



## What Got Us Here, Won't Get Us There

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# Emerging studio ceramic influenced by Islamic culture: the cultural heritage of Alhambra Palace as a case study.

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**Abstract:** At the end of the last Islamic dynasty with the colonial periods, Islamic Art experienced a significant decline in production. Since heritage is not solely history, yet a cultural process that continues to the present. There is a need to revisit the cultural heritage context of Islamic Art and adapt it in the current creative practice by contemporary artists. Islamic Spain during the Nasrid dynasty (1237-1492) produced artefacts that are known to be lavish, multi-cultural, artistic style. However, from a Studio Ceramics perspective this area is under researched. Therefore, the current practice-based research is exploring Alhambra Palace by reinvigorating cultural heritage artefacts. Additionally, with the shift of interest from material based to digital based disciplines and Ceramics was one of these fields. As a response this project is undertaking a practice-based approach aiming to produce hybrid contemporary Islamic Ceramics, utilising traditional and new technology methods. Furthermore, this creative practice is taking “failure” or “happy accidents” into consideration.

**Keywords:** Alhambra Palace, Nasrid Polygons, Arabic Poems, Happy Accidents, Laser Engraving

## 1. Introduction

### 1.1 Historical and Cultural Context of Alhambra

Alhambra Palace (قصر الحمراء) meaning the red-coloured palace in Arabic, is one of the remarkable landmarks and superb examples of Islamic art and architecture, that inspired the West before the East (Carey, 2012; De Guise, 2008; Irwin, 1997; Rosser-Owen, 2014). Alhambra Palace located on a hill over the river Darro was built in Granada, South Spain by the Nasrid Kingdom the last Muslims rulers in Spain (1237-1492). Alhambra Palace is part of “Alhambra, Generalife and Albayzín, Granada” registered by the UNESCO and the ICOMOS on the World Heritage List as a cultural heritage site. The

first dynasty of the Nasrid Kingdom was established in 1232 by Muhammad I. However, most of the work seen in Alhambra is during the second dynasty during the reign of Ismail I, Yusuf I and Muhammad V (Fernández-Puertas, 1997; Rosser-Owen, 2014, pp. 49–61).

This palace is one of the few palaces from the Islamic Empire surviving today and the only one in Europe. The fact that Alhambra Palace was built by one of the minor kingdoms of the Islamic dynasties indicates their advancement of craft and design skills through the lavish and intricate ornaments and architecture (National Gallery of Art, 2005; Rosser-Owen, 2014). Nineteenth century designers as Owen Jones and his companion Jules Goury who stayed in the palace for six months, admired it and systematically studied the palace's significant architecture features; calligraphy inscriptions, geometric tiles and plasterworks which followed by his well-known book *The Grammar of Ornament* in 1856 (De Guise, 2008; Eggleton, 2012, 2013; Jones, 1988; Rosser-Owen, 2014).

“The Alhambra is at the very summit of perfection of Moorish art, as is the Parthenon of Greek art. We can find no work so fitted to illustrate a Grammar of Ornament as that in which every ornament contains a grammar in itself... We find in the Alhambra the speaking art of the Egyptians, the natural grace and refinement of the Greeks, the geometrical combinations of the Romans, the Byzantines, and the Arabs ” (Jones, 1988, p. 66).

## 1.2 Aims and Objectives of the Study

This research explores an area in-between two major fields, namely the field of Ceramics and Islamic Art, specifically inspired by Nasrid Arts and ceramics (fig. 1). In terms of Islamic Art this doctoral research is focuses on a specific cultural heritage ceramic artifacts production during the Nasrid dynasty (الناصرين) (1237-1492) found in or produced for Alhambra palace, as a source of inspiration.

This artistic project explores selected geometric ceramic tiles and Arabic poems inscriptions found in Alhambra palace. As well as the reduction lustre technique<sup>1</sup> used on the superb Alhambra vases. Even though the history and the creative interpretation of the superlative Alhambra vases and reduction lustre are a significant part of the current doctoral research, it will not be discussed here. However, this paper will focus on the investigation of the geometric patterns found in Alhambra Palace, especially the Nasrid polygons and the poems inscribed on the walls, which describe the features and craft skills used in the Palace. Another important section of this paper is the utilisation of ‘happy accidents or surprises’ in the artistic practice in this project, and a novel discovery.

From the researcher's previous experience in the field of Islamic Art and ceramics, and with the ongoing investigation of literature and contextual review during the current research, gaps were identified and raised the following research questions; What and how does Alhambra Palace's visual-aesthetic dimension provide a source of influence in the development of contemporary Islamic Studio Ceramics? To what extend can the combination of hand skills and new technologies contribute to the hybrid approach, inspired by Nasrid ceramics, to contemporary Islamic Studio Ceramics? This on-going research acknowledges a dual perspective of some of the contemporary Studio Ceramics practices; the traditional skills and technique and the new technological development. There is a lack in this matter by contemporary Studio Ceramic artists influenced by Islamic culture, which was evident after the contextual review of this doctoral research.

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<sup>1</sup> Reduction Lustre (البريق المعدني): is a ceramic innovation technique by potters during the Islamic reign started in Iraq in the 9<sup>th</sup> century, which produce a gold like sheen on tin-glazed earthenware objects fired under reduction atmosphere. This technique is different than the ready-made lustre common today made of real gold and used as an overglaze.

Furthermore, with the development of new technologies, interests have shifted from material to digital based disciplines. However, the ongoing decrease in the involvement of tactile sensation with actual materials appears to be due to three primary aspects: (a) contemporary design's creative digital tools; (b) the extensive knowledge of materials that has amassed; and (c) availability or affordable pricing (Leader, 2010). Ceramics was one of the fields that has been affected as it usually depends on hand skill techniques, since it is also important to preserve the tactile experience. Therefore, this study aimed to explore the making of hybrid Contemporary Islamic Ceramics using both traditional and new technology methods.

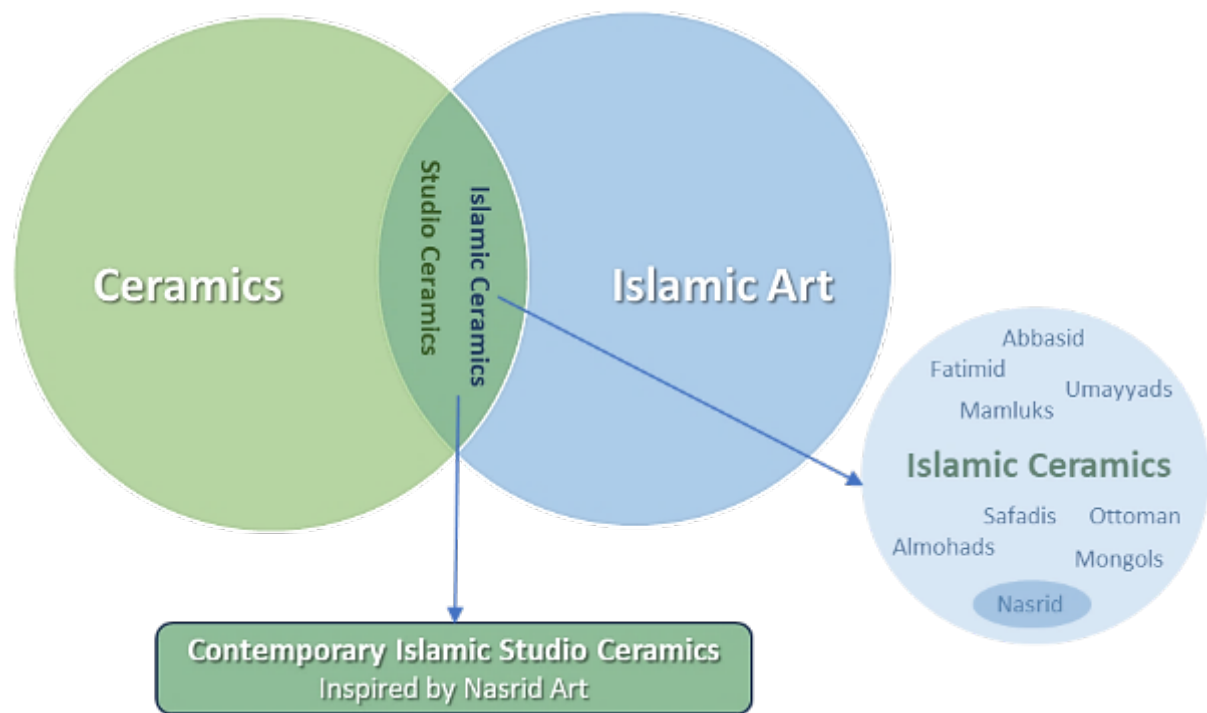


Figure 1. The research scope, designed by: Zelal Basodan, 2023.

## 2. Concepts and Approaches Embedded in the Creative Practice

### 2.1 The Concept of Unity and Diversity in Islamic Art

From a philosophical and methodological perspective, the principle of unity and diversity is key in understanding the nature of human beings. Two main theories can be derived from this concept, one general and the other one is more specific. The general view believes that the principle of unity and diversity is a phenomenon that is instinctively understood. They also see that this principle can be applied naturally in explaining almost all aspects of life such as the evolution of civilisations, the development in history and knowledge. This is from a religious, philosophical, and scientific perspective. Whereas the specific view believes that the principle of unity and diversity is a conundrum that requires a solution through philosophy, science, literature, art, and other fields of knowledge (Hanash, 2017, p. 25). One of the metaphors of Islamic Art patterns denotes this principle, especially in geometry, as the whole pattern represents society as a whole, each varied element within the pattern represents the individuals within this society.

## 2.2 Hybrid Art Form as a Research Approach

Visual Arts can be considered as a heterogeneous field, due to its rich aesthetics resources, which have emerged from the combination of various avenues. Such as traditional craft shipment and technologies, tradition and modernism (Canclini, 1995; Papastergiadis, 2005) as cited in (Canclini, 2015). Jerrold Levinson emphasises that “A hybrid art form is an art form with a "past," and it is its miscegenetic history that makes it hybrid, not just the complex "face" it presents” (Levinson, 1984).

Islamic Art especially Ceramics is a result of a hybrid process, starting from the eighth century. The Islamic culture expanded from India through Persia to the Middle East, Africa and until Spain. This resulted in heterogeneous societies and rich cultural exchanges between the different regions and trading through the ‘Silk Road’, which played a significant role in Islamic Art production (Greenhalgh, 2022, pp. 45, 156). Furthermore, with the development of new technologies interests have been shifted from materials to digital based disciplines. Therefore, this research aims to continue the hybrid approach by reusing its cultural patterns and techniques, as well as benefiting from other cultures advances and adapting both hand and digital skills.

## 3. Methods

The paradigm of this study is based on the Constructive view as Naturalistic enquiry (Gray & Malins, 2004, p. 72) following a qualitative design in general (Creswell & Creswell, 2018). The individual creative practice conducted by the researcher follows a circular systematic strategy of making, reflecting, evaluating and remaking when needed (Candy, 2020; Schön, 2008). This research is located in the field of Studio Ceramics practice and follows recent developments in thinking and making. “What then is the relation between thinking and making? To this, the theorist and the craftsman would give different answers. It is not that the former only thinks and the latter only makes, but that the one makes through thinking and the other thinks through the making” (Ingold, 2013, p. 6).

Consequently, conducting practice-based research as its main approach is believed to be the most appropriate process, alongside the combination of other complementary methods. Furthermore, this practice-based research utilises a multi-method approach, known also as ‘triangulation’, which means the use of two or more techniques and tools in gathering, investigating and analysing data. The reason behind applying more than one method and tool in this project is to enhance its reliability and significance, as more methods means generating information from varied perspectives in order to fully investigate complex issues (Gray & Malins, 2004, p. 17,31). However, the number of methods also depends on their necessity and relevance to answer the research questions.

Since the materials of clay and paper have historical and cultural connotation the researcher aims to retain these connections within the body of work aiming to contribute culturally and technically towards a hybrid Contemporary Islamic Ceramics. Therefore, paper clay has been used in this project’s creative practice. As well as the use of other traditional materials such as plaster slabs, and digital applications such as laser cutter and 3D printing. The research as mentioned before is inspired from a cultural heritage context, which is the UNESCO World Heritage Site Alhambra Palace. This is examined through exploring the intercultural production of Islamic artifacts and applying new interpretations in the current practice. Investigating the making of hybrid Contemporary Islamic Ceramics artefacts, adapting both hand and digital skills.

## 4. Practice-based Research Inspired from Alhambra Palace

Visitors to Alhambra Palace will notice that its exterior is quite plain, giving the impression of strength, whereas they will be astonished by its intricate interior. Thus, Alhambra is referred to as a "fairy palace" or "hidden gem" which implies the significance of inner beauty (Eggleton, 2012, p. 8). To correspond with the concept of the inner beauty, this research practice explores grids and inscriptions, that were embedded inside the pieces [fig. 4 (c)]. The water element plays a major role in the palace, as fountains and pools can be found throughout the palace. The reflection of the palace on water initially indicates power and pride, then the waves act as a reminder that this life is transient (fig.5).

During the current project two visits were conducted to Alhambra Palace. The main aim was for gathering visual data especially in the form of photographs, drawings and for personal somatic and sensorial experience of the space in the palace and surroundings. Being immersed in the setting twice enabled a deeper understanding of the history, features, style, materials, conditions and metaphors embedded in the palace. For example, on each day the weather conditions were different, which gave different views of the palace's reflection on the water (fig. 2). These visits have been followed up with thoughts and ideas, linking to the project's creative practice that occurred during and after the visits (fig. 11), which will be explained further in section (5).



Figure 2. dry day (left), rainy day (right), The Court of the Myrtles, Comares Palace, Alhambra Palace, 2021, Photos by: Zelal Basodan.

### 4.1 Geometric Tiles and the Nasrid Polygons

Explanation of the Historical Artefacts:

It is believed that the ceramic tiles of the world heritage site the Alhambra Palace were made in Malaga. The geometric tile work in Alhambra Place can be divided into three main groups. The first are the Friezes that act as frames and arranged in one direction. The second group is the mosaics which are usually arranged in two directions, then the last group is the wheels or rosettes which are arranged in circular movements (Caruncho, 2018, p. 21; Vela, 2018) [fig. 3 (a,b &c)].

Based on simple square, triangle or hexagon grids the Nasrid craftsmen developed iconic polygons so-called “Nasrid Polygons”, some have been given contemporary names due to their shapes, such as the “Nasrid Birds”, “Nasrid leaves” and “the Swallow Kiss” (fig. 3 & 4). Even though geometric tiles have been used significantly on the walls of Alhambra, only simple 6, 8, 12, and 16 folds geometric roseate are found, but not the complex folds of 7, 9, 10 and 14 (Abdullahi & Embi, 2013). The technique used in most ceramic tiles in Alhambra Palace is ‘zilije’, is a geometric tessellation made by arranging small hand cut shapes of polychrome ceramic tiles, covering a surface with cut tiles while arranging them to avoid intermediary gaps, while still not overlapping them (Caruncho, 2018, p. 21; Vela, 2018) (fig. 3).

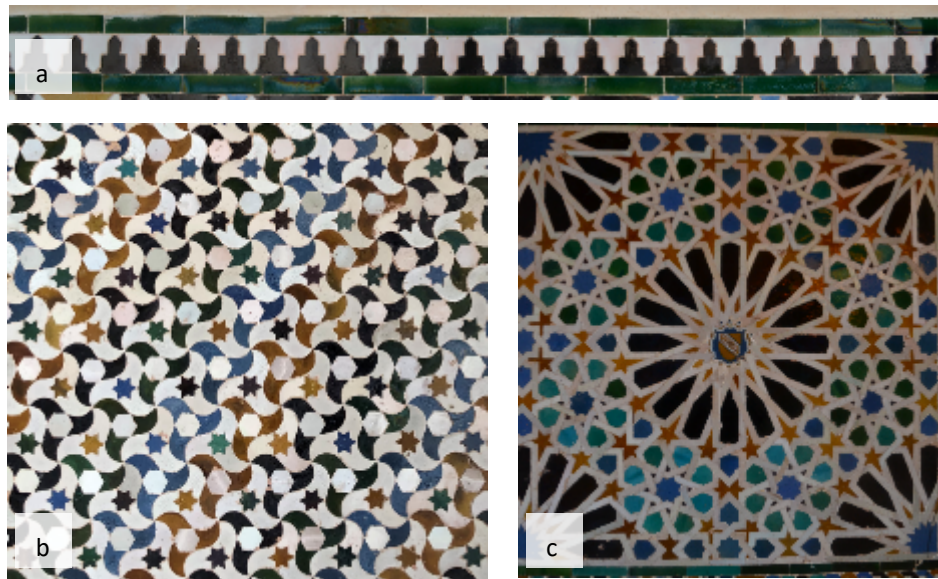


Figure 3. (a) Geometric frieze, *The Court of the Myrtles*, (b) mosaic, *The Nasrid little Birds, The Court of the Myrtles*, (c) 16-fold Rosette, *The Mexuar*, all with *zilije* technique, *Alhambra Palace*, 2021, Photos by Zelal Basodan. (Not to scale)

#### Experimental Stage of the Creative Practice:

This creative practice is mainly focused on simple symmetric and rotated geometric patterns that are so-called the Nasrid polygons. The artistic practice started with technical drawings of the geometric patterns found in Alhambra, following instructions of experts such as Richard Henry and Adam Williamson. The grids of these patterns were engraved on plaster slabs testing both hand tools and laser engraving. Clay was applied on the engraved plaster and the patterns were identified with the grids embedded in a very low relief. The purpose was to acknowledge and make visible the long hidden ‘process of growth’ used to create these final patterns. Which corresponds with Tim Ingold’s claim that making is a ‘growth’ process in which the maker participates in a morphogenetic process: a confluence of forces and materials in which the maker engages in form generation alongside the materials (Ingold, 2013, pp. 20–21).

Another set of explorative works was inspired by the gentle, water waves and the reflection in water pools of the palace. Benefiting from Owen Jones’s research method by identifying parts of the geometric patterns. The aim of this body of work is to combine and achieve an aesthetic that sits in between the acute geometric grid and the organic wave and to allow the viewer to ponder and reflect on the whole pattern (fig. 5).



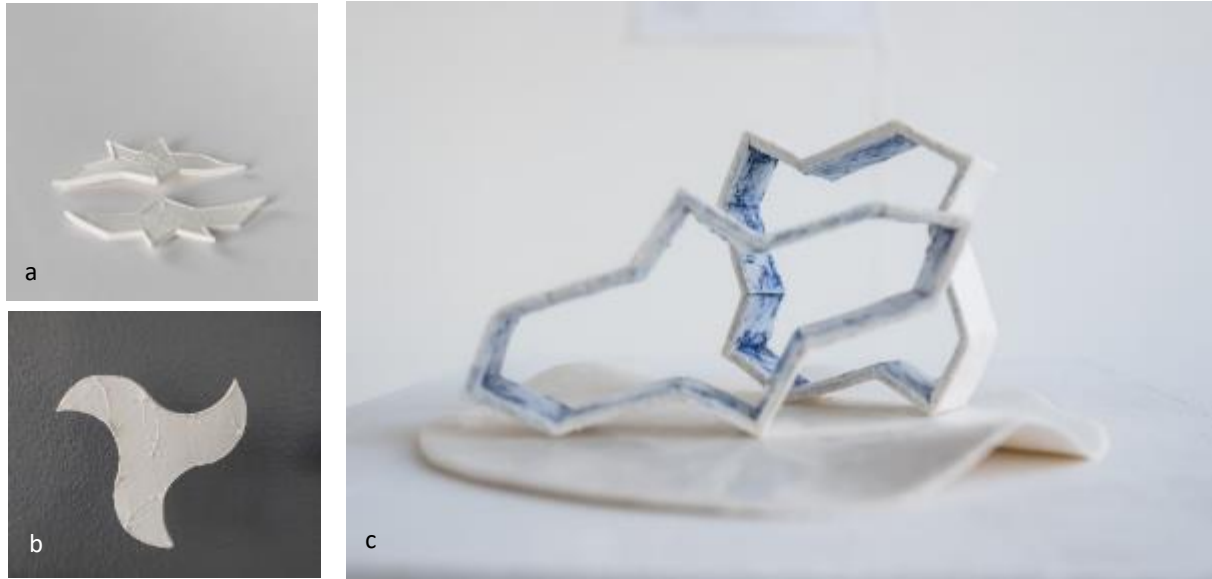


Figure 4. (a) The swallow kiss polygon, (b) The Nasrid bird polygon, both with grid embedded, porcelain, 2021, photo by: Zelal Basodan. (c) As a Lover - hand built 3D polygons from Alhambra, grid and Arabic inscriptions in low relief, base with natural firing bend inspired by an accident, paper porcelain, cobalt blue, 2021, photo by: Pill Wilson.

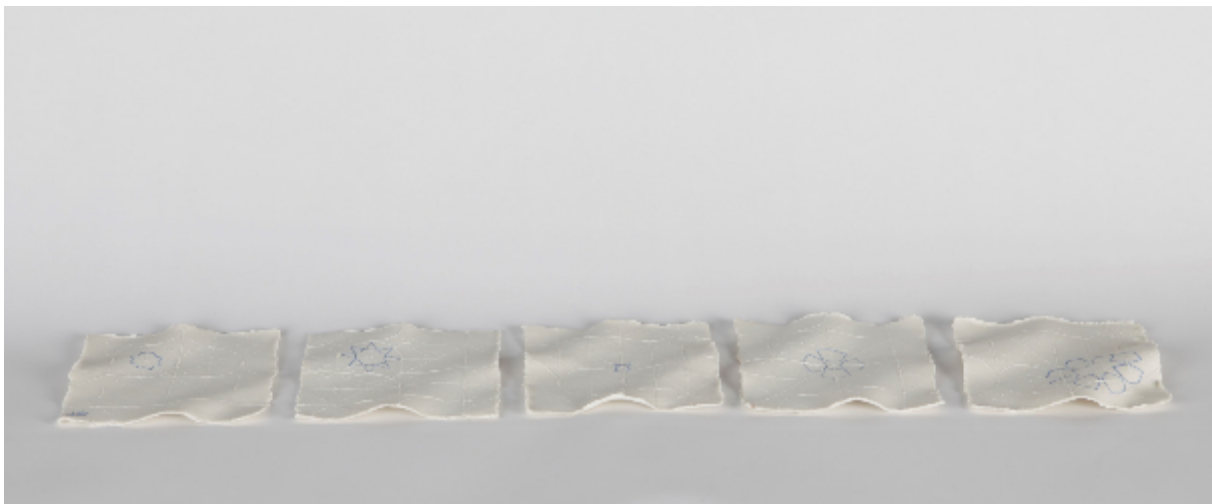


Figure 5. Reflection - in-between, 5 pieces, paper clay porcelain, grid in low relief, 2021, photo by: Zelal Basodan.

## 4.2 Poems from Alhambra

Explanation of the Historical inscriptions:

Alhambra Palace's walls, fountains and friezes are filled with Arabic inscriptions. These inscriptions are mainly Quranic, Prayers, Sultans praising, around thirty Poems and extensively the Nasrid Moto (Vilchez, 2011) (fig. 6). Two main scripts have been inscribed on the walls they are the Kufic script mainly for Quranic verses, and various curves scrips mainly for poems known as Thuluth Maghribi (Vilchez, 2011, pp. 13–14). The Nasrid Motto 'There is no victor but God' (ولا غالب إلا الله) is spread in almost every wall of the palace in various scripts, orientations and on different materials.

The palace has been defined as a luxurious book of poems, due to the poetic and epic inscription found on its walls, mostly in the first-person voice. The poems are written by high ranked three well-known poets appointed by the Nasrid sultans, these poets are Ibn Al-Jayyab (ابن الجياب), Ibn Al-Khatib (ابن الخطيب) and Ibn Zamrak (ابن زمرك) (Moustafa, 2008, p. 18; Rosser-Owen, 2014, p. 53; Vilchez, 2011). The extensive use of poems creates a relationship between the text and the architecture; the inscribed walls of Alhambra engage the visitors and encourage them to ponder beyond the visual view (Bush, 2008).



Figure 6. Arabic inscription on a wall in the Court of the Myrtles, Comares Palace Alhambra Palace, 2021, photo by: Zelal Basodan.

#### Experimental Stage of the Creative Practice:

The current project is focused on four poems written by Ibn Al-Jayyab and inscribed on the walls of the Tower of the Captive Princess. Interestingly these poems appreciate the design and craft process, describing the geometric design proportions, making techniques and materials used in the palace (El-Gamal, 2004, p. 183; Vilchez, 2011, p. 309). In this project these lines were embossed in Arabic in low relief and written using underglaze pencils on another piece (fig. 7).

When using Arabic calligraphy in art the viewer could enjoy the visual aesthetic quality of the lines even without understanding the meaning. In a PDF file the lines of poems from the Palace were written in both Arabic and English and QR codes were created to provide the translation to the viewers to widen their accessibility (fig. 8). These experiments were taken further by showcasing them in an exhibition to non-Arabic speakers. It has been discovered that by providing a QR code to the audience it enables them to have a deeper understanding of the work as they read the translation, which can enhance the viewers' experience. By receiving the text from a visual aesthetic view then adding up the content aesthetic.

Furthermore, because Arabic script needs to be joint and cannot be written in single characters, 3D printing laser cutting the words can ease in the making process especially for small size text. The 3D printed words can then be attached to hand built ceramic objects. Some experiments have been conducted, such as 3D printing with clay and testing the laser cutter on different types of clay in various stages of drying (fig. 9). In terms of 3D printing with clay, the printer Hyrel 3D was used as a syringe to be attached to load it with clay, also ceramic resin was tested using FormLab printer and the Tronxy Moore 1 3D printer [fig.9 (a& b)].



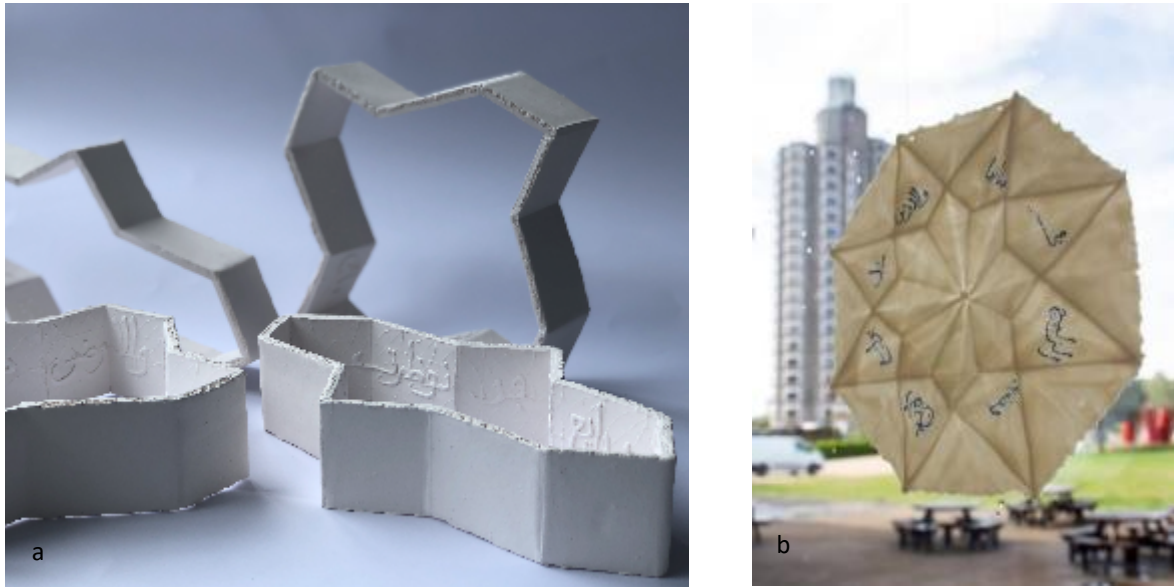


Figure 7. (a) 3D geometric polygons and lines of Arabic poem applied using slip-trails, paper clay porcelain, 2021, Photo by: Zelal Basodan, (b) 3D geometric pattern based on paper folding, paper clay porcelain, circle grid with laser cutter, 2022, Photo by: Simon Kemp.



Figure 8. Scan the QR code to read the translation in English.

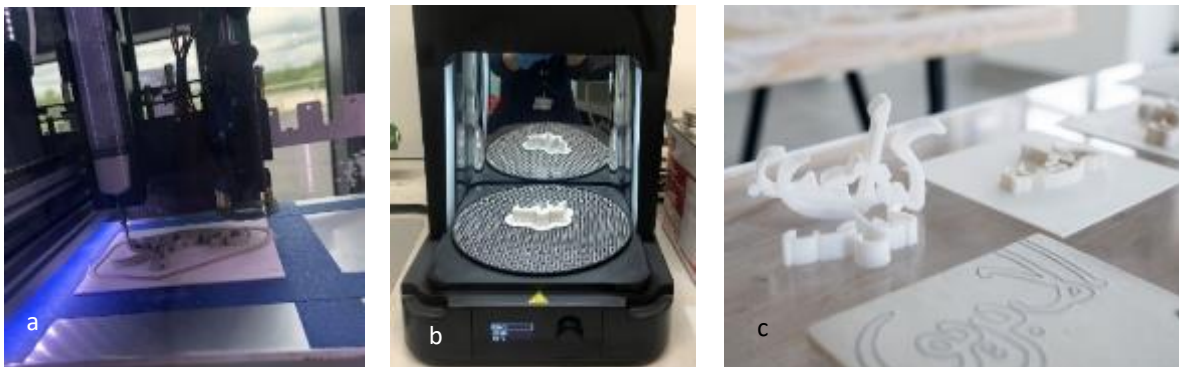


Figure 9. (left to right) (a) 3D printing Arabic text with clay using the Hyrel 3D printer, (b) 3D printing Arabic text with ceramic resin using the FormLab printer, (c) Engraved Arabic text on fired porcelain tile using laser cutter and two pieces 3D printed with filament, 2021, photos by: Zelal Basodan

## 5. 'Failure' as Happy Accidents or Surprises

Since accidents are more likely to occur during the making process of ceramics, this creative practice is taking "failure" or "happy accidents" into consideration. In 1961 Rose Slivka asserted that "There is a tradition of the "accident" in ceramics [...] may take place out of the potter's control, in the interaction between the living forces of clay and fire that may exercise mysterious wills of their own", (Slivka, 2010, p. 527). Some accidents that occurred during the creative process of this project have been considered as "happy" (fig. 10). In order to judge an accident or surprise to be attributed as happy/successful the following criteria was identified 1) leading to a new method or idea, 2) gives a solution to an existing problem, 3) enhance the aesthetic features, 4) bring originality to the work. These accidents were recorded or used to develop and inform the creative practice, starting or being completed by a failure or 'happy accident'. As shown in [fig. 10 (a)] an accident happened during firing when a piece of porcelain was bent, then paper porcelain pieces were fired deliberately to achieve a natural curve. Allowing the material to create its own final shape and to level up the flat 2D pattern to a 3D piece introducing movement. The piece in [fig. 11 (b)] was an accident when pulling the clay from the plaster slab. This happy accident with unclear grid was linked to the absent of the palace's reflection on water during the visit during a rainy day in Alhambra Place. In contrast the piece in [fig.11 (a)] resembles the reflection on water in a sunny day with a calm wave and clear pattern and grid (see fig. 2).



Figure 10. Some happy accidents of bent ceramics pieces during firing, 2021-22, photo (a) by: Zelal Basodan, photos (b & c) by: Phil Wilson.

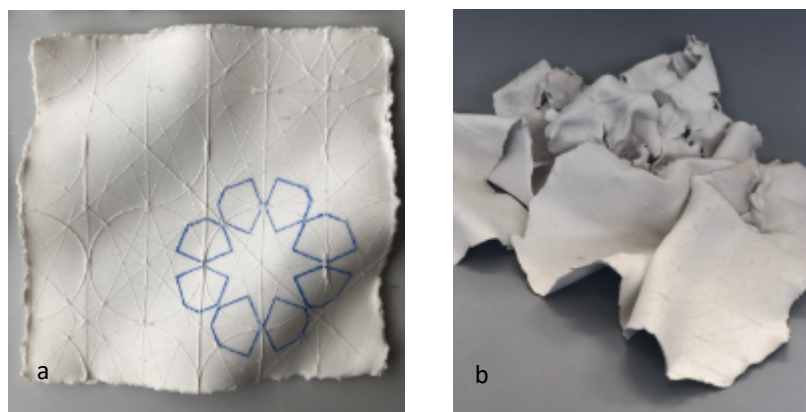


Figure 11. Reflecting and linking experience from the field trip with the creative practice, 2021, Photo by: Zelal Basodan.

Another exploration was to exploit the possibility of making a hand-built 3D geometric tile, starting from paper folded geometry, following Adam Williamson's instructions. Earthenware clay and paper porcelain slips were used. Then the grid was engraved using a laser cutter on the fired paper porcelain, resulting in unexpected glazed lines (fig. 12). This experiment was taken further by testing

the application of the laser cutter on different clay types such as earthenware, stoneware and terracotta, resulting in various sheen affects [fig. 13(a)]. All tests of lines and text got a unique result mainly as a glaze or metallic effect (fig. 13). The most glazed sheen appeared clearly on fired paper porcelain, and the most interesting discovery was on the fired terracotta engraving black glazed lines [fig. 12 & 13 (b)]. These fine lines can be seen more clearly when holding and moving the piece and reflecting with the direct light, which adds another layer of a relationship between the piece and the viewer.

This novel result is not only beneficial to be utilised in the artistic practice of current doctoral research, but also it can be a new method to be used by other practitioners and industry. This is because this technique causes permanent lines, drawing or writing which can be applied on the unglazed fired ceramic objects, this will not fade compared to the application of paints or pigments. This innovative discovery has great potential to influence various disciplines because of its durability and adaptability to the design of small size and larger size functional and decorative products. This latest finding shows the potential impact of artistic research at cultural and economic level.

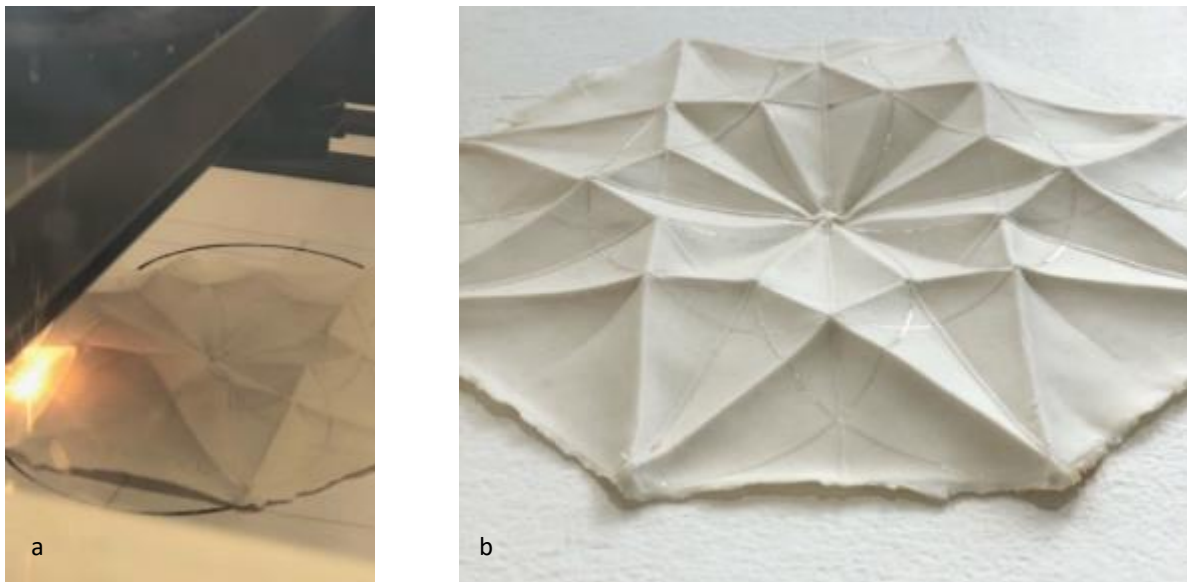


Figure 12. 3D geometric pattern based on paper folding, paper clay porcelain, unglazed(1260°C), (a) applying laser cutter to draw the grid, (b) circle grid by laser cutter surprisingly showing glazed sheen, 2022, Photos by: Zelal Basodan.

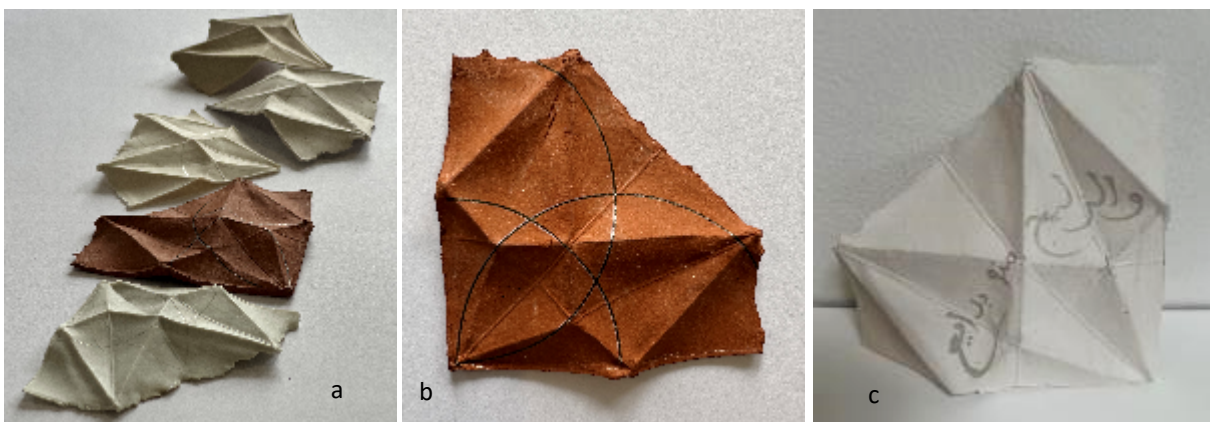


Figure 13. (a) tests of different clay types by applying laser cutter to draw the grid showing different glazed sheen, (b) result of engraving lines by laser on fired terracotta showing black glazed lines, (c) result of engraving Arabic text by laser on fired earthenware showing light metallic text, 2023, Photos by: Zelal Basodan.

## 6. Conclusion

In the few years since the current practice-based research began, theoretical and practical investigations have been conducted. Various methods have been followed in gathering data including a field trip and curating an exhibition to contribute to the emerging field of Islamic Studio Ceramics. Due to the identified lack of contemporary studio ceramic practice inspired by Islamic cultural heritage. Alhambra Palace was chosen as a source of inspiration due to its cultural heritage significance and its aesthetic excellence. Artistic ceramics became the elected vehicle in adapting traditional concepts, patterns and methods alongside new digital methods in the current artistic project. Accordingly, there is a need to revisit more Islamic cultural heritage context and adapt it by contemporary ceramics artists. Furthermore, it has been discovered that when engraving on an unglazed fired ceramic object a glazed or metallic permanent line will appear. This innovative finding identifies a new method that can be applied by practitioners or designers and influences the creative industry in the production of new products. It has concluded that this study should therefore be of value to practitioners not only from the field of Islamic Art, but also from the field of ceramics, and provides an impact that goes beyond these fields.

## References

- Abdullahi, Y., & Embi, M. R. Bin. (2013). Evolution of Islamic geometric patterns. *Frontiers of Architectural Research*, 2(2), 243–251. <https://doi.org/10.1016/J.FOAR.2013.03.002>
- Bush, O. (2008). A Poem is a Robe and a Castle : Inscribing Verses on Textiles and Architecture in the Alhambra. *Textile Society of America Symposium 11th Biennial*. Lincoln: University of Nebraska.
- Canclini, N. G. (2015). Hybridity. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (pp. 448–452). <https://doi.org/10.1016/B978-0-08-097086-8.12091-4>
- Candy, L. (2020). *The Creative Reflective Practitioner* (First). Oxon, New York: Routledge.
- Carey, M. and others. (2012). *An illustrated history of Islamic art & design* (H. Sudell, ed.). Wigston: Southwater.
- Caruncho, D. R. (2018). *Tilework in the Alhambra of Granada*. Barcelona: Dos De Arte Ediciones.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design; Qualitative, Quantitative & Mixed Methods Approaches* (Fifth). Los Angeles: SAGE Publications, Inc.
- De Guise, L. (2008). *Beyond Orientalism; How the West was Won over by Islamic Art* (Z. Ahmad, ed.). Malasya: Islamic Arts Museum Malaysia.
- Eggleton, L. (2012). History in the making : the ornament of the Alhambra and the past-facing present. *Journal of Art Historiography*, 1(6), 1–29.
- Eggleton, L. (2013). “A Living Ruin”: Palace, city, and landscape in nineteenth-century travel descriptions of Granada. *Architectural Theory Review*, 18(3), 372–387. <https://doi.org/10.1080/13264826.2013.875612>
- El-Gamal, M. (2004). *Los Palacios De La Alhambra: Diwan De La Arquitectura Y Las Inscripciones Arabes* (Arabic). Alexandra: Bibliotheca Alexandrina.
- Fernández-Puertas, A. (1997). The Three Great Sultans of al-Dawla al-Ismāʿīliyya al-Naṣriyya Who Built the Fourteenth-Century Alhambra: Ismāʿīl I, Yūsuf I, Muḥammad V (713-793/1314-1391). *Journal of the Royal Asiatic Society*, 7(1), 1–25. Retrieved from <https://about.jstor.org/terms>
- Gray, C., & Malins, J. (2004). *Visualizing Research*. Aldershot: Ashgate Publishing Limited.
- Greenhalgh, P. (2022). *Ceramic Art and Civilisations* (First). Ondon, New York, Dublin: Bloomsbury Visual Arts.
- Hanash, I. M. (2017). *The Theory of Islamic Art Aesthetic Concept*. London, Washington: The International Institute of Islamic Thought.
- Inglod, T. (2013). *Making* (First). Abingdon: Routledge.

- Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture* (first). Abingdon, New York: Routledge.
- Irwin, R. (1997). *Islamic Art* (T. Barringer, ed.). London: Laurence King Publishing.
- Jones, O. (1988). *The Grammar of Ornament*. London: Studio Editions.
- Leader, E. (2010). Materializing Craft: Evaluating the Effects of Experiencing Actual Materials during the Design Process. *Design Principles and Practices: An International Journal*, 4(4).
- Levinson, J. (1984). Hybrid Art Forms. *The Journal of Aesthetic Education*, 18(4), 5–13. Retrieved from <https://www.jstor.org/stable/3332623>
- Moustafa, N. (2008). *Essence of the Alhambra, a phenomenological account of the Nasrid palaces through the lens of twelfth century Andalusian Islamic philosophy*. UCL (University College London).
- National Gallery of Art, W. (2005). *Islamic Art and Culture: A Resource for Teachers*.
- Rosser-Owen, M. (2014). *Islamic Arts from Spain*. London: V&A Publishing.
- Schön, D. A. (2008). *The Reflective Practitioner : How Professionals Think In Action*. Retrieved from <https://ebookcentral.proquest.com/lib/lboro/reader.action?docID=1113868&ppg=87>
- Slivka, R. (2010). The New Ceramic Presence. In G. Adamson (Ed.), *The Craft Reader* (First, pp. 525–533). Oxford, New York: Berg Publishers.
- Vela, M. M. (2018). *The Alhambra With a Ruler and Compass* (Secons). Spain: Editorial Almuzate.
- Vilchez, J. M. P. (2011). *Reading The Alhambra: A Visual Guide to the Alhambra through its Inscriptions* (First). The Alhambra and Generalife Trust and EDILUX s.l.

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