

Ceramics at the Convergence of Art and Culture

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Abstract: The materiality of ceramics has emerged as a new frontier in the academic discourse because of its versatility in both traditional and modern use. Clay has been known for its resistance to corrosion and environmental conditions, and their ability to withstand high temperatures accounts for reasons why it became a point of reference for archeological research and in the study of the history of human evolution and civilization across time. The subject of the research is to determine the complex relationship existing amongst ceramics, art, and culture. It further discusses the means through which ceramics can be used via history to reflect cultural values and traditions. Additionally, the paper explores the emergence of contemporary artists and how they have used ceramics to interrogate established cultural norms by pushing boundaries with fresh perspectives and practices while simultaneously creating new meanings and interpretations. It also investigates the complex relationship amongst the three elements mentioned earlier and how these elements have contributed to the evolution of the world's art. Historical analysis and case study research was used in unfolding the intricacy of ceramics as a discipline and how it has facilitated modern art practice and its relationship with historical studies. Secondary data was effectively used for the research. The research findings show that the method and techniques of ceramics production cut across all world civilizations, and its significance in materiality cannot be over-emphasized.

Keywords: Arts and Culture, Archaeology, Ceramic Intersections, Contemporary Ceramic Artists, Cultural Appropriation & Revival, Clay Materiality, and Material Culture.

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INTRODUCTION

Culture has been considered one of the most significant ways to categorize human beings, and it is also the oldest method of differentiating between different groups of people. Culture provides insights into the lives of individuals and how they have developed in their respective cultural environments; as such, understanding culture requires more than just understanding language differences; it also involves knowledge, perception, beliefs, attitudes, and behaviors (Pappas & Mckelvie, 2022; LaMorte, 2016). Cultures from across the globe have

transformed in all sorts of ways. The relationship between art and culture in human society has been a complex issue from ancient to present civilization due to their close links to one another. "Culture is often described as the way of life passed from one generation to the next, including institutions, beliefs and the arts." It encompasses codes of manners, dress, shelter, language, religion, rituals, artistic practices, and norms of behavior such as morality and systems of beliefs. Culture is also a large and varied set of predominantly intangible aspects of social life (Cole, 2024; LaMorte, 2016). In this way, Cole (2024)

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clarifies that material culture, which comprises objects both created and used by humans, is part of society. These cultural elements can be anything from architecture and technology to movies and various visual or performing arts.

The history of culture is rooted in the theory of classical French sociologist Emile Durkheim, who reflects that material and non-material aspects of culture are valuable in holding society together. As such, these values, beliefs, morals, communications, and practices shared, provides purpose and collective identity. Durkheim reveals that when people come together to participate in religious and ritual activities, they are reaffirming the culture they hold in common which indirectly strengthens the social ties that binds them together, (Cole, 2024; Luce, 2017). There are elements of art in every culture and these elements are the pillars and spear heads that build the culture and identity of the society. Any society that has achieved culture, has spontaneously, already begotten art from inception. Even primitive cultures that lack mythology or religion still have some artistic expressions that can be seen and studied in today's contemporary society - as can be seen in dance, song, design, and so on. History has been one of the most significant effects positioned to determine the sense of art in the communities in which the periods they lived in are brought to life through documentation. The experiences and senses felt are the products of the socio-cultural structure of the community, and it has played a fundamental role in the embodiment of the art throughout history (Onal, 2012).

The highest form of human existence and the most genuine documentation of knowledge across civilization is art. Cultural practices have been preserved throughout history thanks in large part to the work of historic artists. Art is still the most important source for reconstructing the past, even with oral tradition's shortcomings (Retna, 2023). Art serves for a diverse range of human activities in creating visual, auditory or performing artifacts, expressing the creator's imaginative, conceptual idea or technical skills that are intended to be appreciated for their beauty or emotional power (Mbahi & Adiwu, 2019). These researchers have argued that art is an individual means of expression, it is a source of beauty, communication, reflection, identity and immortality for a culture. There has been a conception that art imitates life as forms imitate art. The nature of art and its related concepts, such as creativity and its interpretation, are seldom explored in a branch of philosophy known as aesthetics. The philosophy of aesthetics has developed different definitions or analyses of what makes an object or even what constitutes a work of art. A different account of the meaning of art, including values and

the relationship of art to other domains serves as a reference point. In this setting, the term "aesthetic" is used to refer to experience, and it is customarily used to select emotive features which are present in what we term an artwork (Taliaferro, 2013; Iseminger, 2004; Beardsley, 1982; Danto, 1981). Despite the lack of a clear-cut definition of art, scholars have attempted to propose several suitable meanings and definitions for the word. Their historical experiences and general worldviews have led to divergent understandings of what constitutes art and how it should be defined.

Despite this, many of these definitions are somewhat related (Gushen & Nasidi, 2019). When discussing the role and essence of art, Areo (2009) argues that art is an expression of a people's philosophical, cultural, and religious worldview, and therefore, artists within that society are expected to express their understanding of their milieu.

Art can affect culture, these sensitive effects of art and imagination are what make a culture or cultural statement across different civilizations; thus, the environment is influenced by the socio, political, economic, and religious norms and modes of organization which together distinguish one group from another through their art (Mbahi & Adiwu, 2019). Additionally, the materials and approaches used in ceramic production often tell a story of geographical and cultural specificity. The types of clay, glazes, and firing techniques frequently dictate or indicate specific regions and the natural resources available to the artist or artisan environment (Ojie, 2002). Clay offers a unique palette for self-expression. One that invites artists and craftspeople alike to experiment with form, texture, and, yes, even the color wheel, to create pieces that stretch the boundaries of traditional ceramics and meld promiscuity with tradition. The notion of ceramic art as a living dialogue between the past and present is an ongoing conversation that shapes the contemporary art scene and cultural identity (Petersen, 2012).

The goal of the study is to promote knowledge of other cultures, their environments, and the ways in which they have historically reflected their religion, beliefs, and practices through ceramic mediums. Gaining a thorough understanding of the arts and culture represented through ceramics - which usually use clay and other necessary materials - requires this. Additionally, the study is important because it clarifies the role of folk-telling pottery as an art form and a way to express ideas. It illustrates the evolution of earthly elements like clay from aesthetically pleasing products to symbols of global cultural expressions and customs. The exploration suggests that ceramics can serve as a narrative

medium through which artists and artisans encode and decode societal values, historical periods, communal identities and the heritage which sets them apart from each other (Ojie & Onuzulike, 2010). The study of ceramics opens a panoramic window into the artistic and cultural practices of civilizations across time. This perspective emphasizes the medium's ability to combine artistry with cultural representation (Ojie & Onuzulike, 2009). This view highlights the focality of ceramic art not only in bridging cultural gaps but also in promoting a cross-cultural conversation that sheds light on shared human experiences in craftsmanship and aesthetic preferences and appreciation. These insights indicate that ceramics, with their varied techniques, forms, and decorative applications facilitates an unfathomable conversation that mediates individual and collective identities.

Historical Background of Ceramics across Cultures

The exploration of ceramics as a central point of intersection between art and culture offers a multiple perspective on socio-historical narratives which have been embedded within material culture of clay. The assertion transcends ceramics from merely being a functional utility, encapsulated in aesthetic principles and cultural values of historical epochs (Ozidede, 2024). The culture of clay renders the vibrant medium of artistic expression for cultural dialogue. The culture of clay is the emergence of a dynamic medium for creative conversation. The ceramic dialogue exposes differences in technique, form, and decoration are deeply intertwined with the cultural identities and creative expressions of diverse communities as cross-culture (Abamwa, 2002).

Research on pottery has lent understanding to the creative and ritualized efforts of civilizations across the period. However, these ideas conflict with how historians, linguists, anthropologists, and sociologists make sense of cultural dynamics (Butmann, 1999). Inspired by evolutionary biology, these domains present a distant model of reality rooted in the similarities and universality of human cultural behavior (Mesoudi *et al.*, 2006; Shennan, 2002; 2000). Ceramics serve as a convergence of art and culture through several dimensions (Ojie, 2002). Ceramics represent cultural heritage, embodying techniques, styles, movement and aesthetics knowledge that has been passed down through generations (Agberia, 2007), magnifying these objects to become a reflection of their cultural, economic, and environmental contexts of their origins. In many cultures, these ceramic objects have deep roots and veins that have intermingles with daily life, and rituals of the people, ranging from simple domestic wares to highly ceremonial or

religious artifacts. This integration into daily and ceremonial practices signifies the cultural importance of ceramics beyond their utility - acting as carriers of meaning, tradition, and identity (Hoeane & McGinn, 2021).

Archaeological studies indicate that ceramics developed over time in early civilizations. It travels from African terracotta deities and the earthenware of the Indus Valley, through the clear celadon of Korean functional wares and the colorful Talavera of Mexico, all the way to the Egyptian fiancé and the delicate porcelain of China and Europe. Each of these artifacts is a reflection of the society from which it was born. Now we are able to paint picture in understand how all these culture left their mark and shape the history of our relation with clay from ancient culture to modern civilization (Tsetlin, 2018). Ceramics is a study that is central to the development of archaeology as they are the most abundant type of artifacts to be unearthed in excavations of ancient sites. The ceramic materials have great archaeological significance since they survived in the ground when objects made of other materials did not. Despite their fragmentary state, they have substantial archeological value (Baker & Majewski, 2006). For this reason, ceramic fragments are extremely significant and essential tools for archeological research as we continue to trace our origins.

The earliest known ceramic evolved in Dolní Věstonice in the Czech Republic, dating back to around 20,000 BCE (Bozdemir & Gençyılmaz, 2023); hence, clay is thus intimately linked to the lives and stories of people, beginning one of the most remarkable human discoveries since the inception of civilization. Recent research in these fields suggests that prehistoric China may have been the first place where cooking with clay and ceramic materials was documented (Liu *et al.*, 2023; Matencio, 2020).

Pottery in ancient society were produced not merely for aesthetic purpose, as seen in Cybele figurines from the Anatolia (Kuzmin, 2013) but were performance based and deeply engraved in daily life and religious practice within societies like Africa showcasing the relationship between humans and clay, and humanity's ability to use clay as a vehicle for symbolic expression paving way for human inventions. These examples are a way of becoming familiar with technical and cultural development in ceramic production. In much the same way, in the Americas the pre-Columbian societies (e.g., the Moche of Peru) converted clay into worthy possessions (Speight & Toki, 2003; Pillsbury, 2001). They produced intricately detailed figurative pieces that were used in religious and social rites. Art and ceramics were also essential in the Islamic world and often displayed geometric shapes and calligraphy

that captured the values of the culture and religion of that time (Abamwa & Uviekovo, 2023). An example of one of the developed techniques from the Islamic Middle East is lusterware, which later was transferred to Europe, showing an interchange of ceramic technologies and aesthetic preferences between cultures (Speight & Toki, 2003).

The Industrial Revolution in Europe resulted in significant advances in ceramic production, including the invention of bone china by Josiah Spode in late 18th century England. Bone china was first developed in the UK by Thomas Frye, but its quality initially did not match that of traditionally made porcelain (Zakaria & Haron, 2014). Success in production was only achieved when Josiah Spode changed its recipe in the late 18th century to include bone ash (Altissimo *et al*, 2024; Nodeh *et al*, 2015). It was crucial because this was just the beginning of producing high-quality ceramics at a new price point for newer audiences. It was also a time when studio pottery movements began to emerge, a reaction against mass-produced ceramics, and a movement that encouraged individual creativity and craftsmanship.

Ceramic Artists as Artisans of History

Culture impacts us as much as we impact it. Artists and artisans have not only been the makers of aesthetic objects but also, a pivotal figure who in industry, society and economy has significantly contributed to cultural identity and heritage (Al-Zadjali, 2024). They have the means to reflect social value, critique political regimes and inspire change among multitudes of narratives. Artists as, cultural ambassadors, have made use of the capacity to articulate universal thoughts and experiences that resonate with people of all walks of life (Reynolds, 2021). As custodians of cultural heritage, artists and artisans have an indispensable role to play. Both past and present, their work provides a tangible link between people and their history, tradition and identity. These creators preserve not only the heart of their communities passed down memories and experiences but what is layered on top of that, what continues to reinvent its own whisper for subsequent generations (Al-Zadjali, 2017).

By utilizing both traditional methods and contemporary interpretations to emphasize the development of their cultures, artists, and craftspeople are able to preserve the history of their people. Their works—whether they are paintings, sculptures, ceramics, textiles, or other media that directly connect us to the past—offer insights into the ideals, convictions, and way of life of our ancestors (Reynolds, 2021; Mason, 1988). Styles and movements in ceramic art have been significant in human civilization that reflect techniques and

technological evolutions throughout history. The versatility of clay used in the creation of ceramics has allowed artists and craftspeople to produce functional and artistic objects, ranging from simple cooking pots to intricately ornamented or embellished wares – for multipurpose use (Okewu, 2019). The methods and aesthetics of ceramic artists evolved in step with cultures, and every age and area developed a distinctive style that guided the evolution of the craft.

A number of those master ceramicists who have shown their artistic prowess over cultural boundaries are highlighted in the following text and each will be briefly explored. One of the most well-known was Bernard Leach (1887–1979), who is often hailed as the father of British studio pottery and was a key figure in the marriage between Eastern and Western pottery principles and techniques. His work and philosophy stressing the importance of handmade vessels and functional beauty helped shape current ceramic arts (Turkel, 2016; Aslıtürk, 2015; Cooper, 2003). Also well known for a modern sensibility in clay is the British potter Lucie Rie (1902–1995), plain and simply born in Austria. Her work is beautiful and functional, subverting ideas of what ceramic art can be (Heath, 2004).

Shoji Hamada (1894-1978) a Japanese potter, who was a significant influence on 20th-century studio pottery. Hamada's work emphasis was on the beauty of natural clay surfaces; which in combination with traditional glazing and decoration techniques produced pleasingly crafted figurines and wares. He was a crucial figure in the Mingei movement which celebrates the beauty of everyday handmade objects (Turkel, 2016; Leach, 1990). Magdalene Odundo (b. 1950) A British ceramicist born in Kenya, noted for her hand-built, highly burnished and carbonized vessels. Her work, which often takes the form of the human body or traditional African pottery, engages in a dialogue with tradition, personal identity, and contemporary art (Caseley-Hayford, 2006). Peter Voukos (1924-2002) is a postwar American artist whose abstract expressions in clay transformed ceramic art. He created large-scale sculptures that connected ceramics with fine art, departing from conventional pots and vessels (Rosenberg, 2016). American artist and studio potter Beatrice Wood (1893–1998) was a part of the country's Avant-Garde movement. She became a major character in the American ceramics world because of her lusterware pottery, which combined rich glazes and fanciful forms that displayed a variety of lively personalities (Hennessey, 2004; Schlatter, 2000).

Canvassing Clay In-between Fingers

Ceramics is an ancient material, and yet, an ever-evolving source of form and expression. It encompasses various techniques, tools and equipment, with each contributing uniquely to the final artistic statement. Clay has been the canvas through which societal ideologies are represented and molded, and thus, has been extensively used to create objects for everyday use, such as vessels for ritual, religious and other ceremonial use. Clay has presented itself to be a versatile material which can be shaped and be reshaped into diverse objects and forms, encompassing different styles and surface embellishment. Canvassing clay in-between the fingers elaborates the process, techniques and approaches that this lively ancient material can be used in representing modern canvas for cultural narratives and expressive dialogue.

The study of Earth's mineralogy (clay), is one of the oldest branches of silicate science and is relatively easy to understand. Clay is a versatile material due to its plastic nature; it is malleable and sticky and can be found on the earth's crust which comprises of different rock formation (such as in igneous rocks, etcetera). It exhibits plasticity when the appropriate amount of water is added for homogeneity (Otimeyin, 2015; Igbinedion, 1995). Ceramics are made from a common naturally occurring material called clay, which is then subjected to intense heat in a kiln. Clay does not become ceramics until all the water it contains, in both free and chemically combined, is removed through heat. This process involves firing the clay in a kiln, which provides a controlled environment that generates heat. This heat transforms the crafted objects into hard, rock-like materials that cannot return to their original state after being fired. Once fired in a kiln, these objects are more susceptible to corrosion and other chemical reactions, which is one reason material scientists find them to be valuable subjects for archaeological studies.

Metamorphosis and Innovation in Ceramic Practices

The introduction of modern materials and technologies has significantly influenced ceramic art. Exploring the contemporary shifts and creative advancements in the domain of ceramic art. Ceramics have evolved into a complex, high-performance material that plays a vital role in modern technology and industry. It includes a wide range of materials, such as both conventional ceramics and state-of-the-art high-tech devices with several applications (Ozidede, 2024; Yan *et al.*, 2023). The manufacturing industry is changing faster than it has in the past due to globalization and the rapid growth of technology. We are now transition into more sustainable and globally competitive paradigm shift/ wave of

innovation that trumps traditional manufacturing processes, (Ninduwezuor-Ehiobu *et al.*, 2023). Ceramic practice changes now are infused into a context of materiality and technology in cultural identity, a dialogue that connects ancient traditions and innovation.

Material and technique are evolving and the emergence of digital technologies in ceramic making is reshaping ceramic practices. Researchers indicate that an increasing dedication to digital fabrication processes grants them the ability to form more visionary forms, and surface qualities, practically unavailable before, as, additive manufacturing (AM), 3D formal prototyping, printing and digital molding (Bozdemir, 2024; Lakhdar *et al.*, 2021; Mostafaei *et al.*, 2020; Chen *et al.*, 2019) are significantly beginning to multiply the available inventive alternatives opened to ceramicists and their visions. These methods enabled the generation of geometries, as well as architectures and shapes such as designs that had not been possible or at least, accessible (Yan *et al.*, 2023). In more detail, novel methods like direct ink writing (DIW) (Shahzad & Lazoglu, 2021), binder jetting (Du *et al.*, 2020) and stereolithography (Chen *et al.*, 2020) enabled the deposition of ceramic powders in accordance with buildup 3D forms capable of recycling porosity and new generation designs. As such, one can argue that, still, current ceramicists are still coming to grips with ceramics as a medium and using it as a point of departure for personal expression and social critique, raising ceramics to the realm of intellectual and philosophical inquiry. A similar perspective is offered by (Ojie & Onuzulike, 2010, 2009) exploring the place of ceramics - as a material form - in revealing concerns of environmentalism, the environment, and sustainability, suggesting several contemporary artists make work in clay in response to ecological disasters and consumerism.

RESEARCH METHOD

Qualitative method was used. The qualitative method involves combining both historical analysis and case studies research approaches, and vocabularies that emphasizes the concepts of the study into a single structure. These methods integrate different strategies to gain a broader insight or perspective. This historical analysis refers to a wide time span including the art and culture of ceramics. This means researching the modalities of ceramics through different cultures, which range from art pieces to functional goods that reflect the socio-cultural values, traditions, and technological advancements of different societies; including aspects such as the aesthetics and taste of ceramics, the steps of production, historical significance, and the place of ceramics in rituals, in everyday life and the current art world.

The case study that was used in the research explores possible scenarios where art and culture intersect with ceramics. Each of these case studies provides a tunnel through which the explorative canvas of art, culture, and ceramics can be examined, highlighting the diverse ways in which these elements interact, intersect and influence each other across different cultural contexts and periods. This integrated method allows for a deeper appreciation - the combination of the historical analysis and case study methods - offers a multidimensional approach in understanding the evolution and influence of ceramic art in of the global world.

Intersecting the Timeless Dialogue: Case Studies

One of the fundamental intersections of arts and culture in ceramics can be observed in using ceramics across various cultures for utility, ritualistic

and ceremonial purposes. In Greece, ceramics were integral to the daily life and religious practices of the people (Munasinghe & Jayathilake, 2021). The Greeks produced vases not just as art objects but as essential components of their funeral practices, wherein they served as burial containers for the dead. These vases were adorned with mythology and daily life scenes, providing insight into Greek culture, social practices, and beliefs. The Amphorae, Kraters, and Kylixes — tall vases for storage, mixing, and drinking, respectively - are prized objects and canvases that communicate ancient Greece's myths, athletics, and daily life. The black and red figure pottery techniques that the Greeks were most popularized for reveal clues about the developments in Greek art and narrative storytelling, and ultimately their perspectives on people's relationships with their society and experiences as human beings (Jones, 2021; Speight & Toki, 2003; Vicker, 1981).



Figure 1: Red Figure (RF) Amphora attributed to the Syracuse Painter, 470–460 BC, depicting Poseidon and Nike.
©Metropolitan Museum 06.1021.151; Jones (2021).

Cremation was widely practiced by the Etruscans or, the ancient civilization of Italy before the corpse's death, which was held in clay urns, and the ashes remained. These urns, often richly adorned with mythological or quotidian scenes, expand our

knowledge of the uses of cinerary vessels, and, in that light, reveal how mortuary rites were embedded in Etruscan culture (Huntsman & Becker, 2013; Becker *et al.*, 2009; Sabatini, 2007; Becker, 1982).

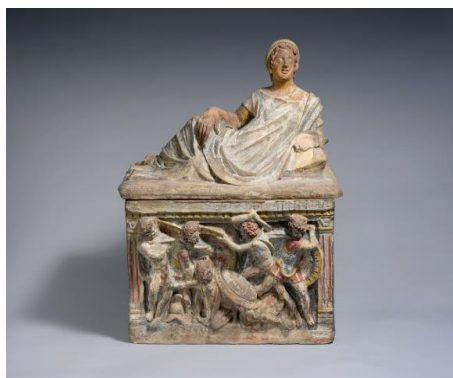


Figure 2a: Terracotta cinerary Urn of av: latini: velsial



2b: Detail of cremated remains inside the urn box, prior to analysis

Source: MMA inv. no. 96.18.163a, b (Photo: The Metropolitan Museum of Art, Purchase by subscription, 1986 (96.18.163a, b); Image © The Metropolitan Museum of Art). Huntsman and Becker (2013).

The jars themselves date from Egyptian mythology, when the process of mummifying the body and sealing it in a sarcophagus was complemented with jars specifically designed to hold the body's organs for the afterlife. Each jar was assigned to one of the Four Sons of Horus, who would keep the organs safe. The main purpose was to

preserve the four organs on the four sides of the body symbolizing the unity of the body (El-Krim, 2024; Gamil 2016; Lüscher 1998; Allen 1974). The earliest known forms of preservation of corpse come from the Stone Age in which the removal of internal organs was regarded as an integral part of the dying process (Dodson, 1994).



Figure 3: Canopic jars of Ruiu; 1504-1447; painted pottery Metropolitan Museum of art, New York.
http://en.m.wikipedia.org/wiki/Canopic_jar

Native American pottery has been a vital part of Southwest culture for nearly 2,000 years. It has evolved through the influence of Spanish settlers, resulting in new styles. For them, pottery served as a form of artistic expression and allowed the Native American communities to preserve their cultural heritage through ceramics; and these heritage has been passed down to future generations. For example, the pottery of the Navajo, Hopi, and Zuni people of the Southwestern United States is known for its beauty, imbued with symbolic meanings and intended as a medium for transmitting stories and traditions to subsequent generations (Garland, 2024).

Opening onto another is that of the Pueblo people of Mexico, whose artistry elucidates the particular cross-pollination of Indigenous Mexican and Spanish techniques and motifs in Talavera pottery. Along with some other decorative items, these ceramics can be understood as cultural artifacts narrating tales of colonial impact and history, cultural exchanges, dialogues and artisanal resilience within the region. Also, the Inca, Nazca, Moche, and Maya people of Pre-Columbian cultures of the South America, used ceramics in burials both as containers for food and liquids for the journey to the afterlife and as figurative offerings representing animals, deities, or other significant symbols (Wilke & Wunn, 2019; Valdez, 2008).

That being said, in a traditional Japanese tea ceremony, the "Chawan" or tea bowl symbolizes not only the host's aesthetics but also the very philosophy of the gathering, whether it be the season, occasion, or spirit of the gathering. According to Morais (2023)

and Davis (2022), ceramics are essential in sharing and experiencing Zen principles. Japanese ceramics inherently embody the aesthetic of Wabi-Sabi - "beauty in imperfection, an embrace of the transience of life." In this famous ceremony, simplicity, and nature is in harmony with tranquility are the main state of mind that the focus is on (Li, 2024; Dongfeng, 2019; Xueyong, 2017; Ruli, 2017; Wen, 2016; Kakuzō, 1994). Furthermore, Zen's acceptance of life's impermanence is closely echoed by the philosophy of Kintsugi, the Japanese technique of mending shattered pottery using lacquer coated with powdered gold or silver. Through healing and transformation, this practice figuratively reflects the Zen philosophy of tolerating imperfection. Kintsugi emphasizes that this practice is a method of crafting new types of beauty by honoring the object's history; this can also imply the recognition and acceptance of flaws as a condition for real beauty and growth (Keulemans, 2016; Burkus, 2015; Chikamatsu *et al.*, 2011; Cross, 2009).

Jingdezhen have been renowned as the "Porcelain Capital" of the world for over a 1,000 years, and has been a major influence in the ceramic business, by impacting global artistic trends and commerce (Fang, 2000; Curtis, 1995, 1993; Fung Ping Shan Museum, 1992). The development and refinement of porcelain during the Tang (618-907) (Li *et al.*, 2017; Cui *et al.*, 2010), Ming (1368-1644) (Hay, 1995; Scott & Kerr, 1994), and Qing (1644-1911) (Greene, 2019) dynasties is one example of China's unmatched contribution to ceramic art. Chinese mythology and philosophy are deeply embedded in the motifs found on the delicate blue-and-white porcelain of the Ming and Qing dynasties

(Scott, 2024; Dias *et al.*, 2013; Pierson, 2012). For instance, phoenixes symbolize beauty and harmony, while dragons stand for power and good fortune (Shen, 2016).

The ancient Chinese had used ceramic vessels extensively in their burial practices during the Han Dynasty. The Chinese made pottery pieces (called Mingqi, meaning "spirit object") in animal, building, everyday utensils and even soldier representations — for example, the famous Terra-

cotta Army of Emperor Qin Shi Huang (Shen, 2010). Mingqi is a practice that reflects ancient Chinese concern for the afterlife's well-being and the desire to preserve continuity between the mortal world and the spiritual realm. These objects were placed in tombs alongside the deceased, and the main belief surrounding Mingqi is that these objects would serve the deceased in the afterlife, giving them the same comfort and status they enjoyed while living (Turkel, 2016; Speight & Toki, 2003; Kikuchi, 1997).



Figure 4: Blue and White Vase with a design of a three-clawed dragon, Jingdezhen (China), Yongle period (1403-1442), porcelain and blue, Pigment under glaze; h. 43 x 33 cm, Leeuwarden Prinsessehof National Museum



Figure 5: Horse-eye motif plate, early 1800s, Japan, Stoneware, glazed. Gift of Dr. Delmar E. Kolb 2011-57-002; L2015.0601.139 Mingei International Museum

<http://www.sformuseum.org/exhibitions/mingei-traditional/ofceramics>.

No. 01109 (on loan from Ottema Kingma Foundation). <https://fokum-jams.org/index.php/article/view/123/217>

Traditional African societies have their unique system of cultural heritage that reverences their ancestral origin, the mode of communication among the subdivides in Africa; whether it be through oral (verbal) or through symbols (written/drawn), and through religious ideology and philosophy (Roy-Omoni *et al.*, 2024). In many African societies, pottery practice is interwoven with rituals, spirituality, social status, and communal identity, establishing notions of usefulness not just with functional but also the intangible (Moffor 2024; Roberts, 2013). Certain

shapes of pottery and decoration (such as for ceremonial consumption) are unique to individual tribes and imply affiliations and social hierarchy. The Bamileke tribe of Cameroon, for example, uses pottery for royal ceremonies, sometimes bedecked with swirling patterns and symbols that are meaningful to the tribe's history and royalty. These pieces are more than just creative objects; they serve cultural narratives and social significance (Djoukwo, *et al.*, 2024).



Figure 6: Nok Sculpture of a Seated Man

http://en.wikipedia.org/w/index.php?title=File:Nok_sculpture_Louvre_70-1998-11-1

The Nok culture of Nigeria is notable for its terracotta sculptures, which are believed to have held ritual significance (Egonwa, 2005). These figurines were utilized in ceremonies associated with fertility and protection, encompassing a range of human and animal forms. According to some scholars, people who participated in rituals intended to prevent bad luck or guarantee a plentiful harvest (Lei, 2024; Rupp *et al.*, 2005). These objects usually consist of intricate ritualistic designs of water vessels, bowls, and pots, etcetera (Wale, 2024).

Another example comes from the Akan people of Ghana, whose funerary rites include ornate terracotta vessels to contain food, drink, and valuables for the deceased. Since the dead go to the world of the ancestors, these vessels containing provisions are said to help to ensure their own well-being and a proper transition to the afterlife. The use of these pottery vessels in funerals underscores the Akan's emphasis on honoring and providing for ancestors, reflecting a deep reverence for the deceased and the spiritual world (Onibere & Ottuh, 2024; Adjei *et al.*, 2015; Speight & Toki, 1999). Additionally, the Zulu people of South Africa use pottery in a variety of rites of passage, such as marriage ceremonies, puberty rites, and purification rituals. For example, beer brewed in specially made pots is a key component of marriage negotiations and ceremonies, signifying unity and communal bonds (Fowler, 2015; 2008).

Challenges and Opportunities in Sustaining and Preserving Traditional Knowledge

- i. Cultural appropriation makes it even more difficult to maintain and preserve traditional heritage, because it frequently entails those outside a culture. It adopts important or revered cultural practices and beliefs which can result in lack of understanding or appreciation of their original context,

meaning, and significance (Shikha, 2019; Nicklas & Lindner, 2012; Ballengee-Morris & Stuhr, 2001). However, this can dilute or distort cultural practices, making it more difficult to preserve their integrity and authenticity. Furthermore, the sustainability of traditional ways is further jeopardized when individuals outside the community market cultural elements, which can also deny the original cultural creators recognition and financial benefits.

- ii. There is a risk that these distinctive traditional practices, languages, and crafts will be overshadowed or replaced by more dominant or widespread global trends, resulting in the loss of cultural diversity and heritage. The main challenges of globalization in maintaining and preserving traditional methods center on the tension between integrating global systems and maintaining local uniqueness as countries engage more with global markets, technologies, and cultures (Rahman *et al.*, 2023; Shaharuddin *et al.*, 2021). To preserve these traditions, deliberate efforts must be made both domestically and globally to value and support diverse cultural expressions in the face of globalization.
- iii. Throughout the cultural world there has been discussion of the need for preservation and revival of ancient practices as a means of preserving culture. Revival strategies can be very beneficial, as they seek to revive and maintain traditional forms of arts, crafts, rituals, practices, or daily activities while avoiding the fading of cultural heritage and turning them into a pleasure for future generations. Not only does this approach help to diversify human culture, it strengthens the identity of communities while ensuring their continuity in time

(Onibere, 2023; Aguila, 2022; DeMarrias & Robb's, 2013).

- iv. A second approach to re-imbuing cultural ideals is to explore these in vacations and educational courses that foster and protect traditional systems. It indicates a wish to familiarize people with customs, maybe employing physical challenges and learning options (Chalmers, 1996). Such initiatives strive to preserve cultural traditions as well as historical practices by promoting the alignment of modern contexts or economies with cross-cultural initiatives, for example by coordinating to attract tourists to engage in educational projects with local populations (Al-Zadjal, 2024, 2017; Clayton, 2019; Martinello, 2015; Manson, 1988).

CONCLUSION

Ceramics transcend mere utility which embodies aesthetic ideals and cultural mores, by bridging the past with the present and reinventing continuous interpretation of context of cultural heritage. It highlights the importance of ceramics in understanding cultural identity and historical development. Ceramics' evolution from antiquity to the present, elucidating the proliferation of ever-changing artistic practices and socio-political movements, has re-contextualized the significance and value of the earliest, most timeless medium of natural clay minerals. It also underscores the way ceramics mirror the paradigm shifts of 21st-century cultural expression and the mutable terrain of art and design.

In sum, in studying the art and culture relations of ceramics we have given a deep description of ancient history with current philosophy models and interpretation, drawing attention to the materiality and properties of clay to inevitably relate the past through the ages. In addition to revealing ceramics' historical relevance in a range of cultural, religious, political, and economic contexts, this investigation has brought attention to ceramics' function and influence as a dynamic medium for artistic expression of cultural diversity. The turning point is demonstrated by demonstrating how ceramics have functioned as a medium for representing cultural norms, values, and experiences. Across different cultures. Although, pottery and ceramics have been interchangeably used to tell stories in honoring deities, marking ceremonial occasions, used in folklore and in meeting practical needs for economic activities; this study has illustrated the versatility and adaptability of clay as a medium to the cultural zeitgeist for material exploration.

REFERENCES

- Abamwa, O. E and Uviekovo, A. A. (2023). Exploring Islamic Drawings in Contemporary Ceramic Production Technology in Nigeria for Sustainable Development. *Kepes: volume 2, issue 3*; Pp. 702 – 714. <http://doi.org/10.6084/m9.figshare.24182547#124>
- Abamwa, O. E., and Diakparomre, A. M. (2020). Clay Body Formation for Ceramics and Sculpture Production. *Humanities Review Journal of the Faculty of Arts, Delta State University, Abraka – Nigeria*; Vol. 9. 94 - 105.
- Abamwa, O. E. (2002). Production and Firing Techniques of Ughewwughe and Otor- Edo Potters. Port Harcourt. Pam Unique Publishers, Pp. 53-60.
- Abamwa, O. E. (2002). "Pottery as Instrument for Economic Empowerment in Ishiagwu". Kraft Books Limited, Ibadan, Nigeria; Pp. 342-350.
- Adams, L. S (2002). *Art across Time: Prehistory to the Fourteenth Century*, Volume 1; (2nd Edition). McGraw Hill Companies.
- Adjei K., Asante A. E., and Adu-Gyamfi V. E. (2015). Life, Death and Eternity: The Role of Pottery in Some Cultural Practices among the Akans of Ghana. *Online International Journal of Arts and Humanities*: Vol. 4, Issue 4, pp. 55 – 61.
- Agberia J. T. (2007). *Ladi Kwali: A Study of Indigenous and Modern Techniques of Abuja Pottery*. Kraft Books Limited.
- Aguila, C. (2022). *The Influence of Identity on Art and How It Can Connect Us to Our Community*. Master's Thesis, Dominican University of California. <https://scholar.dominican.edu/cgi/viewcontent.cgi?article=1063&context=education-masters-theses>
- Allen, G. (1974). *The Book of the Dead or Going Forth by Day: Ideas of the Ancient Egyptians Concerning the Hereafter as Expressed in their own Terms*, Chicago: The University of Chicago Press.
- Altissimo, P. A. M., Glufke, R. M., Cidade, M. K., and Palombini, F. L. (2024). Biomaterial Experimentation with Bone Residues for the Manufacturing of Bone China Porcelain. *Cuaderno 239, Centro de Estudios en Diseño y Comunicación*. ISSN 1668-0227, Pp. 43-59.
- Al-Zadjali, Z. (2017). The Traditional Handcrafts and Its Role in Shaping the Cultural Identity of the Sultanate of Oman. *Scientific Journal of the Faculty of Qualitative Education*, 9, 297-308.
- Al-Zadjali, Z. (2024). The Significance of Art in Revealing a Culture's Identity and Multiculturalism. *Open Journal of Social Sciences*, 12, 232-250. <https://doi.org/10.4236/jss.2024.121015>

- Areo, M. O. (2009). 'Adire in Southwestern Nigeria; 1957 – 2007'. (*Unpublished Ph. D. Thesis*), Ladoke Akintola University of Technology, Ogbomosho, Pp. 10-18.
- Aslıtürk, G. E. (2014). 20th Century Turkish Ceramic Art. (*20. Yüzyılda Türk Seramik Sanatı*). Ankara: Gece Kitaplığı.
- Attula, R. (2010). "Hellenistic Pottery from the Athenian Agora". *The Classical Review*, New Series, 60/1, 273-275.
- Caseley-Hayford, A. (2006). 'Magdalene Odundo: Breath and Dust' in Resonance and Inspiration new works by Magdalene Odundo (2006) *Samuel P. Harm Museum of Art, University of Florida*, Gainesville, p. 14
- Ballengee-Morris, C., & Stuhr, P. L. (2001). Multicultural Art and Visual Cultural Education in a Changing World. *Art Education*, 54, 6-13. <https://doi.org/10.2307/3193897>
- Barker, D. and Majewski, T. (2006). *Ceramic Studies in Historical Archaeology*. 0521853753c12.xml CUUK488B-Hicks. <https://doi.org/10.46222/pharosjot.102.113>
- Beardsley, M. (1982). In M. Wreen (Ed.). *The aesthetic point of view*. Ithaca: Cornell University Press.
- Becker, M. J. (1982). "Cremation among the Lucanians: Anthropological Appendix." *AJA* 86: 475-479.
- Becker, M. J., J. M. Turfa, and B. Algee-Hewitt. (2009). Human Remains from Etruscan and Italic
- Bozdemir, O. (2024). The History and Future of Ceramic Sculpture: From Ancient Clay Figures to Modern 3D Printing. *Gaziantep University Journal of Social Sciences*, 23(2) 420-436.
- Bozdemir, Ö.Ü.O. and Gençyılmaz, O. (2023). The Role of Pottery in the Development of Early Human Societies. *Ilsel International Gordion science Researches Congress*, Türkiye 29-30 September. <https://bilselkongreleri.com/>
- Burkus, D. M. (2015). "Some Random Thoughts on the Practice of Chanoyu (4): Rikyū's Way to Use the Tsutsu-chawan." Chanoyu to Wa [website]. June 11. Available at <http://chanoyuto-wa.tumblr.com/post/137057832368/somerando-m-thoughts-on-the-practice-of-chanoyu>
- Chalmers, F. G. (1996). Celebrating Pluralism: Art, Education, and Cultural Diversity. Los Angeles, CA *Getty Center for Education in the Arts*.
- Chen, H.Z.; Pan, Y.; Chen, B.; Li, J.; Gui, Z.; Chen, J.; Yan, H.; Zeng, Y.; Chen, J. (2023). Fabrication of porous aluminum ceramics beyond device resolution via Stereolithography 3D printing. *Ceram. International*, 49, 18463-18469.
- Chen, Z.; Li, Z.; Li, J.; Liu, C.; Lao, C.; Fu, Y.; Liu, C.; Yang, L.; Wang, P.; Yi, H. (2019). 3D printing of ceramics: A review. *J. Eur. Ceram. Soc.*, 39, 661-687.
- Chikamatsu, S., Mori, K., and Mori, T. (2011). *Stories from a Tearoom Window: Lore and Legends of the Japanese Tea Ceremony*. Kawasaki: Tuttle Publishing.
- Clayton, J. (2019). Multiculturalism. In A. Kobayashi (Ed.), *International Encyclopedia of Human Geography (2nd ed.)* pp. 211-219. Elsevier. <https://doi.org/10.1016/B978-0-08-102295-5.10296-3>
- Cole, N. L. (June 25, 2024). How Emile Durkheim Made His Mark on Sociology. Retrieved from: <https://www.thoughtco.com/emile-durkheim-relevance-to-sociology-today-3026482>.
- Cole, N. L. (June 4, 2024). So What Is Culture, Exactly? Retrieved from <https://www.thoughtco.com/culture-definition-4135409>.
- Cooper, E. (2003). *Bernard Leach - Life and Work*. London: Yale University Press.
- Cross, T. (2009). *The Ideologies of Japanese Tea: Subjectivity, Transience and National Identity*. Folkestone: Global Oriental
- Curtis, J. B. (1995). *Chinese Porcelains of the Seventeenth Century: Landscapes, Scholars' Motifs and Narratives*, University of Washington Press, Seattle and London.
- Curtis, J. B. (1993). 'Markets, Motifs and Seventeenth-Century Porcelain from Jingdezhen', *the Porcelains of Jingdezhen* (R. Scott ed.), London, Pp 123-49
- Danto, A. (1981). *The transfiguration of the commonplace: A philosophy of art*. New York: Columbia University Press.
- Davis, B. W. (2022). *Zen Pathways*. Oxford University Press. Doi:10.1093/oso/9780197573686.003.0001
- DeMarrais, E., & Robb, J. (2013). Art Makes Society: An Introductory Visual Essay. *World Art*, 3, 3-22. <https://doi.org/10.1080/21500894.2013.782334>
- Dias, M. I., Prudencio, M. I., Pintos De Matos, M. A. and Rodrigues, A. L. (2013). Tracing the origin of blue and white Chinese Porcelain ordered for the Portuguese market during the Ming dynasty using INAA. *Journal of Archaeological Science*. Doi: 10.1016/j.jas.2013.03.007
- Djoukwo, T. M. C; Michel, M.; Emmanuel J. G. (2024). The Concept of Aspectism in the Traditional Arts of the Bamileke People of Western Cameroon: Myth or Reality? *International Journal of Culture and History*. ISSN 2332-5518: Vol. 11, No. 2 page Doi:10.5296/ijch.v11i2.21917
- Dodson, Aidan. (2001). "Canopic Jars and Chests", *OEA EI*, 231-232.
- Dongfeng, C. (2019). "Harmony, Respect, Purity, and Tranquility" and "Oneness of Dhyana and

- Tea"--The Jingshan Origin of Japanese Tea. *Aesthetics Journal of Agricultural Archaeology*, (2):239-245.
- Du, W.; Ren, X.; Pei, Z.; Ma, C. (2020). Ceramic binder jetting additive manufacturing: A Literature Review on Density. *Journal of Manuf. Sci. Eng.*, 142, 040801.
 - Egonwa, O.D. (2005). African Art: A Contemporary Source Book. Benin, National Gallery of Art, P.15.
 - Ehab Gamil Abd El-Krim (2024). Three Canopic Jars from El-Matariya in the Grand Egyptian Museum (GEM 4964, 4967, 19335) *SHEDET* Issue (12), Pp. 213 - 243. Doi:10.21608/SHEDET.2023.174603.1153
 - Eliche-Quesada, D. Perez-Villarejo, L and Sanchez-Soto P. (2019) Introduction to Ceramic Materials: Synthesis, Characterization, Application and Recycling. *IntechOpen publishers*. <http://dx.doi.org/10.5772/intechopen.84710>
 - Fang, L. (2000). Tradition and Changes: Investigation into the History of Jingdezhen's Folk Porcelains. *Nanchang: Jiangxi People's Publishing House*.
 - Fowler, K. D. (2008). Zulu pottery production in the Lower Thukela Basin, KwaZulu-Natal, Pietermaritzburg, South Africa, *Southern Africa Human*, 20: 477-511
 - Fowler, K. D. (2015). Zulu pottery technology and group identity in the Phongolo Basin, South Africa. *Southern African Humanities*: 27: 81-111.
 - Frank, L. (2023). The Integration of Contemporary African Art into Western Auction Houses. Publication No. 11843634. Austra, *Unpublished Bachelors Thesis, Modul University*.
 - Fung Ping Shan Museum (1992). *Ceramic Finds from Jingdezhen Kilns*, University of Hong Kong.
 - Gamil, E. (2016). Magical Bricks in Ancient Egypt, Study in Funerary Rituals through the Book of the Dead, Ph.D Thesis Submission to the Department of History and Archeology, Faculty of Arts - Benha University. <http://dx.doi.org/10.13140/RG.2.1.2014.2963>
 - Garland's (2024). The History and Significance of Southwestern Native American Pottery. <https://www.shopgarlands.com/blogs/news/the-history-and-significance-of-southwestern-native-american-pottery?srsltid>
 - Greene, C. A. (2019). Politics and Patronage: A Re-examination of Late Qing Dynasty Porcelain, 1850-1920. A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy. Arizona State University. https://keep.lib.asu.edu/system/files/c7/211675/Greene_asu_0010E_18839.pdf
 - Gushem, P. O. and Nasidi, N. A. (2019). African art and oral Tradition. *University of Jos Fine and Applied Arts Journal*. 1(1), Pp. 1 - 17.
 - Hay, J. (1995) Art of the Ming Dynasty (1368-1644). Originally Published in Italian in *Storia Universale dell'arte: La Cina* (Torino: UTET, 1995), 2 vols, Ed. Michèle Pirazzoli t'Serstevens.
 - Heath, S. (2004). The Lucie Rie Archive at the Crafts Study Centre. Accessed on the 22nd of September, 2024 from <https://static1.squarespace.com/static/5784b8d1b8a79b20f4381bc5/t/5e81f58f0a5e5d2a3e84d93d/1585575316454/Lucie+Rie+essay.pdf>
 - Hennessey, H. D. (2004). *Beatrice Wood: Sophisticated Primitive*. A Dissertation submitted to the Program in the Humanities in partial fulfillment of the Requirements for the degree of Doctor of Philosophy, Florida State University. Retrieved from http://purl.flvc.org/fsu/fd/FSU_migr_etd-4117p
 - Hoeane, M. and McGinn I. (2021). Making a Case for the Spiritual Significance of *Dinkho tsa Badimo* as Sacred Ceramics in Museum Collections. *Pharos Journal of Theology*. ISSN 2414-3324 online Volume 102 - Special Ed 1.
 - Huntsman, T., and Becker, M. J. (2013). An Analysis of the Cremated Human Remains in a Terracotta Cinerary Urn of the Third-Second Century BCE from Chiusi, now in the Metropolitan Museum of Art in New York. *Etruscan Studies*: 16(2): 153-164. <https://doi.org/10.1515/etst-2013-0011>
 - Igbinedion, S. J. (1995). *Introduction to Industrial Ceramics*. Benin City. Uri Publishing Limited.
 - Iseminger, G. (2004). *The Aesthetic Function of Art*. Ithaca: Cornell University Press.
 - Jianfeng Cui, Th. Rehren., Yong Lei., Xiaolin Cheng., Jie Jiang., and Xiaohong Wu. (2010). Western Technical Traditions of Pottery Making in Tang Dynasty China: Chemical Evidence from the Liquefang Kiln site, Xi'an City. *Journal of Archaeological Science*: 37, 1502-1509.
 - Jones, R. (2021). The Decoration and Firing of Ancient Greek Pottery: A Review of Recent Investigations. *Advances in Archaeo materials*, 67-127 <https://doi.org/10.1016/j.aia.2021.07.002>.
 - Kakuzō, O. (1994). *The Book of Tea*. Tokyo: Kodansha.
 - Keulemans, G. (2016) The Geo-cultural Conditions of Kintsugi. *The Journal of Modern Craft*, 9:1, 15-34, <https://doi.org/10.1080/17496772.2016.1183946>
 - Kikuchi, Y. (1997). "Hybridity and the Oriental Orientalism of 'Mingei' Theory". *Journal of Design History*, 10(4), Pp. 343-354.
 - Kösel, A. T. (2022). "Seramiğin Bir Kap Olarak Ölü Gömme Geleneğinde Rolü". *Yedi: Sanat, Tasarım ve Bilim Dergisi*, 27, 137-149.

- Kuzmin. Y. V. (2013). "Origin of Old World Pottery as Viewed from the Early 2010s: When, Where and Why?" *World Archaeology*, 45/4, 539-556.
- Lakhdar, Y.; Tuck, C.; Binner, J.; Terry, A.; Goodridge, R. (2021). Additive Manufacturing of Advanced Ceramic materials. *Prog. Mater. Sci.* 116, 100736.
- LaMorte, W. W. (2016). What is Culture? Accessed on the 22nd of September, 2024, from <https://sphweb.bumc.bu.edu/otlt/mphmodules/P/H/CulturalAwareness/CulturalAwareness2.htm>
- Leach, B. (1990). *Hamada Potter*. First Paperback Edition (First Ed. 1975), New York: Kodansha International.
- Lei, Y. (2024). An Archaeological Overview of Nok Terracotta Sculptures. *SHS Web of Conferences*, 04011 <https://doi.org/10.1051/shsconf/202419304011>
- Li, X. (2024). Analysis of the Aesthetics of Japanese Tea Ceremony. *Critical Humanistic Social Theory: Vol. 1 No. 2.* <https://doi.org/10.62177/chst.v1i2.54>
- Li, W., Lu, X., Luo, H., Sun, X., Liu, L., Zhao, Z., and Guo, M. (2017) A Landmark in the History of Chinese Ceramics: The Invention of Blue-and-white Porcelain in the Tang Dynasty (618–907 A.D.), *STAR: Science & Technology of Archaeological Research*, 3:2, 358-365. <https://doi.org/10.1080/20548923.2016.1272310>
- Liu, X., Ren, M., Fu, Y., Hu, Y., Wang, S. and Yang, Y. (2023). "New Insights into the Use of Neolithic Pottery in Guangxi of South China: Organic Residue Analysis of Experimental and Archaeological Pottery." *Heritage Science*, 11/201, 1-15.
- Lüscher, B. (1998). *Untersuchungen zu Totenbuch Spruch* 151, Wiesbaden: Harrassowitz,
- Martiniello, M. (2015) *Multiculturalism and the Arts in European Cities*. Taylor & Francis Group. <https://doi.org/10.4324/9781315758381>
- Mason, R. (1988). *Art Education and Multiculturalism*. Croom Helm.
- Matencio, T. (2020). Importance of ceramic materials in our society. *Revista Materia* Vol. 25(1). Editorial e-12602. <https://doi.org/10.1590/S1517-707620200001.1001>
- Mbahi, A. A. & Adiwu, T. O. (2019). Symbiotic Relationship between Art and Culture. *University of Jos Fine and Applied Arts Journal*. 1(1): Pp. 162 – 174.
- Mesoudi, A., Whiten, A., and Laland, K. L. (2006). "Toward a Unified Science of Cultural Evolution", in *Behavioral and Brain Sciences* 29(4): 329-347. <https://core.ac.uk/download/pdf/28888755.pdf>
- Michael Vickers (1981). *Cross-craft and Cross-cultural Interactions in Ceramics*. WesterVill, OH. The American Ceramic Society, Inc. Pp. 43 - 63.
- Moffor, E T. (2024). Objects as Expression of Power, Religion and Therapy: The "Country" Pots in the Bamenda Grassfields Fondoms of Cameroon. *Journal of Contemporary Philosophical and Anthropological Studies (JCPAS)* 2(1): <https://doi.org/10.59652/jcpas.v2i1.149>
- Morais, L. (2023). Material and Spiritual Entanglements with Ceramics. Looking at the Case of Contemporary Western Practitioners in Japan. *Artis Observatio* 2, ISSN 2750-7521: <https://doi.org/10.11576/ao-5807>
- Mostafaei, A.; Elliott, A.M.; Barnes, J.E.; Li, F.; Tan, W.; Cramer, C.L.; Nandwana, P.; Chmielus, M. (2020). Binder jet 3D printing—Process parameters, materials, properties, modeling, and challenges. *Prog. Mater. Sci.*, 119, 100707.
- Munasinghe D.S.A and Jayathilake K.K.P.M. (2021). The Study of Ancient Greek pottery. *Vimaršana: Journal of Junior Staff Development Programme, Faculty of Social Sciences, University of Kelaniya*. ISSN 2806-5077: 1(2). Pp. 366-381
- Nicklas, P. and Lindner, O. (2012). "Adaptation and Cultural Appropriation: Literature, Film and the Arts." Berlin, Germany: Walter de Gruyter GmbH & Co.
- Nodeh, A. A. *et al.* (2015). Influence of Bone Ash on Bone China Characteristics at Constant Firing Temperature. *Journal of the Australian Ceramic Society*, 51(2): Pp. 75–83.
- Ojie, G. N. and Onuzulike O. (2010). Ceramics Metaphor: Ngozi Omeje. *Ceramics: Arts and Perception International*. Issue 80.
- Ojie, G. N and Egede, S. C. (2010). Pottery Traditions in the Niger Delta Region of Nigeria: Discussions of Processes. *International Journal of Ceramics Technical, United States*, Vol. 30.
- Ojie, G. N. and Onuzulike O. (2009). Alozie Onyirioha: Fragile Security. *Ceramics: Arts and Perception International*. Issue 75.
- Ojie, G. N. (2002). *Historical Perspective of Selected Pottery Production Centers in Delta State*. Design History in Nigeria. J. T. Agberia (Ed.), Abuja, National Gallery of Arts (NGA): Pp. 79 – 86.
- Okewu, J. E. (2019). Adaptation of Practice Styles of Nigerian Ceramic Art Proponents for Developing Conceptual Ceramic Forms. *IRORO: JOA* 18(1 & 2): Pp. 210-226
- Onal, P. B. (2012). Op-art and Personal Practices in Contemporary Ceramic Art. *Procedia – Social and Behavioral Sciences*. 51, 655 – 661.
- Onibere, V. and Ottuh, P. O. O. (2024). Intersection of Art and Religion in African

- Cultures. *Peradaban Journal of Religion and Society*. 3(2). Pp. 100 – 112.
- Onibere, V. (2023). Reimagining African Identity and Space: Decolonizing Visual Representation. *Ethiopia Journal of English and Cultural Studies: Department of English and Literary Studies*, Delta State University, Abraka. Volume 1, page 85 – 102.
 - Roy-Omoni, S., Onibere, V., and Osakwe, S. (2024). Visualizing Divinity: Analyzing the Evolution of Religious Iconography and Graphic Design in Modern African Art. *Abraka journal of religion and philosophy (AJRP)*, Vol. 4(2): pp. 115 – 126. Retrieved from <https://dysmb.com/index.php/AJRPDELTA/TEUNIVERSITYABRAKA/article/view/414>
 - Otimeyin, P. (2015). *Ceramics at a Glance (Revised Edition)*. Ambik Press Limited, Benin City, Edo State.
 - Ozidede, M. (2024). The Role of Ceramics in Traditional Rite of Passage in African Religion. *Abraka Journal of Religion and Philosophy (AJRP)*, 4(2): pp. 100 – 114. Retrieved from <https://dysmb.com/index.php/AJRPDELTA/TEUNIVERSITYABRAKA/article/view/413>
 - Ozidede, M. (2024 inpress). Art and Algorithms: Unveiling the Roles and Impact of Artificial Intelligence Technology in Ceramics. A conference paper presented at the Faculty of Arts 6th Biannual International Conference, held at Delta State University, Abraka, From 16th - 19th April.
 - Pappas S. and McKelvie C. (October 17, 2022). What is Culture? Retrieved from <https://www.livescience.com/21478-what-is-culture-definition-of-culture.html>
 - Pierson, S. (2012). The Movement of Chinese Ceramics: Appropriation in Global History. *Journal of World History*. University of Hawaii's Press. 23(1): Pp. 9-39. Doi:10.1353/jwh.2012.0013
 - Pillsbury, J. (2001). Moche Art and Archaeology in Ancient Peru. *Studies in the History of Art* Vol. 63, Symposium Papers, *Published by National Gallery of Art*. XL: Pp. 8-19.
 - Rahman, S. A. Rahman, M. A. A., Baharom, F., Rahman, M. N., Mustafa, M. S. S. (2023). A Review on the Issues and Challenges of Heritage Preservation in the Industry Revolution 4.0. *International Journal of Academic Research in Business and Social Sciences*. 13(12). E-ISSN: 2222-6990. Doi:10.6007/IJARBS/v13-i12/19922
 - Retna M. R., Ragupathi R., Roy, J. B., Chandrayan, S. B. and Balamurugan N. (2023). Exploring the Role of Art in Shaping Historical Narratives. *Journal of Namibian Studies*, 33 S3: 1932-1943.
 - Reynolds, A. (2021). The Influence of Cultural Identity on the Creation of Art. <https://adrianreynolds.ie/cultural-identity-influence-art/>
 - Roberts, D. L. (February, 2013). The Centrality of Ceramics in African ceramics. <http://www.Ceramicsmonthly.org>
 - Robinson, E. (2024). Influence of Trade Routes on Cultural Exchange in the Silk Road Era. *European Journal of Historical Research*, ISSN 2789-7079 (Online) Vol.3, Issue 3, pp 1-13, Doi: <https://doi.org/10.47672/ejhr.2333>
 - Rosenberg, K. (December 29, 2016). *Peter Voulkos, an Influential Sculptor Who Broke the Rules*. *Art and Design - The New York Times*. <http://www.nytimes.com/2016/12/29/arts/design/review-peter-voulkos-museum-of-arts-and-design.html?rref=collection>
 - Ruli, L. (2017). A Study on the Influence of Chinese Zen Aesthetic Thought on Japanese Tea Ceremony. *Art Journal of Tea in Fujian*, (4):76-77.
 - Rupp, N., Ameje, J., and Breunig, P. (2005). New Studies on the Nok Culture of Central Nigeria. *Journal of African Archaeology*. 3(2), Pp. 283-290
 - Sabatini, S. (2007). House Urns: A European Late Bronze Age Trans-cultural Phenomenon. *Gotarc Series b. Gothenburg archaeological theses N. 47. Department of Archaeology and Ancient History, Gothenburg Universitet*.
 - Schlatter, N. E. (June 2000). *Wood, Beatrice (03 March 1893–12 March 1998)*. Printed from American National Biography Online. Oxford University Press. <https://doi.org/10.1093/anb/9780198606697.article.1701612>
 - Scott, R. E. (2024). *Blue and White Porcelains of the late Ming-Early Qing*. *Anita Grey Oriental works of Art*. <https://www.chinese-porcelain.com/news/6-blue-and-white-porcelains-of-the-late-ming-early-rosemary-e-scott/>
 - Scott, R and Kerr, R. (1994). *Ceramic Evolution in the Middle Ming Period: Hongzhi to Wanli (1488-1620)*, London, Percival David Foundation.
 - Shahzad, A., and Lazoglu, I. (2021). Direct ink writing (DIW) of structural and functional ceramics: Recent achievements and future challenges. *Composites Part B: Engineering*, 225, 109249. <https://doi.org/10.1016/j.compositesb.2021.109249>
 - Shahrudin, S. I. S, Shamsuddin, M. S., Drahman, M. H., Hasan, Z., Asri, M. N. A., Nordin, A. A., & Shaffiar, N. M. (2021). A Review on the Malaysian and Indonesian Batik Production, Challenges, and Innovations in the 21st Century. *SAGE Open*, 11(3), 21582440211040128.
 - Shen, C (2010). *The Warrior Emperor and China Terra-Cotta Army*. *Library and Archives, Canada*

- Cataloguing in Publication*. Canada, Royal Ontario Museum: Pp. 1-41.
- Shen, C (2016). *Reinterpreting the Dragon and Jade Bi-disc in Western Han: A Case Study from a Cross-cultural Perspective*. Proceedings of the International Academic Symposium to Commemorate the 40th Anniversary of the Excavation of the Mawangdui Han Tomb Compiled by Hunan Provincial Museum; Yuelu Publishing House. ISBN/ISSN 9787553806365.
 - Shennan, (2000). "Population, Culture History and the Dynamics of Culture Change", *Current Anthropology* 41. Pp. p. 811–836
 - Shennan S, (2002). *Genes, Memes and Human History*. London. Darwinian Archaeology and Cultural Evolution.
 - Shikha, S. (2019). *"A Conversation about Cultural Appropriation as Explored by an Emerging Media Professional"*. Honors Theses. 1052. This Undergraduate Thesis Submitted to Sally McDonnell Barksdale Honors College. Retrieved from: https://egrove.olemiss.edu/hon_thesis/1052
 - Speight C. F. and Toki J. (2003). *Hands in Clay*. 5th Edition, McGraw Hill, New York
 - Speight C. F., and Toki, J. (1999). *Hands in Clay*. New York: McGraw-Hill Company Inc.
 - Taliaferro, C. (2013). Aesthetics (Philosophy). In: Runehov, A.L.C., Oviedo, L. (Eds) *Encyclopedia of Sciences and Religions*. Dordrecht, Springer. https://doi.org/10.1007/978-1-4020-8265-8_1548
 - Tsetlin Y. B. (2018). The Origin of Ancient Pottery Production. *J. His Arch & Anthropol Sci*; 3(2):193–198. Doi: 10.15406/jhaas.2018.03.00083
 - Turkel, E. (2016). In *The Footsteps of Bernard Leach: The Rise of Studio Pottery on the Way from Far East to West, From West to World*. *International Arts and Design Congress*. ISBN: 978-975-441-473-8
 - Valdez F (2008). Interzonal Relationships in Ecuador. In: Silverman H, Isbell WH (eds.) *Handbook of South American Archaeology*. USA, Springer, Pp. 865-888.
 - Wale, A. (March, 12th 2024). *The Art of Yoruba*. <https://www.yorubalsa.com.au/blog/2019/3/11/on-letting-go-nelj2-5ssg6-3yr2p-dj844-5k3ns>
 - Wen, S. (2016). Japanese culture's uniqueness from the Japanese tea ceremony perspective *[[J]]. Tea in Fujian*, (10):323-324.
 - Wilke, D. and Wunn, I. (2019). A Multi Theory Approach for Studying Presumed Ritual Pottery - The Stirrup Spout Bottle as a Case Study from the Pre-Hispanic Andes. *Open Access J Arch & Anthropol*. 1(5): <https://doi.org/10.33552/OAJAA.2019.01.000521>.
 - Xueyong, G. (2017). Analysis of Zen Cultural Factors in the Origin and Development of the Japanese Tea Ceremony *[[J]]. Tea in Fujian*, (11):376-377.
 - Yan Z, Gao Y, Zhang H. (2023). Materials Development and Potential Applications of Ceramics: New Opportunities and Challenges. *Applied Sciences*; 13(19):10957. <https://doi.org/10.3390/app131910957>
 - Zakaria, Z., & Haron, H. (2014). Characterization of Local Bone Ash for Bone China Production. *Jurnal Teknologi (Sciences & Engineering)* 66:1, 25–34