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INTERGRATING GRAPHIC ART FOR A SUSTAINABLE BUILT ENVIRONMENT IN ABEOKUTA: THE ROLE OF INTERDISCIPLINARY COLLABORATION

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Abstract

Urban areas in Nigeria, such as Abeokuta North and South, continue to grapple with environmental, aesthetic, and infrastructural deficiencies stemming from uncoordinated development and the absence of inclusive planning frameworks. A critical gap lies in the neglect of visual and cultural elements that embody local identity, resulting in urban environments that are neither sustainable nor engaging. This study investigates how interdisciplinary collaboration can contribute to a more sustainable and culturally resonant built environment in Abeokuta through the strategic application of Environmental Graphic Art (EGA). Emphasizing key public spaces—including markets, transport terminals, schools, and tourist sites—the research examines how EGA can transform these locations into visually dynamic and contextually meaningful environments. Adopting qualitative methodologies such as field observation, stakeholder interviews, and visual analysis, the study draws on both primary and secondary sources. Findings revealed that integrating EGA will significantly enhance the visual quality, usability, and cultural relevance of urban spaces while fostering environmental consciousness and community identity. The paper recommends the institutionalization of interdisciplinary approaches in urban planning, the integration of EGA in academic curricula, and the promotion of public art initiatives as sustainable strategies for urban regeneration in Abeokuta and similar Nigerian cities.

Keywords: *Abeokuta, Built Environment, Graphics, Interdisciplinary Collaboration, Urban Planning*

I.0 Introduction

Abeokuta, the capital of Ogun State, is a rapidly urbanizing city that is steeped in rich Yoruba cultural heritage. Despite its historical and social significance, the city faces growing challenges in urban planning, environmental sustainability, and aesthetic coherence. Urbanization in Abeokuta, as in many Nigerian cities, often unfolds without a clear integration of cultural identity, design innovation, or interdisciplinary collaboration. Environmental Graphic Art (EGA), which merges architecture, art, and communication design, presents a valuable but underutilized tool in re-imagining public spaces and fostering sustainable urban development. Abeokuta's urban environment is increasingly marred by visual pollution, disjointed infrastructure, and culturally disconnected design. The neglect of visual and cultural narratives in public spaces diminishes community pride and fails to reflect

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the city's identity. There is limited integration of graphics and environmental design in the planning and implementation of public infrastructure, contributing to urban decay and socio-cultural disconnection, hence the gap filled by this research. Therefore, the goal of this study is to investigate how environmental graphic art, through interdisciplinary collaboration, can be harnessed to create a sustainable and culturally vibrant built environment in Abeokuta. This study highlights the transformative role of visual art in urban development. It demonstrates how collaboration between urban planners, artists, and architects can lead to culturally expressive and environmentally sustainable spaces. The outcomes can inform urban policy, educational curricula, and design practices, not only in Abeokuta but also in other cities facing similar challenges.

2.0 Literature Review

Literatures abound for both graphics and urban development topics, but few are available for the combined topic of graphics and urban planning. For the purpose of this research the review of literatures are categorized into subtopics below.

Urban Challenges in Nigerian Cities

Urban areas in Nigeria are characterized by infrastructural decay, poor planning, and an absence of inclusive and culturally grounded development strategies. Adebayo (2019) emphasizes that cities such as Abeokuta face chronic challenges related to uncoordinated urban development, which hampers environmental sustainability and socio-economic growth. Amole (2017) further critiques the visual culture of Nigerian cities, identifying the neglect of aesthetics and identity-based design in public spaces as a major flaw in the current urban planning framework. These challenges underscore the urgent need for integrated and interdisciplinary design interventions that reflect local identity and enhance livability.

The Role of Environmental Graphic Art (EGA) in Urban Spaces

Environmental Graphic Art (EGA) is increasingly recognized as a strategic tool for transforming public environments into culturally meaningful and functionally effective spaces. Bauer and Mateus (2020) describe EGA as a catalyst for placemaking, capable of revitalizing urban areas through visually coherent and locally inspired interventions. Chinweizu and Okonkwo (2021) argue for a design approach that unites art, architecture, and urban planning to

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reimagine Nigerian cities. Their work suggests that EGA can contribute to both the aesthetic enrichment and functional redefinition of public spaces, making them more inclusive and representative of local heritage.

Visual Communication and Public Engagement

The theoretical foundation of EGA lies in visual communication, which shapes how individuals perceive, navigate, and interact with their environments. Beck and Perkins (2016) and Frascara (2004) highlight the communicative power of design in shaping public behavior and facilitating understanding in shared spaces. Visual tools such as signage, murals, and informational graphics are not only aesthetic enhancements but also vital for usability and public engagement. Gibson (2015) and Calori and Vanden-Eynden (2015) emphasize that effective wayfinding and signage systems enhance orientation, accessibility, and the overall urban experience, making cities more user-friendly and legible.

Public Art, Cultural Identity, and Environmental Sustainability

Public art, a key component of EGA, plays a significant role in cultural preservation and environmental consciousness. Elinwa and Abdulkareem (2022) document the positive impact of public art projects in Nigerian cities, particularly in terms of beautification and environmental education. Similarly, Nwagbara (2020) frames creative placemaking as a powerful tool for urban regeneration, noting its ability to embed cultural narratives in physical spaces and revitalize community spirit. This aligns with Ojewale (2023), who argues that public graphics can serve as effective media for environmental communication and civic awareness.

Human Factors and Material Considerations

Successful implementation of EGA requires attention to both human factors and material selection. Sanders and McCormick (1993) underscore the importance of ergonomics, legibility, and user-centered design in creating effective graphic systems. Yin, Jiang, and Wang (2012) discuss the importance of durable and climate-suitable materials for signage in urban environments, a consideration especially relevant in the Nigerian context. These insights are essential for ensuring that EGA installations are not only visually appealing but also practical and sustainable over time.

EGA in Marketing and Urban Identity Formation

Graphic design also functions as a tool for branding and identity formation in urban environments. Kotler

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and Keller (2016) and Kaur and Kaur (2020) highlight the role of visual media in shaping perceptions and influencing public behavior. Phillips and McQuarrie (2004) introduce typologies of visual rhetoric that can be applied to public art and environmental graphics to foster emotional connections with space. In urban Nigeria, this potential remains largely untapped, offering a promising area for future development.

This structured literature review supports the study's central argument that interdisciplinary collaboration, through the integration of Environmental Graphic Art, can address aesthetic, functional, and cultural gaps in the urban landscape of Abeokuta and similar Nigerian cities.

3.0 Methodology

The study adopts a qualitative research approach using case studies, field observations, semi-structured interviews, and visual analysis. Key participants include urban planners, graphic artists, cultural custodians, residents, and architects. Field data were elicited principally, by direct visual observations at selected zones of Abeokuta (especially, Kuto Market, Panseke, Olumo Rock vicinities). The current aesthetic and functional state of public spaces in these areas were documented for analysis. In-depth discussions were also conducted with 15 stakeholders to understand perceptions of EGA and potential for collaboration.

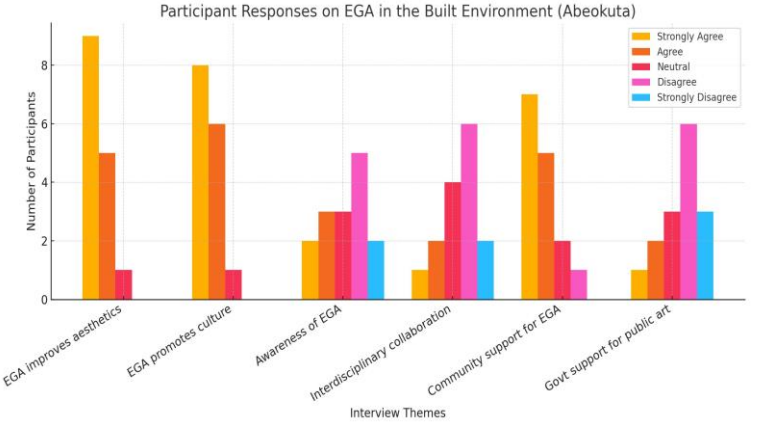

Plate 1: Bar Chat showing Response to interview on the topic

Visual Analysis: Photographs and design artifacts were analyzed to assess the visual communication quality of existing structures and spaces.

Enhancing the Built Environment through Graphics

Environmental Graphic Art enhances the built environment in the following ways:

Wayfinding and Navigation: EGA introduces legibility in public spaces through signage, maps, and symbols that guide movement efficiently.

Place-Making and Identity: Graphic elements reflecting local culture (e.g., Adire patterns, Egba historical motifs) help in creating a sense of place and cultural continuity.

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Aesthetic Improvement: Murals, typographic installations, and color-coded zones visually uplift dull and neglected spaces.

Public Engagement: Interactive and participatory art fosters community involvement and ownership of space.

Environmental Messaging: EGA can communicate sustainability practices through infographics and thematic installations promoting cleanliness, recycling, and green consciousness.

Figure 1: Metal signage reflecting

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Figure 2: Street Identifier

Photograph courtesy: The Authors, 2025

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Figure 3: Mural on three pillar of Adire.

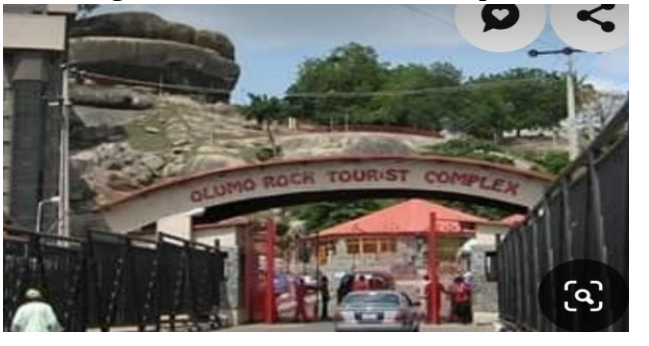

Fig 4: Gate Signnage on identifying Shopping Mall, Abeokuta. Olumo Rock, Abeokuta

Photograph courtesy: The Authors, 2025

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Figure 5: Directional or wayfinding business signboard. Plastic and Metal

Photographs Courtesy: Authors, 2025

4.0 Results and Discussion

Findings from fieldwork indicate that areas incorporating visual art—albeit minimally—such as Olumo Rock and a few educational institutions and commercial areas like Oke-Ilewo, generate higher public engagement and visitor satisfaction. Stakeholders' interviews revealed that both planners and residents see value in EGA but noted the challenges arising from insufficient of funding, absence of policy statements and inadequate public education on its benefits. Thus, a coordinated interdisciplinary approach, involving visual artists at the planning stage, can drastically improve urban aesthetics and cultural presence. EGA will not only improve the visual coherence of public spaces but also serves as an educational and economic tool, supporting local artists and creative entrepreneurs.

5.0 Conclusion and Recommendations

Abeokuta urban development stands to benefit significantly from a structured integration of environmental graphic art through interdisciplinary collaboration. To achieve this, it is recommended, among others, that a city-wide public art policies that promote local cultural content be established, that EGA be integrated into architectural and urban design education, and that a cross-sector partnerships between artists, planners, and municipal authorities be encouraged. Besides, there would be need to promote awareness campaigns on the value of culturally reflective design in public spaces and to allocate public funds for community-based visual art initiatives.

References

Adebayo, A. A. (2019). Urban planning and development in Nigeria: Challenges and prospects. Journal of Sustainable Development in Africa, 21(4), 54–65.

Amole, D. (2017). Visual culture and the Nigerian urban landscape: A study of Ibadan city. Journal of Environmental Design and Management, 9(1), 35–47.

Bauer, C., & Mateus, A. (2020). Environmental graphic design as a tool for place-making in urban spaces. Design Studies, 41(3), 122–

Ilaro Journal of Environmental Research & Development (2025) 7 (1), 88– 94
ISSN: 2736-0814

135. https://doi.org/10.1016/j.destud.2020.01.006

Beck, M., & Perkins, H. C. (2016). Visual communication: Theory and practice. Routledge.

Calori, C., & Vanden-Eynden, D. (2015). Signage and way-finding design: A complete guide to creating environmental graphic design systems. Wiley.

Chinweizu, C., & Okonkwo, E. (2021). Art, architecture, and urban aesthetics: Reimagining Nigerian cities through interdisciplinary design. International Journal of African Arts and Culture, 12(2), 101–119.

Elinwa, U. K., & Abdulkareem, S. S. (2022). Public art and environmental sustainability in Nigerian cities. Journal of Urban and Regional Planning, 15(1), 77–93.

Frascara, J. (2004). Communication design: Principles, methods, and practice. Allworth Press.

Gibson, D. (2015). The way-finding handbook: Information design for public places. Princeton Architectural Press.

Kaur, R., & Kaur, A. (2020). Digital signage: A tool for contemporary marketing. International Journal of Management Studies, 7(4), 112–121.

Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). Pearson.

Lupton, E., & Phillips, J. C. (2015). Graphic design: The new basics (2nd ed.). Princeton Architectural Press.

Moughtin, C., Shirley, P., & Taner, O. (2003). Urban design: Ornament and decoration. Architectural Press.

Nwagbara, C. (2020). Culture, art and urban regeneration in African cities: A case for creative placemaking in Nigeria. Urban Studies and Planning Review, 8(2), 45–58.

Ojewale, O. S. (2023). Public space design in Nigerian cities: Enhancing environmental communication through graphics. Built Environment Journal of West Africa, 17(1), 93– 108.

Phillips, B. J., & McQuarrie, E. F. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. Marketing Theory, 4(1–2), 113–136.

Sanders, M. S., & McCormick, E. J. (1993). Human factors in engineering and design (7th ed.). McGraw-Hill.

Yin, Y., Jiang, Y., & Wang, Z. (2012). Comparative study on the materials used in road traffic signboards. Journal of Highway and Transportation Research and Development, 6(1), 25–31.