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**Achieving The Unity Of Work As A Collection Value  
Using Arabic Calligraphy On The Surfaces Of  
Ceramic Vessels And Its Relation To The Form Of  
The Vessel To Which It Is Added.**

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## Achieving The Unity Of Work As A Collection Value Using Arabic Calligraphy On The Surfaces Of Ceramic Vessels And Its Relation To The Form Of The Vessel To Which It Is Added.

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### Abstract

The present research employs Arabic calligraphy aesthetically to add a combination of qualities, such as form, colour, and shape, which pleases the aesthetic senses, especially sight and splendour, to sculpture artworks. As one of the design elements, Arabic calligraphy has become a fascinating field of artistic sculpture. Arabic calligraphy reveals the inspiration for creativity and innovation. The contribution of forming the ceramic clay decorated with calligraphy on the surfaces of different shapes of vessels by applying the production technology processing of raw materials, forming, and surface treatment methods on the students of the ceramic department has been discussed. On the other hand, the materials of earthenware, stoneware, porcelains, and stone paste bodies are summarised—the approaches to determining how pottery vessels were used in antiquity five axes. Finally, future developments in ceramic studies are briefly considered.

**Keywords:** Ceramic clay, Arabic calligraphy, Earthenware, Stoneware, Porcelains

### المخلص

يستخدم البحث الحالي الخط العربي جمالياً لإضافة مجموعة من الصفات، مثل الشكل واللون، والتي ترضي الحواس الجمالية، وخاصة البصر والروعة، إلى أعمال النحت الفنية. وباعتباره أحد عناصر التصميم، أصبح الخط العربي مجالاً رائعاً للنحت الفني. يكشف الخط العربي عن مصدر إلهام للإبداع والابتكار. تمت مناقشة مساهمة تشكيل الطين الخزفي المزخرف بالخط على أسطح أشكال مختلفة من الأواني من خلال تطبيق تكنولوجيا الإنتاج ومعالجة المواد الخام وطرق التشكيل والمعالجة السطحية على طلاء قسم الخزف. من ناحية أخرى، تم تلخيص مواد الفخار والحجر والخزف وأجسام عجينة الحجر - الطرق لتحديد كيفية استخدام الأواني الفخارية في العصور القديمة من خمسة محاور. أخيراً، تم النظر بإيجاز في التطورات المستقبلية في دراسات الخزف.

**الكلمات المفتاحية:** طين السيراميك، الخط العربي، الفخار، الحجر، الخزف

### Introduction

Ceramics are an eyewitness to Arabic history and represents humanity's continuing creativity. At the heart of this art is clay, a modest material moulded into practical objects, pleasing the senses and mind aesthetically creations for thousands of years. From ancient times to today, ceramics reflect our culture and technology and are still relevant through

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standardisation, specialisation, learning, and continually keeping traditions alive. This article takes on a journey through ceramics, exploring its multifaceted part in human history. We reach inside a receptacle, search into the remarkable process of crafting ceramics from raw clay, and investigate how various societies organise their production. The importance of standardisation, specialisation, and the formation of communities of practice in the ceramic industry is elucidated, displaying how these elements have been fundamental in forming this art. The written letters and words gained unparalleled significance when Islam was revealed to the Arabian Peninsula. The Prophet Muhammad's trusted companions and followers combine the heavenly revelations from written and oral sources, assembling them into a manuscript known as the Qur'an, Islam's holiest book. Since these revelations were transported to the Prophet Muhammad in Arabic, Muslims view the Qur'an in its Arabic letters as the physical embodiment of God's message; therefore, copying text from the Qur'an is thus considered an act of enthusiasm. The connection between the Arabic language and Islam elevated it to the Islamic world's lingua franca or common language. The organic link of the Arabic language to Islam elevated it to the Islamic world's lingua franca or common language. The text form of the Qur'an was codified under the Caliph 'Uthman ibn' Affan (reigned 644–56).

#### **Research Problem**

1. Ceramic Art is intricately linked to the aesthetics of popular heritage. It is one of the fundamental forms of human activity, especially during the Islamic and Caliphate eras. Its significance lies in being a crucial factor shaping the various cultures of Arabic calligraphy, which in turn alters and transforms nature to fulfil the evolving needs of Arab civilisation based on their social conditions and development.
2. Ceramics remain the central artefact type in almost all branches of archaeology in the Islamic empire, resulting from excavation and field-walking surface surveys.
3. These activities yield prodigious quantities of pottery every year. This material receives study along traditional lines, describing its context, date, shape, and function.
4. Pottery typologies have become increasingly sophisticated and specific to time and place.
5. One aspect of looking at the new while keeping the old in mind is diversification of the nature of the enquiry.

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### **Research Significance**

The importance of the research was evident in shedding light on the contemporary works of sculptures from Arab countries, which were inspired by the expressions associated with popular heritage and its use in:

Department and College of Fine Arts.

- (1) Through this importance, the research will meet some needs, the most important of which is that it will help encourage more researchers working in artistic and cultural institutions
- (2) Conduct studies on artists' sculptures to benefit art students and those interested in contemporary fine art in the Arab world.

### **Research objective:**

1. The research explores the use of Arabic calligraphy and its letters in bas-relief and relief sculpture techniques.
2. It aims to establish a formative connection between the surface of ceramic vessels and the added lines and letters, as well as the overall shape of the vessel.
3. It seeks to achieve cohesive unity within the artwork, enriching the field of ceramics with artistic value that enhances art education.

### **Research Limit**

1. The research was limited to studying the diversity of popular expressions in Arabic calligraphy and their representations in contemporary drawings from the Arabic letter.
2. Its goal was to achieve the unity of work as a collection value using Arabic calligraphy on the surfaces of ceramic vessels and its relation to the form of the vessel to which it is added.
3. The research applied to the Ceramics course level 2 students.

### **Methodology**

1. Contemporary artistic solutions can be developed through Arabic calligraphy as a plastic art with elements and components.
2. The forming on a vessel can be part of the art of sculpture, assisted by the Arabic letters on the clay crafts, meaning that the letters might be forms.
3. Utilising Calligraphy as one of the most important elements of composition due to its complete characteristics.
4. Calligraphy allows clay vessels to express movement and mass, which is an important aspect of employing the Arabic letter in a modern visual achievement.

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**Research axes:**

- 1- The relationship between the whole and the part (Gestalt theory).
- 2- Analysis of some types of Arabic calligraphy that can constitute an artistic value by using them on ceramic surfaces.
- 3- The extent of the connection between sculpture (relief-relief) and Arabic calligraphy.
- 4- Arabic calligraphy in the works of Kuwaiti artists.
- 5- The importance of Arabic calligraphy (free) as a creative form that can be used in applying the research experiment.

**Literature review**

Arabic calligraphy, derived from the Greek words kallos (beauty) and graphos (writing), embodies the harmonious proportion of letters within a word and the arrangement of words on a page. Although some of the finest examples of calligraphic writing may seem effortless, each letter and diacritical mark is the product of meticulous measurements and numerous strokes[1].

Calligraphy appears on religious and secular objects in virtually every medium—architecture, paper, ceramics, carpets, glass, jewellery, woodcarving, and metalwork.

Focusing on the object of decoration, the two approaches help us understand how decoration goes beyond visual attraction to signify crucial information about the object — its use, maker, patron, time, and place of production. The use of different types of script is influenced by a range of factors, such as audience, content of the text, and the form and use of the object(s) containing the script. Elegant and fluid scripts, such as nasta'liq, are used for poetry. Qur'an manuscripts are reported in bold and stately scripts. Royal correspondence utilised complex scripts that were difficult to forge. Although exceptions exist, most scripts have several specific functions. Although exceptions exist, most scripts have several specific functions, as shown in (Figures. 1&2&3).

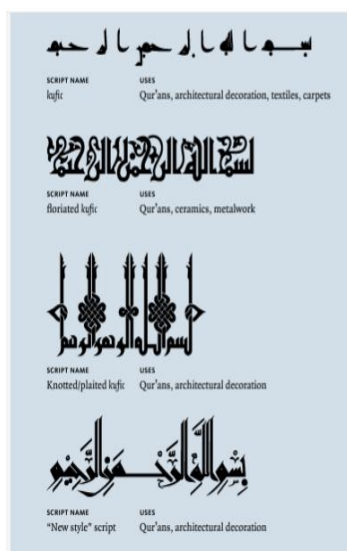


Figure (1)

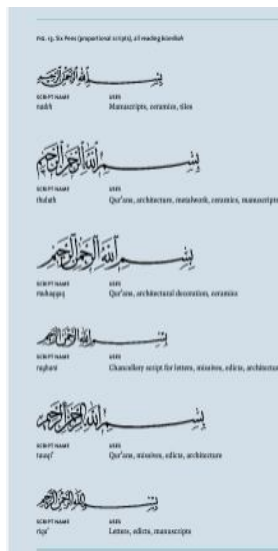


Figure (2)

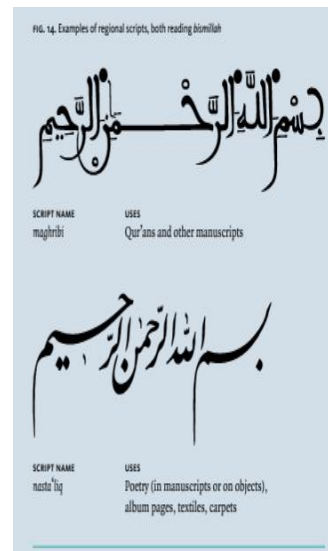


Figure (3)

### Calligraphers and their tools

Calligraphers are highly esteemed artists in Islamic culture. The art of calligraphy has traditionally been transmitted from master to student, often within the same family. Most calligraphers were well educated, and many hailed from the upper echelons of society. Today, this art form is widely practiced by both men and women. The quality of the product is influenced by the tools and materials used. Calligraphers learn how to prepare their pens, inks, and paper. The pens, known as qalam, were commonly made from reeds due to their flexibility. Before the introduction of paper from China around the eighth century, manuscripts were typically written on papyrus or parchment (animal skin). Given the high status of calligraphy as an art form, its tools—such as shears, knives, inkwells, and pen boxes—were often elaborately decorated and sometimes crafted from precious materials. Additionally, calligraphy was frequently inscribed on plates. [2].

A ceramic vessel of this quality served as a visual indicator of wealth and status. In addition to its function as a bowl, it also provided insights into the values and customs of the society in which it was created. The proverbs featured in the calligraphic decoration on bowls are powerful tools for understanding those societal values and mores.

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This vessel is manufactured in the local earthenware, coated with whiten semifluid clay, which offers a smooth surface and uniform background for decoration.



**Figure (4)**

Bowl with Arabic Proverbs from the late 10th to 11th century. This large bowl is decorated with a calligraphic design that reads, as shown in Figure (4).

“Forbearance is at first bitter to the taste but at the end sweeter than honey. Blessing.” Arabic proverbs appearing on slip-painted ware from Nishapur and Samarqand often reference the period's social codes and moral etiquette, which strongly emphasis hospitality and generosity and sometimes allude to their use as functional objects. This bowl’s red earthenware body was covered in white slip and decorated with motifs found on metal objects from the period, late 10th–11th century including the stippled ground.

**Bowl with Arabic Proverb.**

Earthenware: characterised by a white slip adorned with polychrome slip decoration beneath a transparent glaze. It is likely made in present-day Uzbekistan, specifically Samarqand. Ceramics. The bowl's interior is encircled by striking brownish-black inscriptions that create a vivid contrast. The text of extended letters radiates towards the center, establishing a harmonious relationship between the vessel's shape and its surface decoration. Crafted in a “new style” script, the letters display angular shapes and slender vertical shafts. This “new style” script was predominantly utilised in eastern Islamic regions for Qur’ans, architectural embellishments, and ceramic pieces.

**Context**

The vessel was produced in Nishapur, northeastern Iran, in the tenth century. The bowl is related to a larger group that includes some of the oldest records of proverbs and adages in the Islamic world.[3]

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With its delicate spiralling root manufactured, this small vessel is related to a group of ceramics formerly called "Golden Horn" wares. Current scholarship, however, prefers the term *tughrakes*—or "tughra-illuminator" style—for such decoration, comparing its design to the delicate swirling vines adorning tughra calligraphies. During this period, pottery shapes often-imitated metalwork forms. This piece, however, emulates glass mosque lamps, which frequently displayed Arabic inscriptions.



**Figure (5)**



**Figure (6)**



**Figure (7)**

Figure (5) Glass mosque lamps with enamel decoration were mainly made during the Mameluke period in Egypt or Syria and were presented by Mameluke sultans as gifts to Cairo mosques.[3]

Figure (6). A large mosque comprises a relatively stocky, globular body with an upper part shaped like a funnel. Three rounded handles, abstract renditions of snake dragons, are fixed onto the lamp's shoulder and used to attach chains or cords to hang the light.

Figure (7). A bulbous-shaped lamp made from stone-paste ceramic with a flared rim, typical of glass mosque lamps produced during the Mameluke period.[4]

The existing words on this vessel indicated the following proverb: "Planning before work protects you from regret; good luck and well-being"—a typical warning about the careful planning needed to ensure the text fits appropriately around the bowl's perimeter. It is known that such ceramics were not made for royal patrons but for members of an affluent urban class.



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## Terminology

### Clay

Clay is a natural material characterised by its plasticity when wet and hardness when fired. Composed predominantly of fine particles of hydrous aluminum silicates and other minerals, clay is a fundamental resource in producing bricks, tiles, and pottery.

### Pottery

Pottery refers to the process and products of shaping vessels and other objects using clay and various raw materials, which are then fired at high temperatures to achieve a hard and durable form.

Types of clay [5]

The four types of clay are

- (1) Earthenware, (2) stoneware, (3) ball (4) porcelain. Each type can be used for pottery, but the results vary significantly due to their distinct textures, colours, and flexibilities.

Numerous types of clay are on the market for different skill levels and applications so that no single type can be used for all purposes. Therefore, you may wish to choose the appropriate types of clay to avoid wasting time and money on the wrong clay. Understanding these different clays can help you choose the ideal clay for your pottery project as shown in figures (8 to 11).



**Figure (8)**



**Figure (9)**



**Figure (10)**



**Figure (11)**

Figure (8) Earthenware clay or (terracotta clay).

Figure (9) Stoneware clay is relatively plastic, dense, and nonporous

Figure (10) Ball clay is a raw material generally in powdered form.

Figure (11) Porcelain is an incredibly popular style.

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These clays are divided into main specific categories based on the firing temperature at which they mature and the qualities each clay body produces [6].

- **Earthenware** clays are the oldest ones used by potters and the most popular nowadays. They are lightweight and beginner-friendly. Different varieties of clay are mined depending on the soil composition, the region, and the local climate. Terracotta is the most common earthenware clay used to produce plant pots and other items. Earthenware is one of the most common types of clay used by beginner potters. It is commonly used for outdoor pottery, including ornaments for plants, gardens, and other ornaments.
- **Porcelain** dinnerware and plates are of the highest quality. Often, Porcelain is used to make toilets and baths, but now you may be familiar with knickknacks, Figurines, and collectables. Therefore, Porcelain is also utilised for far more purposes than utilitarian ones. There is a magnificent legacy of traditional tea ceremonies in Japanese ceramics, where Porcelain is used to craft the pots and cups used in ceremonies.
- **Stoneware** is quite resilient and is ideal for practical pottery, such as cooking, baking, and holding liquids, as it is less porous than other clays. It can endure heat and other factors, making it safe for use in the oven, microwave, and similar applications. Stoneware is extensively used for hand building and wheel throwing. It is generally less porous and more durable than porcelain and earthenware.

In the Indus Valley, which encompasses present-day Pakistan and northern India, the production of stoneware was prevalent. This type of clay eventually made its way north to China, where artisans created some of the most renowned ancient stoneware pieces during the Han Dynasty. Most potters use ball clay because it produces a white finish after firing. However, when fired at around 1,290°C, ball clays become brittle and shrink substantially during the burning process, which is a considerable downside.

- **Ball clays** contain very few impurities but are the most plastic clay. They contain a high proportion of kaolinite, quartz, and between 10% and 25% mica. Ball clays occur naturally as very fine mineral-rich sediments or deposits. Lignite can also be found in ball clays. Lignite can also be used in any typical ceramic application, such as mugs, plates, and similar items.

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Pottery making ranks as one of Islamic civilisation's most outstanding artistic achievements. Some of the finest wares ever made were produced for over a thousand years in the vast Islamic world, extending from Spain to the borders of China. Muslim potters, displaying an innovative sense of design and colour, created a delightful variety of shapes and a luxuriant but subtle palette of "natural" hues - deep blues and turquoises, copper greens, aborigines and earth reds.

They decorated their wares with extraordinary richness, employing skillful variations of stylised plants, geometric patterns, and calligraphic motifs.

Figure imagery, less frequently seen on Islamic objects, often provides important information about the styles and customs of the period.

In their technical accomplishments, Islamic artisans have mastered new techniques. Potters gained control over their medium to the extent that they often enveloped their pieces in more than one glaze by using a multiple-firing process. Lustre-decorated objects, much admired and imitated in Europe as early as the fifteenth century, had an impact that can be seen in ceramics made in the United States today.



**Figure (12)**



**Figure (13)**

Figure (12) Unglazed vessels were popular because liquids stored in them were kept cool by the evaporation through their porous walls. This example bears motifs drawn from or inspired by pre-Islamic Eastern motifs: a long-horned quadruped with a large-tailed bird on either side of a "tree of life."

Figure (13). This panel, one of a group of six Syrian tiles bearing a bold moulded calligraphic design, exhibits a decorative technique practiced in early Islamic times. It represents a type of ware with moulded designs

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prevalent in the central Islamic lands during the late twelfth and early thirteenth centuries. [7]

Baroda (2023)[8 ] reported that clay is a Transformative Medium. At the heart of ceramics lies clay, a versatile and abundant natural resource that has shaped human civilisation for millennia. This remarkable material begins as humble earth, extracted from riverbanks, quarries, or clay pits. Once sourced, it undergoes a meticulous preparation process, by which impurities are removed, and the clay is kneaded to achieve the desired consistency.[9A&9B].

Ceramics are used in various industries due to their essential properties. Aerospace engineers use ceramics for their notable heat resistance and lightweight characteristics. For example, the heat-resistant ceramic tiles on the Space Shuttle's underside protected it during re-entry into Earth's atmosphere, highlighting ceramics' crucial role in modern space exploration.[9C]

True Porcelain was developed in China in the 9th century and is refined stoneware. It is often delicate with fragile walls – so thin that you can see light through them – yet hardwearing and tough. Its development was due to an aesthetic search to find a substance that was as hard and cold as jade and yet gave a ringing tone when struck, like bronze. True Porcelain is made from a mixture of the mineral feldspar and kaolin, a type of clay, and fired to a very high temperature (1400°), which vitrifies (melts), it into an almost glass-like state. It was exported to Europe from the 1500s onwards and was hugely different to the coarse earthenware that made up European pottery then; this stuff was incomparable (that thing your 3-year-old made using Playdoh versus the finest China).



**Figure (14)**



**Figure (15)**

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Figure (14). The genuine late 17th/early 18th century Chinese porcelain.

Figure (15). A modern Spode porcelain teacup and saucer

TITE (2008)[11] reported that Porcelains are similarly made from refractory clays, fired to even higher temperatures, and have vitrified, hard, low-porosity bodies. Compared to stoneware bodies, which tend to be grey to green in colour, porcelain bodies are white and, because of more excellent verification, are sometimes translucent.

Gliozzo et al. (2004). [12] highlighted that, in the realm of ceramic surface treatments, several studies examining high-gloss surface finishes on Greek Attic black- and red-figured ware, Campanian black-coated ware, and Roman terra sigillata pottery have been published in *Archaeometry*. Through scanning electron microscopy (SEM), electron microprobe analysis, and X-ray diffraction (XRD), it was demonstrated that a three-stage firing cycle—comprising oxidising, reducing, and oxidising phases—was employed in the production of both Greek Attic and Campanian wares. The high-gloss coating was achieved in both instances by applying a fine-textured, non-calcareous clay slip containing approximately 15% iron oxide to a coarser-textured clay body. After firing to the reducing stage, the resulting black coating comprised fine particles of hercynite and magnetite embedded in an impermeable, well-vitrified matrix, while the underlying body remained porous. De Benedetto et al. (2004)[13] provide information on the production technology of high-lead glazes, which involves the application of a suspension of a lead compound, either by itself or by a mixture of a lead compound with silica for the Byzantine period. The use of lead glazes in antiquity, the principal advantages of high lead over alkali-lime glazes are easier preparation and application of the glaze suspension due to the insolubility of lead oxide, the reduced risk of crazing due to the lower thermal expansion of a lead glaze and the excellent optical brilliance.

Paynter et al. (2001). [14A] indicated that the surface treatments of pottery vessels, which serve both as a means of reducing their permeability to liquids and decoration, include burnishing and the application of mineral pigments, a slip or a glaze. The introduction of scanning electron microscopy (SEM) with attached analytical facilities to examine ancient ceramics during the 1970s provided a powerful technique for investigating these surface treatments. Thus, the SEM examination of a polished section through the surface and body of a pottery sherd, burnishing, and applying a slip, both of which can produce a high-gloss surface finish, can be readily distinguished [14B].

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According to Tenconi (2013)[15] and Martin (2018)[16], each vessel produced by the potter results from a series of decisions concerning the available raw materials, tools, forms of energy and required skills. Therefore, for every pot, there are various results based on those choices of various techniques. Therefore, as archaeologists of earlier technologies, we are concerned to clarify how these technologies worked and how they were found in a larger cultural framework. The most potent means of doing this is to remanufacture the production process, explore each stage in the operational chain, and subject to scrutiny our decisions on deploying particular techniques [17&18].

### **Experimental work**

Artists' creative works of ceramic artwork within the bounds of popular heritage represent the product of interaction with the temporal succession upon it. These creative works are produced from the regular interaction between the creator's sensibilities and imagination on the one hand and the causes and influences of those interactions on the other hand. The reasons for stimulating their innovative and creative thinking are formed from this.

The following artistic artwork is carefully selected from the implemented student applications, which show the aesthetic use of Arabic calligraphy. The final work shows how to benefit from the combination of Arabic calligraphy and sculpture artwork in a formative way in doing a sculpture project conducted with different spaces and varied shapes, where each student implemented his wooden projects with different artistic treatments, benefiting from Arabic calligraphy and employing it aesthetically and formatively as an innovative lighting unit.



**Figure (16)**



**Figure (17)**

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Figure (16).It represents the aesthetics of Arabic calligraphy letters for a design by one of the students in the Ceramics 2 course, using the letter Alif and Arabic dots in the ceramic design.

Figure (17). A picture showing the design of the letter "Ha" in Arabic calligraphy, designed by one of the students in the ceramics course.



**Figure (18)**

Figure (18) A picture showing the work of one of the students in the Ceramics 1 course, where the Kufic script formation represents the phrase "Glory be to God."



**Figure (19)**

Figure (19).A picture showing a ceramic work by one of the students to design a geometric shape and wrote on it: In the name of God, the Most Gracious, the Most Merciful.



**Figure (20)**

Figure (20). A picture showing a ceramic vase that expresses the use of the letter "Ha" in Arabic calligraphy and its formation as an aesthetic and artistic aspect.



**Figure (21)**

Figure (21). A picture showing a ceramic work that used Arabic calligraphy for the phrase "Ya Kareem"



**Figure (22)**



**Figure (23)**



**Figure (24)**



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Figure (23).A picture showing a ceramic work by one of the students in the Ceramics 2 course. The design shows the use of the aesthetics of Arabic calligraphy and its decoration, as well as the use of Kufic script on the ceramic work for the phrase “There is no god but God.”

Figure (24).A picture showing a ceramic work by one of the students in the Ceramics 2 course. The design shows the aesthetics of Arabic calligraphy and the decoration of the letter Ha.

Figure (25).A picture showing a ceramic work by one of the students in the Ceramics 2 course. The design shows the aesthetics of Arabic calligraphy and its decoration on the letter Nun.



**Figure (25)**

Figure (25). A picture showing a ceramic work by one of the students in the Ceramics 2 course. The design shows the use of the aesthetics of Arabic calligraphy and its decoration on the ceramic work for the phrase “Do not be sad. God is with us.

### **Discussion**

The study reached a set of results after implementing the sculpture artworks for the sample of students of different sizes and forms through which the students were able to achieve the goal of the research; the results they reached:

1. Current research focuses on the aesthetic employment of Arabic calligraphy to enhance the beauty and splendour of vessel clay works.
2. The Arabic letter is an element that can be developed and updated.

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3. Arabic calligraphy could reach the concepts and expressions of formation to shape the surfaces of the clay vessels and their contours with contemporary sculpture crafts.
  4. Arabic calligraphy as an aesthetic form can lead to new and diverse structural treatments and solutions, as it has become a rich structural source with diverse dimensions in its structural content.
  5. The various forms of Arabic calligraphy and its diversity are constructed as elements in modern art.
  6. The geometric components of Arabic calligraphy include flexibility and the possibility of adapting, creating it successfully.
  7. Since Arabic calligraphy is one of the essential elements of the living and emerging heritage of Arab civilization, its development and usability are crucial to sustaining the Arab heritage.
  8. The sculpture artwork executed with Arabic calligraphy is distinguished by its formative richness due to its potentiality between the elements of repetition, superposition and diversity in artistic treatments.
  9. Arabic calligraphy is a decorative art with elements and components that can create new contemporary decorative meanings in the implementation of sculpture and clay works.
  10. Types of Arabic calligraphy can also be part of the decorative motif.
  11. The letters could be complementary forms of the clay artwork.

### **Conclusion**

From clay to culture, ceramics have stood the test of time, reflecting the essence of human ingenuity and creativity. The journey of ceramics from its humble beginnings to its pivotal role in ancient societies and its enduring importance in modern times serves as a testament to its timeless appeal. As we appreciate and utilise ceramics in the present, we honour a heritage that binds us to our ancestors, a testament to the enduring power of human craftsmanship, innovation, and tradition. The ceramics story is a historical account and a vibrant narrative that continues to shape our world.

### **Recommendations:**

1. Adopting the teaching of intellectual and artistic developments in Arabic calligraphy.
2. Arabic calligraphy must be considered a source of great heritage values, considering the factors of experimentation and discoveries.
3. Encouraging research and studies to pay attention to everything new in Arabic calligraphy as an artistic heritage that can be benefited from may enrich the various fields of plastic arts.

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