

## CEMENT AS SCULPTURAL MEDIUM IN CONTEMPORARY ART PRACTICE: MATERIALITY, TECHNIQUE, AND CONSERVATION

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### **Abstract**

Cement, though historically associated with construction and industrial infrastructure, has become an increasingly important medium in contemporary sculpture. This paper critically examines cement as a sculptural material across three intersecting dimensions: materiality, technique, and conservation. First, it explores the physical and cultural materiality of cement, analyzing how its compositional properties such as plasticity, strength, and porosity, afford new artistic possibilities while also influencing public perceptions of the medium. Cement's industrial associations, particularly in African contexts, resonate with themes of modernity, urbanization, and socio-economic accessibility, making it both a pragmatic and symbolic choice for artists. Second, the study investigates technical approaches employed by sculptors, including direct modeling, casting, reinforcement, and surface finishing, highlighting innovations in Nigerian practices where resource constraints necessitate experimentation. Finally, the paper addresses conservation challenges unique to cement-based works, including moisture ingress, cracking, carbonation, and reinforcement corrosion. Drawing on global conservation literature and Nigerian case studies, it underscores the vulnerability of cement sculptures to environmental deterioration and the need for interdisciplinary, locally grounded preservation frameworks. By situating cement within broader discourses of material culture and contemporary art practice, the study argues for its recognition as both a legitimate medium of artistic expression and a significant subject for conservation science. The findings contribute to a rethinking of sculptural material hierarchies, advocate for capacity-building in conservation, and call for greater institutional commitment to preserving cement-based heritage in Nigeria and beyond.

**Keywords:** Cement sculpture; materiality; technique; conservation; Nigeria

### **Introduction**

The evolution of modern sculpture in Nigeria is deeply tied to academic institutions and their role in mediating material experimentation, artistic identity, and heritage discourse. From the post-independence period onward, Nigerian art schools have acted as crucibles for the redefinition of modernism in local terms, negotiating between global modernist influences and indigenous creative traditions (Okeke-Agulu, 2015). Within this broader context, academic sculpture gardens have emerged as particularly significant spaces.

## Situating Cement Sculpture within Nigerian Academic Sculpture Gardens

In Nigeria, academic sculpture gardens serve as critical incubators for material innovation, experimental practice, and the development of public art traditions. Originating in the mid- to late-twentieth century as part of the formal art curriculum in tertiary institutions such as the University of Benin, Benin City, Ahmadu Bello University, Zaria and Obafemi Awolowo University Ile- Ife (to mention but a few), these sculpture gardens provide outdoor exhibition environments where artists, students, and communities interact directly with sculptural works (plate:1-4).



Plate1:sculpture garden of Ahmedu Bello University Zaria

<https://www.google.com/search?q=ABU+zaria+sculpture+garden&oq=ABU+zaria+sculpture+garden>. Retrieved 14<sup>th</sup> october 2005.



Plate 2: sculpture garden of Obafemi Awolowo university, Ile- Ife.

<https://www.nairaland.com/1548742/obafemi-awolowo-university-ile-ife-pictures/3>.

Retrieved,14th October 2025.



Plate 3: Sculpture Garden of Yaba College Technology Lagos. <http://hive.blog/hive-194913/@talktofaith/some-beautiful-art-works-from-yaba-college-of-technology-lagos-nigeria>.

Retrieved,14<sup>th</sup> october 2025.



Plate 4: The University of Benin Sculpture Garden- courtesy; Odinaka Colins, August 2025.

Unlike museum contexts, academic sculpture gardens are simultaneously instructional and experimental spaces: they allow artists to test new materials, engage with climatic conditions, and explore site-specific installation practices (Okeke-Agulu, 2015; Enwezor, 2019). Cement has become particularly dominant in these contexts due to its affordability, availability, and adaptability to large-scale sculptural forms (plate:5). Within the sculpture gardens of institutions such as the University of Nigeria, Nsukka, University of Benin, and Yaba College of Technology, cement sculptures form the backbone of student training and public art projects. These works are often produced during final-year studio projects, workshops, and art festivals, making them visible symbols of artistic experimentation and institutional identity (Adelowo, 2021), (plate:8-11).



Plate 5: Adeola Balogun, Iya'jamido statue/fountain. Cement- Mortar. 108"x56"x45", 1996, Osi-quarter's roundabout, Ota, Ogun State.

These gardens function as living laboratories where cement's material behavior under tropical environmental conditions can be observed over time as an invaluable, though underutilized, resource for conservation research and sculptural innovation (Omokaro, 2023),( plate:10-13). The role of cement in these academic contexts also carries symbolic weight. Cement is not merely an industrial substitute but a medium that embodies narratives of modernity, accessibility, and collective identity. Its use in sculpture gardens speaks to postcolonial negotiations between imported modernist aesthetics and indigenous creative practices (Okeke-Agulu, 2015).

However, despite their cultural and artistic significance, these cement sculptures face persistent conservation challenges, including cracking, delamination, corrosion of reinforcement, and biological growth (plate:6-9). This vulnerability is compounded by the lack of institutional maintenance frameworks, making many cement sculptures appear "ephemeral" rather than as part of Nigeria's modern art heritage (Oluwatoyin, 2022). Addressing these gaps requires reframing

sculpture gardens as heritage sites and integrating conservation strategies into sculpture training and policy



Plate 6:

Cement sculptures with cracks and corrosion. University of Benin sculpture garden. Courtesy: Precious Ewhedo, September 2025.



Plate 7:



Plate 8: examples of works with biological growth.

<https://www.google.com/search?q=ABU+zaria+sculpture+garden&oq=ABU+zaria+sculpture+garden>. Retrieved 14<sup>th</sup> october 2005.



Plate 9: examples of works with biological growth. Uniben sculpture studio.

Courtesy: precious Ewhedo, August 2025.



Plate10: cement

<https://www.istockphoto.com/search/2/image-film?phrase=cement+bag>,  
retrieved, August 2025.



Plate 11: the experimental proceedings.



Plate 12:



Pate 13:

Plate 8; 9;10. Final Year Students in their Experimental Proceedings at The University Of Benin.  
Courtesy: Precious Ewhedo, September 2025.

## Discussion

This study reveals that Nigerian academic sculpture gardens are not merely passive exhibition spaces but active nodes of cultural production, material experimentation, and heritage formation. They provide an environment where the artistic and the environmental intersect, a dynamic platform where cement sculpture has taken root as a medium of modernity and identity. As seen in the case of Nsukka, Benin, and Yaba, cement works are often tied to academic milestones such as final-year projects and institutional art festivals, underscoring their role in shaping Nigeria's artistic canon (Adelowo, 2021; Omokaro, 2023), (plate 14-17).



Plate14: Ongoing final year project in cement; Uniben 2005. Courtesy: Precious Ewhedo. September 2025.



Plate15: Ongoing final year project in cement; Uniben. Courtesy: Precious Ewhedo. September 2025



Plate 16: Ongoing final year project in cement; Uniben 2005. Courtesy: Precious Ewhedo. September 2025.



Plate 17: Ongoing final year project in cement; Uniben. Courtesy: Precious Ewhedo. September 2025.

Yet, these same environments expose the medium to accelerated deterioration. Unlike bronze or stone monuments, which often receive formal preservation attention, cement sculptures remain largely uncatalogued and unprotected. Their exposure to tropical weather, coupled with a lack of preventive conservation measures, threatens their longevity and undermines their artistic value (Oluwatoyin, 2022). Recognizing academic sculpture gardens as strategic conservation reference points could shift this dynamic. Because these gardens contain clusters of works produced under similar conditions, they offer fertile ground for longitudinal conservation studies, integrating studio-based art practice with material science and heritage preservation (Folarin, 2021).

### **Implications for Practice and Policy in Nigeria:**

**Instructional Integration:** Embedding conservation education into sculpture curricula would ensure that students not only produce works in cement but also understand its long-term behavior and preservation needs. **Institutional Conservation Frameworks:** Universities should adopt formal policies for regular documentation and preventive maintenance of garden sculptures, supported by conservation professionals and heritage agencies. **Collaborative Research Platforms:** Sculpture gardens can serve as interdisciplinary platforms linking artists, engineers, conservators, and historians to develop climate-appropriate conservation techniques (Folarin, 2021).

**Heritage Recognition:** Classifying selected cement sculptures as part of Nigeria's modern art heritage could unlock funding and policy support, placing them alongside traditionally valued media like bronze and stone. **Public Engagement:** As accessible spaces, sculpture gardens can foster community involvement in heritage appreciation, extending the cultural relevance of cement sculpture beyond the academic environment (Enwezor, 2019). By situating cement sculpture within this framework, the article underscores how material experimentation, cultural meaning, and heritage preservation intersect in Nigerian sculptural practice. Academic sculpture gardens thus offer a potent, underutilized framework for ensuring the survival and recognition of cement as both artistic medium and cultural heritage.

### **Subsistence and Symbolism**

Tangibility in art has long been understood as encompassing both physical and symbolic dimensions (Ingold, 2013). The studio experiments confirmed that cement possesses practical properties like strength, malleability, and affordability that make it attractive to sculptors. Yet, its porosity, susceptibility to cracking, and vulnerability to corrosion complicate its status as a durable

medium. From a theoretical standpoint, the choice of cement reflects what Miller (2005) terms the “social life of materials,” where the medium itself becomes a bearer of cultural meaning. Sculptors’ reliance on cement, despite its shortcomings, indicates a negotiation between affordability, accessibility, and cultural expression. These positions cement not as a “lesser” substitute for stone or bronze, but as a distinctly modern material with symbolic weight.

### **Technique, Knowledge, and Studio Practice**

Recent findings reveal that many of the technical challenges such as, cracking, poor curing, and corrosion, stem not from cement’s inherent unsuitability but from gaps in knowledge and technique. As Bekwele (2022) notes, the undervaluation of cement sculptures is exacerbated by inconsistent training and lack of institutional support. The studio experiments demonstrated that careful mix design, reinforcement treatment, and protective finishes can significantly improve outcomes, though these interventions require technical knowledge often absent in art schools or studios.

This aligns with Gray and Malins’ (2004) observation that practice-based research must bridge art and science, expanding the sculptor’s role into that of a material researcher. In this sense, studio-based research not only produces artworks but also generates technical knowledge with conservation implications (Sullivan, 2010).

### **Conservation Ethics and Aesthetic Integrity**

The conservation experiments and field surveys illustrate the central dilemma of aesthetic authenticity versus preservation. Protective coatings and polymer- finishes improved durability but altered the visual texture of cement surfaces. This reflects broader debates in conservation ethics, where interventions risk compromising the artist’s intended aesthetic (Lourenço & Brito, 2020). Nigerian case studies reveal systemic neglect, suggesting that conservation challenges are as much institutional as they are material. This raises ethical questions about the distribution of resources and recognition: why do cement sculptures, (despite their cultural relevance) not afforded the same conservation priority as bronze or stone monuments?

### **Heritage and Cultural Value**

The undervaluation of cement sculpture is not solely a technical matter but a cultural one. Heritage studies emphasize that conservation decisions reflect societal values about what is deemed worthy

of preservation (Smith, 2006). Cement's association with everyday infrastructure such as roads, housing, and bridges, may contribute to its marginalization in fine art discourse. Yet, its ubiquity embeds it in the material memory of Nigerian society. Neglecting its preservation risks erasing an important dimension of modern Nigerian identity.

### **Toward Interdisciplinary Solutions**

Recent findings further suggest that advancing cement sculpture requires an interdisciplinary approach that unites studio-based practice, materials science, and heritage policy. Sculptors must be trained not only in artistic design but also in the technicalities of cement chemistry and reinforcement engineering. Conservators must adapt architectural and engineering methods (such as electrochemical treatment for corrosion or vapor-permeable coatings) to the fine art context (Lourenço & Brito, 2020). Policymakers must recognize cement monuments as integral to cultural heritage, ensuring funding and maintenance structures.

This triangulation reflects what Candy and Edmonds (2018) describe as the future of practice-based research: collaboration across fields where creative practice, technical science, and cultural studies intersect. For Nigeria in particular, adopting such an interdisciplinary framework would elevate cement sculptures from undervalued objects to recognized heritage, strengthening their role in urban and cultural identity.

### **Conclusion**

Cement has emerged as a central material in contemporary Nigerian sculptural practice, functioning at the intersection of artistic innovation, material pragmatism, and cultural symbolism. Far from being a secondary or substitute medium, cement embodies the realities of postcolonial modernity, its accessibility, affordability, and structural versatility allow artists to create large-scale, site-specific works that respond directly to Nigeria's socio-environmental context. Within academic sculpture gardens in institutions such as the University of Benin, Nsukka, and Yaba College of Technology, cement has become both a pedagogical tool and a vehicle for artistic expression, shaping the visual and cultural landscape of modern Nigerian art.

However, the study underscores that material strength alone does not guarantee cultural longevity. The environmental vulnerabilities of cement like moisture ingress, cracking, corrosion, and biological growth, combine with inadequate institutional frameworks to place many of these

sculptures at risk. Their neglect mirrors broader cultural hierarchies that privilege bronze and stone while overlooking cement's heritage value. This gap reveals the urgent need to reposition cement sculpture within national heritage discourse, integrating preventive conservation strategies into both art education and institutional policy.

Moving forward, preserving cement sculpture in Nigeria requires a multi-level intervention. First, art schools must embed conservation knowledge into their curricula, ensuring students understand both the creative and technical dimensions of the medium. Second, universities and cultural institutions should establish formal documentation, maintenance, and preservation frameworks. Third, collaborations between sculptors, conservators, and materials scientists should be fostered to adapt engineering-based protective methods to fine art contexts. Finally, public heritage agencies must recognize cement sculptures as legitimate cultural assets, ensuring they receive commensurate funding and policy attention.

Reframing cement sculpture through this lens elevates it beyond its utilitarian associations. It affirms its position within Nigeria's evolving artistic heritage, highlighting the medium's role in articulating postcolonial modernity, collective identity, and environmental interaction. By merging studio-based research, technical conservation science, and heritage policy, Nigeria can ensure that these works endure not merely as academic experiments but as lasting cultural landmarks. This recognition would contribute significantly to reconfiguring material hierarchies in art history and foster sustainable sculptural practices for future generations.

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