



# Exploring the Art of Murals: An In-Depth Study of Equipment and Process

Siti Nurulfaidah Nazeri,<sup>1\*</sup>  Nikfarhana Zuhir<sup>1</sup> , Mumtaz Mokhtar,<sup>1</sup>  Lennora Putit<sup>2</sup> 

<sup>1</sup> College of Creative Arts, Universiti Teknologi MARA Shah Alam 40450 Selangor Malaysia

<sup>2</sup> Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Selangor Malaysia; Business & Consumer Health (Biz-Health) Research Interest Group, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

faidahnazeri@gmail.com

**Abstract.** This research explores essential equipment and processes for successful mural art, providing a comprehensive guide by a systematic review of existing literature and exploration of various mural equipment and processes employed to gather data. This study relies on existing knowledge in contemporary of mural art in Malaysia. The research provides critical insights into material selections and processes including client meetings, site visits, design development, materials and space preparations, the painting procedure, and the final stages of finishing touches and detailing. It is a valuable resource for artists looking to improve their mural art, offering guidance for creating durable, visually, and captivating murals.

**Keywords:** Equipment, Mural art process, Surface Preparation, Wall painting.

## 1 Introduction

Creating successful murals demands more than artistic vision; it requires a profound understanding of the foundational techniques and materials that underpin mural art. Mural creation is an intricate process influenced by surface preparation, composition, colour theory, and brushwork. These elements form the foundation of mural artistry, and their mastery is critical for artists aiming to create impactful and enduring works. This research seeks to address knowledge gap by thoroughly exploring the equipment and processes that contribute to the creation of mural art. Furthermore, as mural art continues to evolve and adapt to contemporary contexts and technologies, it is crucial for both emerging and experienced artists to be well-versed in the fundamental skills and materials that facilitate their creative vision. This study includes a project conducted by *SemangART Enterprise*. The project was conducted in 10 days starting on 28th September until 7th October 2023. The project involved applying mural production processes to the wall surface of the *Suka Sweet Dessert Cafe* in Melaka. *SemangART Enterprise* is a mural and painting service founded in 2018 and based in Klang, Selangor. The company has produced superior mural and art design projects around Malaysia. Their team has a higher education in fine arts and extensive

© The Author(s) 2024

R. Legino and Y. Ahmad (eds.), *Proceedings of the International Conference on Science Technology and Social Sciences – Social Science Track (ICONSTAS-SS 2023)*, Advances in Social Science, Education and Humanities Research 865,

[https://doi.org/10.2991/978-2-38476-293-4\\_14](https://doi.org/10.2991/978-2-38476-293-4_14)

experience in mural production. As they offer mural, painting, and art classes, they have kept investing in expanding their business to serve their customers better. Since the establishment of this company, numerous mural projects have been completed across Malaysia, showcasing their ability to paint on diverse surfaces, including walls, floors, roads, feeder pillars, glass, and stones.

## 2 Overview of Mural

The term "mural" is derived from the Latin word "murus," meaning "wall." From a modern viewpoint, a mural refers to a large painting designed on a wall (indoors or outdoors), ceiling, or flat surface [1]. According to reference [2], murals are a sociocultural phenomenon incorporating diverse fine arts into public spaces, serving as a universal means of urban communication and fostering dialogue and discussion. However, as stated by reference [3], murals are not just artistic creations but also means of expressing concepts on a building's exterior. The influence of past mural paintings extends to inspiring local artists, The term "mural" is derived from the Latin word "murus," meaning "wall." From a modern viewpoint, a mural refers to a large painting designed on a wall (indoors or outdoors), ceiling, or flat surface [1]. According to reference [2], murals are a sociocultural phenomenon incorporating diverse fine arts into public spaces, serving as a universal means of urban communication and fostering dialogue and discussion. However, as stated by reference [3], murals are not just artistic creations but also means of expressing concepts on a building's exterior. The influence of past mural paintings extends to inspiring local artists, fostering the evolution of their ideas, and providing a source of enduring aesthetic value rooted in the design sequence and context of the murals [4]. Overall, mural art serves as a powerful social education tool, a space decoration element, and a valuable contribution to enhancing the cultural and spatial environment globally. Mural production is renowned both domestically and globally. The market potential for mural creation is extensive and promising. Thus, mural painting is an important and evolving art form that utilises diverse materials and process to produce unique and artistic works.

### 2.1 Mural Equipment

Creating a mural involves a range of equipment to transform plain walls into vibrant works of art. The equipment also necessary for mural painting encompasses various materials and tools with varying dimensions and colour specifications, the specific artistic vision, wall surface, and desired longevity of the mural. As reference [5] mentioned, graffiti, murals, street art, and 2D iron rods share similarities but use different materials like paint and spray cans. However, Chinese and Western murals exhibit distinctions in technique, materials, and subject matter [6]. Contemporary artists have increasingly incorporated modern technology applications, such as metal plate slides, fibre optics, industrial wood, and transparent acrylic, into their artwork [7], introducing new dimensions to their creative works. Recent studies by reference [8, 9] have shown that murals are a popular type of painting that often use paints made from

alkyd resins, acrylic resins, styrene-acrylic resins, and styrene resins. The diverse materials involved include paint, primer, solvent, and medium. Reference [10] explained that acrylic paint, favoured for its vibrant colours, is complemented by a primer to prepare wall surfaces, a solvent for specific paint effects, and a medium to alter paint properties. On the other hand, reference [11,12] noted that it is essential for designers to have tools such as storage to keep various types of painting supplies. These supplies can include various types of brushes, rollers, spray paint, stencils, poster paint, and wall paint in various colours. In addition, they stated the importance of implementing a structured system for managing colour codes and paper rolls. A recent study by reference [13] highlighted that muralist should prioritise using safety equipment when creating their artwork. The shift from chalk to spray paint and markers, as observed in a study from reference [14] signifies a modernisation in mural creation tools, indicating the need for adaptability and the use of updated equipment in contemporary mural artistry. Understanding these developments and the materials required for traditional and modern mural-making environments becomes pivotal for muralists and designers. Next, discussing the mural process, which investigates the steps involved in creating a mural, includes handling surface preparation and composition.

## **2.2 Mural Process**

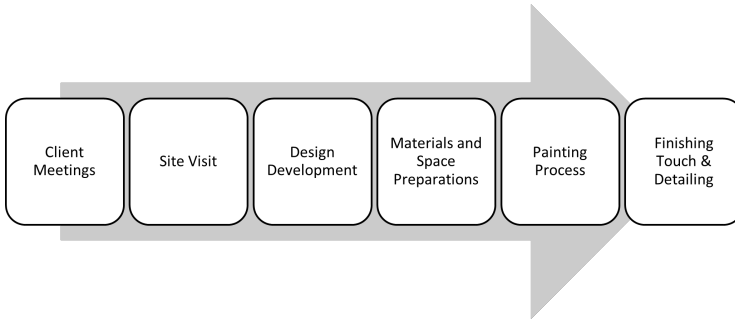
Completing murals involves a thorough process that includes idea development, mural design, wall preparation, layout plotting, painting execution, varnishing protection, documentation, appreciation, and reflection [15]. In the realm of mural production, the process of surface preparation holds significant importance prior to starting the painting phase. There are different types of surfaces for mural painting. Based on reference [16], many examples of murals are produced on walls, buildings, and street furniture decorations such as lampposts, fire hydrants, electrical boxes, and benches. The creation aspect of mural art highlights the dynamic and multifaceted nature of the art form, emphasizing the importance of careful technique and materials in its sustainability. Maintaining these mural paintings is extremely difficult because the continuous mechanical stress on the building's structure can lead to cracks in the mortar-based preparation layers on the walls [17]. However, reference [18] stated that every cleaning technique performed on the wall surface before painting will affect the quality of the mural. In their study, reference [19] identified two distinct approaches for cleansing wall surfaces: chemical methods and laser cleaning. In a recent study conducted by reference [20], an alternative approach to surface preparation was proposed. This project emphasized the significance of repairing the plaster on the entire wall surface prior to applying a white coating material as the foundation for the mural. This step was found to be crucial in achieving consistency in the cement color. On the other hand, reference [21, 22, 23] stated that the application of a protective coating to the mural's surface is a crucial element in protecting its longevity and preservation.

### 3 Research Methodology

The review of related literature was defined as a comprehensive review of existing literature, including academic publications and exploration with various mural equipment and processes employed to gather data. In the discussion part, a comprehensive guide explains the primary creation in mural art, which focuses on material and process.

### 4 Discussion

This study focuses on equipment preparation along with its processes. This research aims to explore the detailed process involved in creating murals, emphasising key components (refer diagram 1) including client meetings, site visits, design development, materials and space preparations, the painting procedure, and the final stages of finishing touches and detailing.



**Fig. 1.** The complete process of mural creation by *SemangART Enterprise*

#### 4.1 Client Meetings

The client meetings phase for mural creation involves a comprehensive discussion with the client to discuss their ideas, preferences, and expectations for the mural. This meeting was arranged to focus on understanding the purpose of the mural, the chosen theme, colours, emotions to evoke and the intended effect of the mural on the space. Addressing logistical aspects like size, location, surface type, budget, and timeframes is crucial. Presenting expertise, sharing ideas, and potentially sketching preliminary concepts aid in visualizing the client's desires. Establishing clear communication channels and outlining the next steps solidify mutual understanding, setting the groundwork for a collaborative and successful mural creation process.

#### 4.2 Site Visit

A site visit in the context of mural creation is a crucial step encompassing various critical elements for effective planning and execution. Visiting the location allows the

muralist to intimately understand the physical space, assessing dimensions, lighting conditions, and surface characteristics like texture and material composition. This first inspection informs decisions regarding the mural's size, placement, and materials necessary for painting. Additionally, the visit provides insight into environmental factors such as sunlight exposure, weather conditions, and potential sources of damage, helping in choosing suitable paints and protective measures. Engaging with the client on-site facilitates discussions about their vision, integration preferences, and specific requirements for the mural within the space. Documentation through photography aids in visualization and design conceptualization, while logistical planning considers access, safety measures, and any challenges anticipated during the painting process.

### 4.3 Design Development

Design development in mural creation involves translating the client's vision into tangible designs. The ideas are rough sketched based on discussions and then refined through iterative feedback loops, gradually developing into detailed designs. Presenting multiple iterations to the client allows for feedback incorporation and ensures alignment with their preferences. As concepts mature, more intricate and detailed designs are crafted, depicting the mural's colour schemes, compositions, and finer elements. The final concept, backed by explanations and rationale for design choices, is presented for client approval before proceeding to the painting stage. This collaborative process ensures that the envisioned mural aligns closely with the client's desires, laying the groundwork for successfully executing the mural painting.

### 4.4 Equipment and Space Preparation

Materials and space preparation are essential aspects of mural painting, requiring careful consideration and planning. Selecting suitable materials such as paint, brushes, rollers, scaffolds, and cleaning agents is essential in adapting to the mural design, surface type, and location. Table 1 presents a compilation of commonly utilised equipment in the creation of murals, including materials and tools, along with their respective purposes.

**Table 1.** Mural's Equipment

No	Equipment	Purpose
1	Acrylic Paint	For Versatility and Durability Colour
2	Nylon Brushes	To Enable Precise Detailing and Brushwork
3	Paint Roller & Trays	To Paint the Huge Wall Surface
4	Bucket	To Wash Brushes, Which Can Keep Tools in Optimal Condition
5	Rags	To Dry the Brush
6	Water Level Ruler	For Designs That Require Measurements or Straight Lines

7	Container	Mixing The Colour to Achieve the Desired Shades
8	Masking Tape	To Assist in An Accurate Design Replication Process
9	Scrapper	To Scrap the Part of The Paint Spilled on The Floor
10	Wet Tissue	To Wipe the Part of The Paint Spilled on The Floor
11	Staircase	For Reaching High Sections of The Wall
12	Chalks	For Marking the Wall

On the other hand, surface preparation included cleaning the walls to remove dust, dirt, and grease and applying a primer or base coat to improve paint adhesion and surface uniformity. Marking the outline of the mural on the wall is a guideline when arranging the workspace with protective covers, proper lighting and ventilation, and coordinating the painting process. The first process in applying the design on the wall starts with marking. This process is essential to accurately estimate the design dimensions depicted on a specific wall area. There are various methods to carry out the marking procedure. Another approach can also be used involving the use of digital technology, especially LCD projectors, to project and display images on the wall surface, a grid system, random sketches of words or objects with a brush or chalk is also a method that can be done. As seen in Figure 2 (a) masking tape was used on the wall surface in this project for the marking process that ensures the visibility of each point during the sketch. It is recommended to use masking tape with a different colour than the wall's original colour. The masking tape used in this context is intended to be temporary and will be removed once the sketch is complete. This is purely to guide the placement of the design. However, as an exploration has been made, masking tape is very convenient for the marking process, which is the most practical and modern method. The mural design must then be altered using the relevant tools, such as Picart, Procreate, or anything similar. The objective of this phase is to estimate the design dimensions concerning the actual physical wall. This method requires a two-layer editing process that uses the top layer with the selected design image and the tape-marked wall as the background image. The design image is on the top layer, which is deliberately blurred so that it is clear to refer to and helps in the drawing process afterward. After finalising the design (see Figure 2 (b)) the next step is to carefully sketch the object on the wall surface using a small brush and paint, following the design edited from the application. By adopting this method, the proportional design will retain its original scale and avoid distortion.



(a) Editing and placement process

(b) Tracing and sketching

**Fig. 2.** Placing mark on the wall using masking tape as a grid to transfer the finalized design

#### 4.5 Painting Process

The mural painting process involves a systematic approach to bring the outlined design to life. The painting process begins by layering background colours and setting up the base. Significant elements are then filled in before refining details and adding depth using blending, stippling, and layering techniques. Maintaining proportion, perspective, and consistent communication with the client remain pivotal. Regular refinement and iteration ensure the mural aligns with the envisioned design, while periodic assessments guarantee visual consistency. Weather considerations, especially for outdoor murals, dictate painting schedules to avoid adverse effects on paint quality. As the mural nears completion, focus intensifies on final touches, detailing, and evaluating the overall harmony of the artwork, ensuring it meets both artistic standards and client expectations. This meticulous process demands patience, attention to detail, and expertise in various painting methods to deliver a captivating and visually striking mural.

#### 4.6 Finishing Touch and Detailing

In the final stages of mural creation, finishing touches and detailing are crucial for elevating the artwork's overall impact and completeness. This phase involves meticulous attention to small details, refining elements with intricate patterns, textures, and delicate highlights to add depth and realism. Adjustments in colour contrast and filtering transitions enhance visual appeal while balancing the mural composition to ensure proportional harmony and balance. Careful inspection and cleaning address imperfections or inconsistencies and refine edges for a perfect finish. Finally, the final review from the client is to ensure that the mural aligns with the client's vision and satisfaction with the completed mural. In addition, document murals with photographs or videos for company portfolio and promotional purposes. This stage requires precision, artistic finesse and attention to detail to create an attractive mural and professional appearance. Figure 3 depicts the finished mural that was created using all

of the essential equipment and process resulting in a high-quality mural painting that precisely duplicates the original design perfectly.



Fig. 3. The condition of the completed mural

## 5 Conclusion

This research project holds the potential to contribute to the field of mural art significantly. By deepening our understanding of fundamental equipment and mural processes, this research will serve as a valuable resource for emerging artists and educators, enriching the art community and enhancing the quality of mural art in public spaces. Exploring the fundamental mural process, including client meetings, site visits, design development, materials and space preparations, the painting procedure, and the final stages of finishing touches and detailing, was discussed in detail. Thus, this exploration revealed that good mural results depend on some values such as quality control, such as time, craftsmanship skill, technique, precise equipment, price, and budget of customers. It emphasizes the importance of passing down the knowledge and skills that underpin mural creation to ensure the continued vibrancy of this art form. This mural is a form of business that brings a lot of profit and is good for students, especially fine arts students. This process focuses on the product which is part of the 4P (product, price, place, and promotion) in marketing strategy. It concentrates on two major components in the product procedures, instead of equipment and process. This project is also concerned with its placement. There are two more items of marketing strategy that other mural artists should explore which are price and promotion. The entrepreneurship of this art is a loss if this field is not looked at or neglected since the skill of drawing has been learned. Future work is needed to clarify these issues regarding marketing strategies that make the platform mural the future occupation of art students.



## References

1. Prasiasa, D. P. O.: Mural Art as a Media for Social Criticism: Perspective Structuralist-Constructivism. *Mudra Jurnal Seni Budaya* 37(2), 203–211 (2022)
2. Shpetna, S.: Socio-cultural phenomenon of mural as a call for dialogue and discussion. *Bulletin of Luhansk Taras Shevchenko National University. Philological Sciences* 3(334), 150–156 (2020)
3. Jalaluddin, S. Z. A. S. A., Tohid, M. S., Shamsudin, M. K., Othman, M. F.: # CeritaKita: The splendour of Malaysia through mural painting on petronas gas station. *Environment-Behaviour Proceedings Journal* 7(SI8), 105–109 (2022)
4. Rahman, N., Ismail, A., Rahim, R.: Revolutions of Mural Painting. *The International Journal of Academic Research in Business and Social Sciences* 10, 1195–1200 (2020)
5. Muhammad, S. A., Mokhtar, M., Isa, M. J. M., Din, N. H. M.: Artistic Style Collection and Distribution of Urban Artworks in Malaysia. In: *Proceedings of the 2nd International Conference on Design Industries & Creative Culture, DESIGN DECODED 2021*, pp. 24–25, Kedah, Malaysia (2022)
6. Buzdar, M. F., Zejia, Z., Ibrahim, Y. B.: The Impact of Public Art Creation on People. *LC International Journal of STEM* 2(4), 30–37 (2021)
7. Al-Haraze, S. M.: Mural painting [Doctoral dissertation] King Abdulaziz University (2007)
8. Kamaruddin, N., Ishak, N.: Exploration of Malaysian Public Awareness Towards Visual on Street Art Mural as a Medium of Communication. *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 7(7), e001595–e001595 (2022)
9. Pellis, G., Bertasa, M., Ricci, C., Scarcella, A., Croveri, P., Poli, T., Scalarone, D.: A multi-analytical approach for precise identification of alkyd spray paints and for a better understanding of their ageing behaviour in graffiti and urban artworks. *Journal of Analytical and Applied Pyrolysis* 165, 105576 (2022)
10. Razak, R. A., Saad, M. N., Ahmad, S. H. S., Ahmad, S., Razali, R., Mazlan, H.: Murals as a Tourism Strategy: A Case Study of Teluk Intan, Perak. *KUPAS SENI* 11(3), 48–56 (2023)
11. Thamrin, D., Wardani, L. K., Sitindjak, R. H. I., Natadajaja, L.: Experiential learning through community co-design in Interior Design Pedagogy. *International Journal of Art & Design Education* 38(2), 461–477 (2019)
12. Orlandi, L.: The Italian Contribution to the Architectural Panorama of Cosmopolitan Galata and Pera Districts in Istanbul and its Reflections on Cultural Heritage. In: *BOOK OF PROCEEDINGS*, pp. 14 (2022)
13. Romat, M. S., Jalaluddin, S. Z. A. S. A., Tohid, M. S., Ab Jalil, M. F.: # UnsungHeroes: Mural Art in Honoring the Role of Malaysian Healthcare Frontliners during the outbreak of Covid–19 at Rembau General Hospital. *Environment-Behaviour Proceedings Journal*, 7(SI7), 109–118 (2022)
14. Poon, S. T.: Talent & Tagging in Harmony: A Study of Graffiti Art as Subculture and Aesthetic Expression of Urbanization in Malaysia. *Journal of Urban Culture Research* 26, 5–28 (2023)
15. Wang, Y., Wu, X.: Current progress on murals: distribution, conservation and utilization. *Heritage Science* 11(1), 61 (2023)
16. Muhammad, S. A., Din, N. H. M.: The Introduction of Street Art's Etymology-Related Context and Discipline Against an Artwork in the Public Space. *Ideology Journal*, 8(1) (2023)
17. Bauer, M., Fukunaga, K., Keil, A., Aramini, F., Palazzo, M., Dall'Aglio, L., Friederich, F.: Structural Investigations on Leonardo da Vinci's Mural Painting “The Last Supper” with

- Terahertz FMCW and TDS Techniques. In: 2022 52nd European Microwave Conference (EuMC), pp. 808–811, IEEE (2022)
18. Abyzov, V., Chuieva, O.: Murals and their evolution and typology in the space of the urban environment on the example of Kyiv. *Środowisko Mieszkaniew* (2021)
  19. Bertasa, M., Ricci, C., Scarcella, A., Zenucchini, F., Pellis, G., Croveri, P., Scalalone, D.: Overcoming challenges in street art murals conservation: A comparative study on cleaning approach and methodology. *Coatings* 10(11), 1019 (2020)
  20. Achmad, Z. A., Wuryandari, Y., Priyadharsini, R.: The importance of murals for strengthening destination branding of Kampong Opak Gambir. In: 3rd International Media Conference 2021 (IMC 2021), pp. 51–63, Atlantis Press (2022)
  21. Macchia, A., Castro, M., Curbelo, C., Rivaroli, L., Capriotti, S., Vieira, E., ... La Russa, M. F.: Methods and products for the conservation of vandalized urban art murals. *Coatings* 11(11), 1304 (2021)
  22. Ahmad, F. R., Legino, R., Ab Jalil, M. F., & Shamsuddin, M. K. (2022). Establishment of the UiTM Retrospective into Integrated Wall Painting and Wall Sculpture as Public Art. *Environment-Behaviour Proceedings Journal*, 7(S17), 207–211. <https://doi.org/10.21834/ebpj.v7iS17.3774>
  23. Ahmad, F.R. and Legino, R. 2022. Establishment of Retrospective Art on the Campus. *Asian Journal of Environment-Behaviour Studies*. 7, 21 (Apr. 2022), 41–52. DOI:<https://doi.org/10.21834/aje-bs.v7i21.406>.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

