z. Wang, "Aesthetic evaluation of multidimensional graphic design based on voice perception model and internet of things," *International Journal of System Assurance Engineering and Management*, vol. 13, no. 3, pp. 1485-1496, 2022. doi: 10.1007/s13198-021-01492-2
24. H. Avram, "The Convergence Effect: Real and Virtual Encounters in Augmented Reality Art," *M/C Journal*, vol. 16, no. 6, 2013. doi: 10.5204/mcj.735
25. B. J. Babin, D. M. Hardesty, and T. A. Suter, "Color and shopping intentions: The intervening effect of price fairness and perceived affect," *Journal of business research*, vol. 56, no. 7, pp. 541-551, 2003.
26. G. Bachfischer, T. Robertson, and A. Zmijewska, "Understanding influences of the typographic quality of text," *Journal of Internet Commerce*, vol. 6, no. 2, pp. 97-122, 2008. doi: 10.1300/j179v06n02\_07
27. A Bureaud, "native young graphic designers; and connections between these different circles," *10 To. Social Media Archeology and Poetics*, vol. 139, 2025.

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