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DISCARDED POLYTHENE BAGS AS A MEDIUM FOR PORTRAIT PAINTING: CHALLENGING PERCEPTIONS OF BEAUTY, TECHNIQUE AND SUSTAINABILITY

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Abstract

This study explores the creative and environmental potential of discarded polythene bags as a medium for portrait painting. Set against the backdrop of rising plastic pollution in Nigeria and globally, the research examines the objective of investigating the technical possibilities of discarded polythene bags in portrait paintings, aesthetic qualities and environmental significance. Employing a qualitative, studio practice-based methodology, the research produced ten paintings in the representational stage; of these, three representational portraits of prominent Nigerian personalities are presented and discussed in this paper. Discarded polythene bags of different colours, collected from dump sites in Lafia, Nasarawa State, were applied without conventional paint through colour-sorting, cutting, layering, and collage techniques. Findings show that, within the scope of the works produced, polythene waste can approximate the tonal range and textural depth associated with conventional portrait media, although questions of long-term durability, conservation, and archival stability were outside the scope of this study and remain to be tested. The resulting artworks function as both aesthetic objects and instruments of environmental advocacy, transforming "waste into art" and prompting a reconsideration of material value, sustainability, and consumerism. This research contributes to contemporary Nigerian art and eco-art discourse by establishing discarded polythene bags as a viable and culturally grounded medium for portraiture.

Keywords: Polythene bags, portraiture, environmental art, sustainability, waste-to-art, contemporary Nigerian art

Introduction

Portraiture has traditionally relied on conventional materials - oil, acrylic, charcoal and paper - to construct likeness, memory, and cultural meaning (Green, 2024). Contemporary artists worldwide, however, have increasingly turned to discarded materials to interrogate what counts as a legitimate artistic medium, using waste to question inherited assumptions about beauty, value, and permanence (Abidin et al., 2024). Discarded polythene bags, in particular, present both an urgent environmental problem and a largely untapped aesthetic resource (Tracey, 2024). With over five trillion plastic bags used each year globally, equating to roughly 160,000 every second, and the vast majority discarded after a single use, the environmental case for creative and sustainable responses is well established (Anwar, Palekhow, & Schmidt, 2020).

Artists internationally have demonstrated that polythene waste holds remarkable aesthetic potential. Mbongeni Buthelezi (South Africa) melts and manipulates discarded plastic directly onto canvas to build tonally rich, textured portraits (Donkor, Micah, & Akomea, 2021). Eduardo Srur (Brazil) compresses and layers plastic bag fragments, without adhesive, to recreate canonical artworks as a commentary on the durability of plastic waste (Srur, 2019). Vik Muniz (Brazil) collaborated with waste-pickers at a Rio de Janeiro landfill to construct large-scale portraits from salvaged debris, foregrounding the dignity of the people who handle the world's refuse (Tracey, 2024). Deniz Sağdıç (Turkey) cuts and layers discarded plastic bags, alongside other waste materials, into detailed human faces as part of her Ready-ReMade project (Sağdıç, 2022). In Nigeria, Chibuike Ifedilichukwu sanitises and weaves plastic strips into intricate representational portraits that foreground sustainability (Ifedilichukwu, 2022), while Patrick Cikuru Cirimwami has used melted plastic waste to create portraits of political figures as environmental and social critique (Cirimwami, 2023).

Read together, these practices reveal a shared technical vocabulary: colour-sorting, cutting, layering, melting, and compression, applied toward differing conceptual ends - Buthelezi and Cirimwami toward socio-political commentary, Srur toward art-historical citation, Muniz toward community empowerment, Sağdıç toward a broader critique of consumer waste, and Ifedilichukwu toward Nigerian cultural sustainability. What remains largely unexplored in this body of work, and the gap this study addresses, is the sustained use of discarded polythene specifically to portray prominent Nigerian public figures, situating the medium within a Nigerian context of waste generation, celebrity, and national identity.

This paper presents the outcome of a studio practice-based research project investigating the technical possibilities of discarded polythene bags in portrait paintings, their aesthetic qualities, and their environmental significance. The wider project produced ten paintings for the representational stage, of which three were selected as samples of prominent Nigerian personalities, using discarded polythene bags of different colours collected from dump sites in Lafia.

Materials and Methods

Research Design

The study adopted a qualitative, studio practice-based research (PBR) methodology, which Candy (2006) defines as an original investigation undertaken to generate new knowledge through the making of artworks and the outcomes of that making. PBR was chosen over a purely theoretical or survey-based design because the research questions - whether and how a waste material can be made to function as portraiture - are questions that can only be

answered by making the work: the properties of polythene (its translucency, elasticity, pre-existing colour, and resistance to blending) only become knowable through direct studio handling. Knowledge was generated iteratively: each painting session tested a technical decision (a cutting method, a layering sequence, a colour-matching strategy), and the outcome of that test, successful or not, informed the next. Artworks were evaluated against three working criteria: (i) fidelity of the finished portrait to the sitter's likeness, (ii) the degree to which the piece exploited, rather than concealed, the material identity of the polythene, and (iii) the conceptual clarity with which the piece connected the portrait subject to the study's environmental theme. Reflective notes were kept after each studio session and used to adjust subsequent artistic decisions, such as which sections of a portrait were suited to translucent versus opaque polythene, and this reflective log forms part of the researcher's supporting studio documentation. This approach is consistent with Nigerian art researchers such as Agaku (2014) and Suberu (2020), who have used practice-based research to generate new painting compositions from other source materials.

Materials

The primary medium used for this study is discarded polythene bags of assorted colours, collected from five dump sites within Lafia metropolis. Supports included artist canvas (92 cm × 61 cm), sketch pads, chipboard, and watercolour paper. Tools comprised sable and hog brushes of various sizes, palette and painting knives, artist easels, and a hot glue gun for adhesion. No conventional paint was applied; the colours of the polythene bags themselves served as the sole medium.

Studio Preparation of Materials

Collected polythene bags were first rinsed and air-dried to remove surface dirt before use. Bags were then sorted by colour and, within each colour group, by thickness and surface finish (matte, glossy, printed), since these properties determined how a fragment would catch light and blend with adjacent pieces once glued down. The criteria used to reject unsuitable material included excessive rigidity, tearing, or contamination. Before committing a colour combination to canvas, small offcuts were test-glued to a scrap support to check adhesion strength and the visual effect of overlapping layers; pieces that lifted, bubbled, or discoloured under the hot glue were withheld from the finished works. Selection for the final compositions therefore combined colour accuracy, stable adhesion, and the visual behaviour of each polythene type under layering.

Durability and Longevity

Durability was not empirically tested within the scope of this study. Based on informal handling of the finished works during the studio period, portraits assembled with securely adhered, well-sealed layers appeared stable over the short term, and general material knowledge suggests that polythene-based works are likely to be more vulnerable when exposed to direct sunlight, excessive heat, moisture, and rough handling than when kept under controlled conditions. However, no accelerated ageing, UV-exposure, or long-term storage tests were carried out, and claims of durability beyond this observation cannot be made. Establishing the archival stability and conservation behaviour of polythene as a portrait medium remains a task for future, dedicated testing, consistent with the limitation noted in the Conclusion.

Safety Precautions

Discarded polythene bags were cleaned, dried, and inspected before use. Protective gloves were worn during handling, and cutting tools were used with care. Work was carried out in a

well-ventilated area, burning or excessive heating of the polythene was avoided, and leftover materials were disposed of responsibly to protect health and the environment.

Data Collection

Primary data were gathered through direct observation of dump sites, photography of polythene bags with a digital camera, and illustrative sketches produced with a ballpoint pen and charcoal. Secondary data were sourced from art history books, academic journals, exhibition catalogues, and internet resources. Three prominent Nigerian personalities were selected as sample portrait subjects: Pastor E. A. Adeboye (General Overseer, Redeemed Christian Church of God), President Bola Ahmed Tinubu, and Nollywood actor Pete Edochie.

Results and Discussion

Objective: Challenging Conventional Perceptions of Beauty, Material Value, and Artistic Mediums

Ten paintings were produced in the representational stage of this study; three of these, depicting prominent Nigerian public figures, are presented below (Plates I–III) as representative examples addressing this objective: they demonstrate that waste materials can generate portraiture of aesthetic quality comparable to conventional painted work, while also carrying the conceptual weight of the source material.



Plate I. *The Man of God*, Discarded Polythene Bags on Canvas, 78 cm × 77 cm, 2025. Owolabi Daniel.

The Man of God (Plate I) depicts Pastor E. A. Adeboye in a vibrant collage of consumer packaging and polythene fragments. The crumpled yellow polythene background adds tactile dimensionality, while the layered fragments of black, brown, blue and white coloured polythene challenge the viewer to reconsider what constitutes a valid artistic material. Technically, the printed polythene proved harder to control than plain-coloured polythene: their pre-existing text and pattern had to be angled and partially concealed within the composition so that they read as texture rather than distracting typography, a limitation that

shaped where such pieces could be placed. Conceptually, the retained branding turns the portrait into a quiet commentary on consumer packaging and its relationship to a subject associated with spiritual authority, suggesting that even sacred image-making is not insulated from the material culture of waste.



Plate II. *Mr President*, Discarded Polythene Bags on Canvas, 72 cm × 94 cm, 2025. Owolabi Daniel.

Mr President (Plate II), a representational portrait of President Bola Ahmed Tinubu, employs a predominantly black-and-white palette punctuated by red and yellow, exploring themes of concealment, duality, and the masked realities of political power. Working largely in black and white polythene demanded finer tonal discrimination than the more colourful pieces, since subtle value shifts, rather than hue, had to carry the modelling of the face; this constraint pushed the layering technique toward greater precision. The juxtaposition of refined portraiture with discarded material invites reflection on the gap between public image and political substance, positioning the waste medium itself as a visual metaphor for what is concealed beneath a polished public persona.



Plate III. *The Iroko I*, Discarded Polythene Bags on Canvas, 90 cm × 65 cm, 2025. Owolabi Daniel.

The Iroko I (Plate III) portrays actor Pete Edochie through a layered tapestry of crumpled polythene and saturated colour patches in blue, orange, and yellow. The crumpling technique used here, distinct from the flatter layering of Plates I and II, introduced a controlled irregularity to the surface that catches light unevenly across the canvas, an effect that could not have been achieved with the smoother handling used in the other two works. The calm posture of the subject against this dynamic polythene backdrop conveys resilience and identity, themes central to Edochie's cultural stature in Nigeria, and positions the "Iroko" (a Nigerian hardwood associated with strength and permanence) as a deliberate counterpoint to the impermanence usually associated with plastic waste.

Findings

Collectively, these works confirm that discarded polythene bags challenge conventional perceptions of beauty and material value: what society discards as an ecological hazard becomes, through artistic intention, a medium capable of richness, depth, cultural commentary and sustainability. This aligns with the observations of Buthelezi (2015), who notes that polythene's translucency, texture, and pre-existing colour schemes can be harnessed to produce portraits of remarkable expressive power.

The principal techniques identified through this research include:

(i) Colour Selection and Tonal Matching: Discarded polythene bags were sorted by colour to replicate the tonal gradations of human skin, hair, and clothing. The pre-existing dyes of packaging materials (reds, yellows, blues, blacks, and whites) were exploited as a ready-made palette.

(ii) Cutting and Layering: Polythene pieces were cut to precise shapes and layered on hot-glued canvas surfaces, building up texture and depth in a manner analogous to oil glazing in classical portraiture. Across the three works discussed here, finer, smaller-cut fragments proved most effective for facial detailing, while larger sheets were reserved for background and clothing, where precision mattered less than coverage.

(iii) Collage Assemblage: Branded packaging fragments, wrapper labels, and printed text incorporated into the compositions added conceptual layers, situating the portraits within a critique of consumer culture.

A recurring technical problem across the representational works was achieving smooth tonal transitions at the boundaries between adjoining polythene fragments, where a visible edge could disrupt the illusion of continuous skin tone; this was mitigated, though not entirely eliminated, by overlapping fragment edges and selecting bags of graduated shade.

These findings corroborate the techniques observed in artists reviewed in the literature - Sağdıç's cutting and layering, Buthelezi's melting and manipulation, Srur's compression without adhesives, and Ifedilichukwu's sanitising and weaving - while introducing a culturally specific Nigerian application of the method, centred on the portraiture of nationally significant figures.

Comparison

Comparatively, the three works demonstrate that discarded polythene can function not merely as a substitute for conventional artistic materials but as an expressive medium in its own right. Although all three works relied on colour sorting, cutting, layering, and collage assemblage, the specific application of these techniques varied according to the visual demands of each portrait. The use of branded packaging and printed text also introduced a common conceptual dimension, linking the representation of nationally significant figures with issues of consumption and waste. At the same time, the recurring difficulty of achieving smooth tonal transitions revealed a technical limitation shared across the works. This was addressed through overlapping fragment edges and the selection of graduated shades, although complete elimination of visible boundaries remained difficult.

Conclusion

This study has demonstrated that, within the three representational works examined, discarded polythene bags constitute a viable and expressive medium for portraiture in contemporary Nigerian art, capable of the tonal range, textural depth, and conceptual weight associated with conventional materials when subjected to techniques of colour selection, cutting, layering, and stylisation. The resulting works additionally function as instruments of environmental advocacy, transforming what society discards as ecological hazard into objects of aesthetic contemplation and social commentary. Establishing polythene portraiture as consistently comparable to, rather than simply capable of approximating, conventional painting would require longitudinal conservation study beyond the scope of this practice-based project.

Recommendations

The findings contribute to the emerging discourse on eco-art in Nigeria and Africa, establishing a culturally specific tradition of polythene portraiture that engages with national identity while confronting global environmental challenges. Future research should extend this practice to explore additional artistic elements (rhythm, movement, spatial composition), engage broader communities in the polythene-as-art dialogue, and investigate the long-term preservation properties, including archival stability and UV resistance, of polythene-based artworks.

References

Abidin, M. Z., Sabri, N. S., Daud, W. S. A. W. M., & Wulandari, W. S. (2024). Waste materials as a sustainable medium in contemporary art: An analysis of Malaysian artists' creative practices. *Environment-Behaviour Proceedings Journal*, *9*(28), 91–97. https://doi.org/10.21834/ebpj.v9i28.5804

Agaku, S. A. (2014). *Adaptation of Kwagh-hir puppets to create kinetic paintings* [Unpublished master's thesis]. Ahmadu Bello University.

Anwar, T., Palekhow, D., & Schmidt, M. (2020). *Comparative study of environmental performance between low density polyethene (LDPE) grocery bags and unbleached paper grocery bags via life cycle assessment using open LCA* [Doctoral dissertation, Brandenburg University of Technology Cottbus-Senftenberg].

Arnason, H. H., & Mansfield, E. C. (2013). *History of modern art* (7th ed.). Pearson.

Buthelezi, M. (2015, September 22). *Meet the artist who paints with recycled plastic*. MaterialDistrict. https://materialdistrict.com/article/meet-the-artist-who-paints-with-recycled-plastic

Candy, L. (2006). *Practice-based research: A guide* (CCS Report 2006-V1.0). University of Technology Sydney. http://www.creativityandcognition.com/resources/PBR%20Guide-1.1-2006.pdf

Cirimwami, P. C. (2023, January 16). *Meet the artist who names and shames politicians with his recycled plastic portraits*. Euronews. https://www.euronews.com/green/2023/01/16

Donkor, E. K., Micah, V. K. B., & Akomea, D. (2021). Plastic waste and its artistic context. *Detritus*, *17*, 71–88. https://doi.org/10.31025/2611-4135/2021.15147

Green, S. L. (2024). *An introduction to the making of Western art: Materiality, preservation and change*. Taylor & Francis. https://doi.org/10.4324/9781003440789

Ifedilichukwu, C. (2022). *Chimamanda* [Polythene portrait].

Muniz, V. (2010). Portraits with purpose: Vik Muniz in Waste Land. *Time*. https://time.com/3775724/portraits-with-purpose-vik-muniz-in-waste-land/

Sağdıç, D. (2022). *Ready-ReMade series* [Exhibition]. "0" Zero Point exhibition, Istanbul Airport, Istanbul, Turkey.

Srur, E. (2019). *Natureza Plástica (Plastic Nature) series* [Exhibition]. Studio exhibition, São Paulo, Brazil.

Suberu, O. E. (2020). *Developing painting compositions from Ebira Tao masquerade images to non-figurative form* [Unpublished master's thesis]. Ahmadu Bello University.

Tracey, C. M. (2024). *How can public art practices respond to plastic waste in the urban environment?* [Unpublished manuscript].