

A Study on the Creation of Natural Form Language in Modern Ceramics from an Ecological Perspective

Zhouzhou Li¹, Jan Theo De Vlees schauwer², PhD Graduate, Arts and Design, Faculty of Fine Arts, Chiang Mai University¹, Associate Professor, Faculty of Fine Arts, Chiang Mai University, Thailand².

Because of the complex value orientations of human beings and the real-life problems in the development of artificial nature, this article analyses the artistic cases of multiple value orientations in the process of artificial nature from an ecological perspective, explores the multiple expressions of the language of natural forms in the creation of contemporary pottery by sorting out the application of the language of natural forms in the creation of modern pottery, and uses this to carry out artistic practice and make positive suggestions for the development of modern pottery.

Keywords: Ecology; Language of Natural Forms; Modern Ceramics; Artificial Nature

OBJECTIVE

- 1. to study the language of natural forms
- 2. to analyze how the language of natural forms is expressed in modern pottery
- 3. to discover those artists who have made use of the language of natural forms in their creations
- 4. to analyze the expression of ecological concepts and ecological values in different works of art in terms of three main parts: creative concept, artistic subject matter, and craft techniques
- 5. to explore the relationship between the two sides of artificial nature and the virtual and real nature in the context of information technology through an artistic approach based on an ecological vision and the use of the language of natural forms in the practice of modern ceramic art creation.



RESEARCH METHODOLOGY

(1) Interdisciplinary research method

The laws of scientific development show that science is highly differentiated and integrated, forming a unified whole. Ceramic art was originally a product of the intersection of art, technology, and science. This time, the author's thesis discusses the creative expression of the language of natural forms in modern ceramic art from an ecological perspective. The relationship between man - nature - society is explored in the creative expression of modern ceramic art.

(2) Documentary research method

The literature research method is researching literature to obtain information according to specific research objectives or topics to gain a comprehensive and correct understanding of the issues to be studied. The literature research method is widely used in various disciplines. The author wants to read much literature, collect relevant text and pictures, and draw on its research results to achieve a multiplier effect. The author uses this method to read a great deal of background material on ecology at home and abroad, how the language of natural forms is used in the field of ceramics creation and other related issues, and to gain a macro understanding of the current state of research in the existing literature collection.

(3) Survey and case study method

Following the research objectives of the thesis, the author intends to conduct a case study analysis by investigating and researching some of the more typical modern ceramic art at home and abroad and to synthesize the existing case phenomena and the relevant natural form language and ecological theories contained therein through his understanding and elaboration, and to synthesize their regular features to draw the corresponding conclusions.

The author focuses on the work of the following modern potters who use the language of natural forms in their work.

- 1. Canadian potter Inuzuka Toshifumi
- 2. Dutch potter Barbara Nanning
- 3. Chinese potter Zhu Lekeng
- 4. Japanese potter Hitomi Hosono
- 5. American potter Marc Leuthold
- 6.Israeli potter Zemer Peled



1. LITERATURE REVIEW

1.1 Introduction

From the most primitive imitation of nature to its reinvention, humanity has explored, generation after generation, the invention of enduring endless visual symbols, including the written word, which records the history of human culture. From comprehensive representations to morphological and from metaphor to metaphorical symbolism, all reflect the development of human understanding and expression of nature. Ancient Chinese philosophers summarised the relationship between man and nature as "the unity of heaven and man." (Grosse, E. 2010) The connection between man, nature, and society is aptly expressed. The world industrial civilization that began in the 1860s seems to us today to be a mixed blessing: "This is the worst of times, this is the best of times, this is a desperate winter, this is a hopeful spring. We have everything before us, we have nothing before us. We all run straight to heaven, we all run straight to the other way" Dickens begins A Tale of Two Cities (Dickens, C., Jennings, L., & Doyle, R. 2016) by describing the industrial age in which he lived.

As times change, artists increasingly reflect new concepts of ceramic art creation in examining their own spirit and the influence of external social realities. The relationship between nature and human society is an essential theme in contemporary art and contemporary ceramic art; many artists have reflected a concern for, and criticism of the living environment in their creative conceptions, and their works are keen to express their concerns and attitudes towards social reality, personal living conditions, and political events. The contradiction between the rapid development of society and the deterioration of the environment has also led to a reflection by the creators, who are aware of the new responsibilities and challenges they face, and this is expressed in their artistic conceptions. As an art form intrinsically linked to nature, ceramic art has endured thousands of years of continuous kiln fires. Whether traditional or contemporary ceramic art, its essential characteristics still reflect the simplest of human artistic pursuits. The dialogue between man and nature is a historical process. In addition to pursuing history, we should pay more attention to developing the relationship between art and nature. In different periods of historical development, humanity has had different relationships with nature, from the initial reverence for nature to attempts to conquer it with the development of technology and industry, to the current harmonious and symbiotic relationship between man and nature.



Laozi's 'The Way of Nature' represents traditional Chinese philosophical thought, which established the aesthetic orientation of the nation(Huyan, 2018.).. The aesthetic code of the Tao is a source of beauty and a model for all artistic creation. It is reflected in the creation of art, which emphasizes that in transforming nature, man should respect the nature of all things, follow the laws of nature, and should genuinely experience the mysterious and great generative power of nature, allowing all things to present their actual value and follow the natural state of nature.

1.2 Ecological Perspective

The concept of ecology was first introduced by the German zoologist Haeckel in 1866, marking the emergence of modern ecology. He stated(Zou,Dongsheng, & Gao,Zhiqiang. 2007)., "We understand ecology as the study of organisms in relation to their surroundings." The American ecologist Eugene P. Odum, in his treatise The Foundations of Ecology, defined ecology as "the science that studies the structure and function of ecosystems."(Odum, E. P., Barrett, G. W., & Lu, J. J. 2009). This marks the maturity of the modern theory of the foundations of ecology. Ecology is a familiar scientific model based on the classical physics of different disciplines. Ecology is the study of the relationship between humans and nature, looking at life on Earth in a more complex and holistic way, exploring the idea of describing all life on Earth as an intrinsically connected whole.

Since the early nineteenth century, ecology has been separated from pure biology and has studied phenomena in nature, often delving into questions of the relationship between man, nature, and society, and therefore closely integrating the disciplines of aesthetics, ethics, and economics. "Early ecological research focused on the study of the biological relationships between individual organisms and species and their habitats. By the end of the nineteenth century, ecology expanded to include biomes." (Lei, Y. 2006)In the twentieth century, resource depletion and environmental problems brought about by the industrial revolution made ecology's 'relational' focus more useful.

In the twentieth century, resource depletion and environmental problems brought about by the industrial revolution gave greater use to ecology, with its emphasis on 'relationships.' In 1935, the British ecologist A.G. Tansley creatively introduced the concept of 'ecosystem,' stating that an ecosystem is a whole in which an organism and its environment are inseparable and closely linked and that each ecosystem member exists in the form of interdependence with the other members. Since then, ecology has entered the stage of ecosystem ecology, which also marks the development of ecology into a modern ecology



centered on the study of ecosystems. Some ecologists saw the ecological implications, such as Emerson, who argued that in studying how the interests of individual organisms paved the way for the community's interests, ecology was already capable of "providing a scientific basis for ethics." (Nash, R. 1990). Since then, ecological research has developed beyond the level of plant and animal ecology. Ecologists have gradually extended the scope of their studies to include the entire biosphere and the relationship between the biosphere and human activities. Following the worldwide environmental movement of the late 1950s, ecology became a science with a broad social impact.

1.3 Language of Natural Forms

"Nature" is the collective term for the natural world and nature, the general environment on which humans depend for survival. The Greeks first introduced the concept of nature, and the word 'nature' in modern Western English also has two primary meanings, not just 'nature,' i.e., the collection of natural objects, but also 'essence,' 'nature .'"The word 'nature' also has two primary meanings in modern Western English, not just 'nature,' i.e., the aggregate of natural objects, but also 'essence,' 'nature,' the latter they use more often in the West. In Metaphysics, Book 5, Chapter 4, Aristotle identifies six meanings of 'nature':

The growth of a growing thing
The seed of a growing thing
The root of the movement of a natural thing
The substance
The essence of a natural thing
The nature of anything

It is clear that the primary use of "nature" here refers to the essence of things, to their origin, rather than to natural things or the natural world as a collection of natural things.

"A 'natural form' is usually a form of natural laws. In the course of a long and complex growth process, the material forms of nature take on a variety of shapes and forms that follow the laws of natural development, are new creations of nature and reflect the long-term development of nature in all their variety and diversity. Natural forms are a conceptual language that combines natural phenomena with space and time. It includes a wide range of organic, inorganic, animal, plant, microbial and accidental forms. At the same time, it has a rich and colorful visual aesthetic, containing many visual form elements such as form, composition, proportion, texture, and color. Studying any art form is inseparable from the study and emulation of nature. The composition of natural forms can be abstractly summarised as the elements of composition such as point, line, and surface.



Without violating the principles of formal beauty, the artist creates a unique natural form of art, striving to give people a delicate and soft visual experience.

In the creation of modern ceramic artists, the language of natural forms is an important way of expression, both in terms of the processing of materials used and the search for the essence of natural matter, as well as the existence of the artist's subjective feelings about natural forms, whether in the form of subject matter or decorative forms, which are a constant source of artistic inspiration for creators and artists(Huyan,A,2018.). In modern times, many artists at home and abroad have generally been happy to explore the world of natural forms for inspiration and relevant material, and more and more people are gradually recognizing the appeal of natural form elements in enriching social life, serving life, applying them to life and creating new values. When we analyze the elements of natural forms, we analyze how to make a particular natural form impact people and export our personal artistic views through the language of natural forms.

2. ANALYSIS AND FINDINGS

The issue of expressing the relationship between man and nature in artistic subjects has been around for a long time. As the material characteristics of ceramic art are gradually becoming familiar and recognized, more and more artists are now expressing their concerns about the natural environment through the artistic vehicle of modern pottery. Modern pottery, under the influence of ecological concepts, does not simply maintain the status quo of the ecological environment. However, it seeks harmony between man and nature, an enhancement of nature and humanity, and the co-existence of art and nature. (Yang, K., & Xu, S. 2016)

2.1 Ecological expression in creative conception

In an age where profit is sought everywhere, modern man is faced with a crisis of survival and morality, a crisis of faith. Never before have social problems challenged people's consciences so violently as today. People, nature, and society, are in extreme imbalance. Contemporary artists are constantly using the language of their work to warn and exhort people in the face of these acute problems. A large proportion of these modern environmental ceramic works reflect the criticism and reflection on the situation of survival in terms of the concept of creation: some of them show concern for the spiritual aspect of modern people; others involve the consideration of the value and meaning of history and culture in today's society.



2.11 Criticism and reflection on the environment

With the development of society, the artist Yu Fa reflects new creative concepts of modern pottery in examining his spirit and the influence of external social realities. At present, the creative concepts of some modern ceramic artists reflect more of a concern and criticism of the living environment. In their works, artists are keen to express their concerns and views on social reality, the emotional state of existence, and political events. For the artists, the contradiction between the rapid development of society and the increasing harshness of the environment has forced them to reflect and face new responsibilities and challenges, which are then poured out in their conception of artistic creation.(Liu, H. 2013)

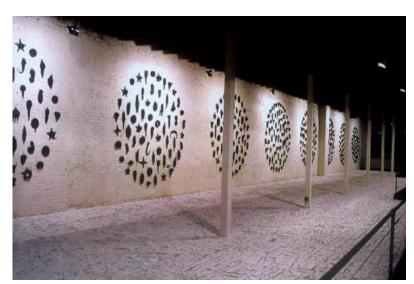


Figure1: Sadashi Inuzuka's work "river", 1999, Porcelain.



Figure 2: Sadashi Inuzuka's work "Dark Blue" 2006, Porcelain

Sadashi lnuzuka is an American-based potter who often uses insects, invertebrates, and marine life as his subject matter. When these uniquely shaped ceramic life forms are neatly displayed on the wall, a strong sense of ritual invites reflection on the conflict between man and nature. His works aim to explore man's concern for nature, ecological imbalance, and environmental pollution, using traditional and non-traditional art forms to implicitly and vividly express his concern for the ecological environment. The work Rivers imitates many dried-up sea creatures and arrange them in a large area on the wall in sequence; the author gives it an artistic context similar to that of a specimen or fossil, conveying to the viewer a vague feeling of poignancy, loss, and regret. This allows the viewer to find the origin of these "fossils" or "specimens" on the walls, leading to a sober reflection. On entering the exhibition, the floor is entirely or partially covered by mud and beyond that by sand and gravel, and it is only possible to stand in a black corridor like a reviewing stand or corridor to examine the insects, invertebrates, and sea creatures hanging from the walls and to savor the cracked texture of the dried mud beneath the stand. (Sadashi lnuzuka. 2018) This leads the viewer to ask, what is happening to the world? In the process, people have inadvertently become involved in the artist's work, which expresses his care for people and nature and his concern for the problems of ecological imbalance and environmental pollution, and leaves room for reflection. His works are full of humanistic and aesthetic exegesis, beautifully and poetically expressing the severe themes of his



works with multiple suggestive and inspiring perspectives. His thoughts on technology and concerns about environmental issues are often expressed in his works express his reflections on technology and concerns about environmental issues, leaving the viewer with endless food for thought.



Figure 3: Barbara Nanning's work "Botanica." Stoneware, polyurethane, sand, pigment, laquer

Barbara Nanning's work is intensely expressive, whether in its abstract and coherent forms or its bright and vibrant surface coloring, reflecting her unrelenting desire to create and her bold and extraordinary creativity. Her ceramics straddle the line between functional art and pure art and are dedicated to exploring the expressive potential of modern ceramics. Her work captures the regularity and fluidity of nature, order and chaos, hardness and softness, formality, and informality, combining the rational and the irrational through a constant contrast in the language of form, symbolizing a shift from the sensual to the rational, creating an atmosphere of peace, peace, and vitality (Huang, Y. 2016). Barbara Nanning's works are characterized by three main features: the curvilinear construction of changing combinations, the plural forms of superimposed loops, and the multi-dimensional space of spiraling twists. A simple color palette, uniform lightness, and the same purity also characterize the works.

Nature was Barbara's primary source of creativity, and she loved to depict timeless natural phenomena such as the Milky Way, the tides, and other changes in the movement of nature.



In addition, she consulted about crystals, jellyfish, flowers, and a tiny creature that was quite fascinating in the nineteenth century. She usually starts her pottery with such common phenomena as her subject matter, structure, and geometry—the Object Botanica. The series began around 1996, with several individuals in pods of flowers, buds, and seeds that were later developed into individual groups. The initially tightly packed and restful buds evolved into rich flowers in several pieces, while the leafy parts were like waves in the wind. The leaves sway like waves in the wind.



Figure 4: Barbara Nanning's work "Botanica." Stoneware, sand, pigment, laquer

Both organic and inorganic forms are a source of inspiration for Dutch potter Barbara Nanning. "Natural phenomena have become a constant source of creation for me, such as the Milky Way, tides and other never-ending changes in the movement of nature, and for me the sense of dynamism expressed by the forms is the most important element, which constantly reminds me to express originality." (Bai, M. 2015) The author is adept at observing and studying the multi-faceted water products of biological structures, soft and transparent jellyfish, flowers, and ordinary objects made up of tiny, fine runs, as in the Botanica series, where the author works in high-purity colors such as bright red, orange, deep blue and brilliant violet giving her work an unpredicted and dreamlike effect. The naturalness and softness of the flowers are weakened, and the sense of structure, a kind of artificial mechanical nature, is accentuated. Through Barbara Nanning's work, the author may seek a nature created by urban culture. Underneath the seemingly harmonious forms, the work implies a certain contradiction between simplicity and complexity, static and



dynamic, inner and outer, and growth and gravity. She unites order and chaos, hard and soft, tangible and intangible forms into the work, making it full of strong contrasts(.Liu, H. 2013) The work is a metaphor for the irony and crisis of the destruction and shrinkage of the natural environment due to the over-exploitation of the artificial environment in modern society. The colors of his works are also characterized by solid chemical pigments, giving an unusually eye-catching but unrealistic mechanical plant form.

2.12 Expression and care of the humanities

In modern pottery creation, environmental pottery is also the focus of many potters and can be said to be closely linked to human life. From ancient times to modern times, environmental pottery has moved from an agrarian society into today's industrial society, giving it a new language of expression integrated into human life, focusing on the expression of spiritual content in a purer material language, gradually becoming a vehicle for the spiritual expression of modern man and society, and reflecting a harmonious ecological spiritual pursuit in the environment. For the artist, environmental ceramics should be the ultimate care for people and the pursuit of eternity, and thus become an essential part of both the external construction and the internal needs of human beings.



Figure 5: Zhu Legeng's work "Hot Land", ceramic sculpture

Today, with the rapid development of the times, people have to run around in the jungle of steel and concrete, which makes us yearn for the unrestrained nature in our hearts and a spiritual habitat where we can find ourselves. Zhu Lekeng once said, "My creative



inspiration comes from the inspiration of nature, and also from the rediscovery and interpretation of history." His works are always concerned with the emotional world of people's hearts, and the themes of his works are always inseparable from the exploration of nature, life, and faith, constantly mobilizing the emotional demand of people to return to nature. Cows and horses have always been among the most critical themes in Zhu Lekong's work. They were the animals most closely associated with people's productive lives in agrarian societies and formed the most important source of productivity and wealth for a family. With the advent of industrial society, the production methods of agrarian society are becoming more and more distant. People cannot help but look back on their memories of life in the fields and countryside, with cows and horses as symbolic images of that era, which will cause people to yearn for the simplicity and authenticity of rural life. However, the authors express different states of mind and sentiments in different works. The cows and horses in the environmental pottery work Hot Earth and Wind express the author's celebration of the spirit of the primitive and straightforward farming civilization, giving the symbols of farming civilization, the cow and the horse, a new and modern spirit. The work 'Hot Earth' is like a herd of cattle coming from the distant past, marching towards people as if they were still plowing away under the scorching sun. At this moment, one seems to feel the long-lost breath, the faith, and the spirit from the distant past again. The work uses a bold ceramic expression with an unrestrained, hot glaze, expressing the author's passion and celebration of nature, the earth, and life.



Figure 6: Zhu Legeng's work "Wind", ceramic sculpture

The "Wind"represents a group of horses standing against the Wind, some with their heads



raised, others buried deep as if they could be heard whispering. They are like a group of spirits that inspire us to reverie, embodying the infinite longing of modern people for freedom. The two sets of works express the author's strong desire to return to nature and simultaneously bring man and nature closer together, with works full of exploration and concern for the spiritual world of man. From Zhu Lekeng's artistic creation, we sincerely feel that the creation of environmental pottery should pay more attention to the experience of people's inner world and the expression of their spiritual emotions and that environmental pottery should play its function of serving the space and drawing closer the relationship between man and man, man and nature, and man and society. Zhu Lekeng's attempts at such works have given people a strong sense of the ecological development of environmental ceramics.

2.2 Ecological expression in creative subjects

2.21 Depiction and celebration of nature

The best teacher of the artist, the most outstanding teacher of all, is nature, which deserves our infinite and unconditional worship. As a ceramic artwork made of clay, it is not only a teacher of nature but a creation of nature. From the transformation of clay into porcelain, through water panning and natural drying, kiln firing, until the final ware, half is artificial, half is heavenly, is the cooperation of man and heaven. Man is the spirit of all life, and what makes him human is that he has a natural desire for material things and a spiritual expression of emotion. While man's pursuit of material things has bounds, his spiritual and emotional pursuit and expression can transcend space and time, reaching back to the universe's origins and looking down into the infinite stars. The importance of nature and man lies in the fact that man cannot be separated from nature and must live in nature, and ceramic art is also a gift from nature to man.





Figure 7: Zhu Legeng's work "The Bloom of Life", High temperature ceramic mural

Chinese ceramicist Zhu Lekeng's work 'The Blossoming of Life' expresses the radiant process of the free emergence of life in nature. Leaves, flowers, shoots, moss, mushrooms, rivers, pebbles - these seemingly real and illusory landscapes may not necessarily be real natural landscapes. However, landscapes flow from our hearts so that the unreal is more accurate than the real. Sometimes the simplest things are often the most beautiful, so the writer decided to use a single white color; white is colorless, but it can also be a myriad of colors. In Chinese painting, it is essential to have a blank space, which sometimes contains more content than fullness. However, a single white color does not mean flat. Without variation, the work undulates in a rhythm of highs and lows, approaching the viewer with an overwhelming momentum, a power of life that is bursting and writhing, a power that comes from the boundless universe of the ding, from the sublime sense of sublimity and religion deep in the human heart."(Zhu Legeng: Symphony of Gold, Wood, Water, Fire and Earth. 2004, January 13)



Figure 8: Hitomi Hosono's work "A Very Large Hawthorn Tower", Porcelain

Hitomi Hosono is a Japanese potter born in Tajimi, Gifu Prefecture, Japan, an area renowned for its rich ceramic heritage. As the daughter of a rice farmer and the granddaughter of a potter, she spent much of her childhood surrounded by pottery and rice paddies. The distinctive sounds and undulating shapes made by the wind blowing through the rice fields gave her some of her initial inspiration for her pottery, primarily inspired by leaves and flowers, incorporating the beautiful details of plants into her pottery and allowing them to become her own creative language. Hitomi Hosono's pottery is known for its intricate botanical forms and carvings, using a technique called 'Sprigging,' which has been used to decorate pottery in England since the 6th century AD, by pressing clay into a mold to create a relief effect shape, which we also call a print. The whole process takes around a year for a large piece, showing the work's complexity and detail.



Figure 9: Hitomi Hosono's work" A Tall Tsutsuji Tower", Porcelain

Hitomi Hosono spends a great deal of time observing plant forms, including the veins of leaf growth, the shape of leaf edges, and the layering of petals. Her work focuses on plants in their earlier stages, which are more compact and detailed than their mature forms and give them a more intimate and lovely feel. "I wanted to transfer the beauty and detail of the leaves into my ceramic work, using it as my own language to weave new stories for the objects."The artist's attention to nature is subtle, conveying a sincere attitude towards it, treating even tiny plant objects carefully. She has said that she believes every leaf, tree, and flower has a soul and can think and feel just like humans. Therefore, when she is inspired by nature to create, she puts her energy and emotions into it, and each work reflects the author's attachment to nature.

2.22 Interpreting the communication of culture

"The role of the environment for people is very significant, the environment influences the way of life and behaviour of the population, rich in value, influential environmental factors are protected and complemented, people create the environment, the environment also changes into a sense of intimacy, identity and a sense of belonging, and moreover conveys a culture from which to feel the due cultural value li aesthetic pleasure. ". Modern pottery has a richer form of expression and communication properties. Through the interpretation of its material and craft properties, combined with personal creative thought, the artist can give appropriate form expression and content communication to the artist's creative concerns based on the modelling characteristics of natural forms, satisfying its social

properties and mass communication characteristics, while showing the author's thoughts on social forms and cultural spirit.



Figure 10: Marc Leuthold's work" Typhoon", porcelain

Humans seem to naturally sense the circle, a "mother form" of commonality and sympathy. Because the sun is round and the moon has roundness, they contain mysterious laws beyond human reach, giving light and heat, dividing day and night. This mysterious perception of vitality is reflected in all civilizations. It is constantly being confirmed and given a spiritual accumulation and storage. Marc Leuthold's creation and grasp of the circle draw on these types of civilizations, and his work traces the circle's spirit.

Marc Leuthold's work is based on the radioactive pleated wheel as a matrix, creating a 'field' of circles through precise drawings, with a sense of time and space, radiating, reverberating, surging, exquisite, layered, and cyclical; his work has a primitive vitality but also contains a futuristic coldness and fantasy, the core of this vitality is the trace of the spirit of the circle, but also includes time and space, 'space-time view' has become the implicit theme of his pleated wheel creation.





Figure 11: Marc Leuthold's work" Esprit / Spirit 2", porcelain

For example, his award-winning Esprit / Spirit 2 in Chinese White has echoes of the apparently Chinese jade. He shows the warmth and mystery of white porcelain with two identically sized round plates, one smooth and plain with small holes, translucent as if the jade were divine; the other with knife-marked folds spreading out from the center, with a human figure and dragon faintly visible on the front and back; the other two small pieces are a knife-marked 'offering bowl' and a pinched 'wave' with hand marks. "The four pieces are held up on a wooden stand, staggered in height, and the synthesis of imagery between them suggests a return to one's own experience of life after traveling through time and space. The classic style of Mark's work, the 'radioactive folded wheel,' can also be seen in this work. This was already evident in his Origin, a work from 20 years ago, which explored his cosmology, asking how the source of the world related to the clay and carving knife in his hands. His work is rich in imagery: solar discs, mechanical gears, shaped and mutated feathers, scales and armor, and waves formed by wind and water, which he connects ambiguously, using a carving knife to wander, dance and punch through the clay, the marks of which reveal the plasticity and fragility of the clay's inherent tension.



Figure 12: Zemer Peled's work" Intertwine", Porcelain

Zemer Peled is an artist from Israel whose work explores the beauty and cruelty of the natural world. Her sculptural language is inextricably linked to the environment in which she grew up, showing the beauty and cruelty of the natural environment surrounding Israel on the one hand and the unyielding spirit and will of the Israelis to resist the intense power of art on the other. She is known to the public for her unique and innovative nature ceramic art, which examines the beauty and cruelty of the natural world. Inspired by natural landscapes, Zemel forms ceramic installations resembling flowers or sea creatures from thousands of handmade ceramic tiles. His ceramic installations convey a sense of delicacy, softness, and lightness, with many of the forms taking on the shape of coral and a sense of nature. Zemer Peled's sculptures symbolize the beauty and brutality of the visual world. Her ceramic sculptures connect themes of personal memory, identity, and place through the formal fragmentation and reconfiguration of porcelain tiles, combining narrative and formalist elements through her work, using the process of creation and destruction to form sculptures from thousands of handmade tiles, resulting in works that can be associated with art history traditions, outsider art, and natural phenomena.



Figure 13: Zemer Peled's work" Large Peony and Peeping Tom", Porcelain

Zemel Pered's sculptures and installations comprise thousands of handmade porcelain shards, often in white and colored representations. She transforms the sharp pieces into soft feathers, flower petals, leaves, and thorns. As she breaks the porcelain into shards during the creative process, the jagged edges make the ceramic material violent, beautiful, complex, and fragile. They are intricately arranged from the inside out, appearing delicate and fluffy. The work Large Peony and Peeping Tom, 2014 features these shards in geometric barb shapes that mysteriously take on an alluring form. The endlessly sharp porcelain pieces give the viewer a sense of sharpness and danger while at the same time providing a sense of softness through the formal combination of shapes. Moreover, her forms are always fluid and dynamic, never static, with the sharp porcelain sections conveying a sense of constant movement. As the viewer moves around the work, the work changes shape with a sense of wonder.

2.3 Individual creative practice

Based on an ecological vision, the author created a group of modern ceramic sculptures to express the conflict and contrast between artificial and genuine nature. Through the artistic creation of three types of natural elements, namely flowers, insects, and seeds, the geometric language of these realistic representations is extracted and utilized as the natural base form in the creation. At the same time, high-purity colors, such as bright red, orange, deep blue, and brilliant purple, give the works a visual vitality, presenting an unpredictable and fantastic effect. The final combination of the highly metallic ceramic plating process emphasizes the contradictory relationship between man, nature, and society in the industrialization process, weakening the naturalness and softness of the original objects and deliberately emphasizing the metallic quality of the work, attempting to create an artificial sense of natural beauty, making the work a contradictory carrier with both natural and industrial technological properties. The work is a contradictory vector of both natural and industrial technology, with sharp lines and angles in the form emphasizing the danger.



Figure 14: Personal works" Nature Communication VII", Ceramic sculpture

The forms in the first group were inspired by flowers, which are also one of nature's most beautiful creations. The author uses the most basic symmetrical shapes as the primary form for this sculpture and abstracts and deforms them, combining simple metal shapes with abstract petals to form new living shapes and to emphasize the contrast and conflict between the natural and the artificial in one work.





Figure 15: Personal works "Nature Communication I", Ceramic sculpture

The second group of works takes its creative form from insects. Insects are the most numerous group of animals on earth. They come in different shapes and colors. They are also symmetrical in their shapes and patterns. Like flowers, some insects are small but aggressive toward humans. The symmetry of insect structures is used as a focus for abstract expression in the compositions, also combined with metallic forms to form short forms that are aggressive and dangerous.



Figure 16: Personal works "Nature Communication V", Ceramic sculpture

The shape of the third sculpture comes from the seed. Seeds are the reproductive system of seed plants and play an essential role in the continuation of the species. The seed is closely linked to human life, and the tiny living individual is powerfully alive. At the same time, it varies in shape, size, color, and surface texture from one plant species to another. Therefore, its full shape is seen as a focal point for abstract expression, blending with the cold

metallic texture to create a visual conflict.



Figure 17: Nature Communication "series works exhibition site photosFigure17

Ceramics as modern art, the natural form modeling output through modeling in the context of the information age, on the one hand, reflects the relationship between the virtual and the real in the context of the information age, and on the other hand, explores the two sides of artificial nature in practice. Through this art practice, the author attempts to find a balance between the organic beauty of nature and the repetition and normality emphasized by industrialization and to put into practice the influence of technology on nature and the influence of industrialization on craftsmanship in the process of creating the work and attitude.

3. CONCLUSION

"Today, with the advent of the post-industrial era, people are gradually waking up from the extreme pursuit of rapid economic development and are constantly searching for a balance between man - nature - society. "has gradually been implemented into all aspects of social development and has become one of the important directions of development. In other words, "ecology" is no longer an abstract concept for the general public today but exists as an urgent need of the times and a state of being that people look forward to.

Modern pottery is thought of from the perspective of nature and ecology as a medium and carrier of interconnectedness and balance between man and man, man and nature, and man



and society. Moreover, today, because of its material characteristics and the historical context it carries, it conveys more spiritual and cultural care and exchange to people. In other words, ecology today is no longer just a concept of material sustainability. However, it has risen to the cultural concept of achieving a harmonious coexistence of man, nature and society from both material and spiritual aspects.

Through the interpretation of ecologically representative modern ceramic art creations and creative practices, it is evident that the concept of ecology is an important value orientation for the future development of modern ceramic art and that the use of the language of natural forms for ceramic art creation will continue to be an important modelling vehicle for the creative expression of modern potters. Based on this, with the richness of visual language and the application of diverse materials and techniques, the deepening of ecological concepts and themes conveyed by works through multiple artistic expressions is one of the trends in the creation of modern pottery in the future. Modern pottery will be more widely known and recognised by society and people shortly as the needs of the new era develop further.

4. ACKNOWLEDGEMENT

The author would like to acknowledge the various educational resources provided by Chiang Mai University, including the e-book resources provided by the Chiang Mai University Library and other learning resources provided by the Faculty of Fine Arts, which have been of great help in the writing of this paper. I would also like to thank my supervisor, Professor Jan Theo De Vleeschauwer, for his guidance and support during this PhD study in Arts and Design, Faculty of Fine Arts, Chiang Mai University. This article is part of the PhD Thesis in the Art and Design Program, Faculty of Fine Arts, Chiang Mai University. This thesis and the research behind it would not have been possible without the exceptional support of my advisor.



REFERENCE

- Bai, M. (2015). Barbara Nanning. In World famous ceramic artist workshop Europe Vol. 1. Shijiazhuang: Hebei Fine Arts Publishing House.
- Dickens, C., Jennings, L., & Doyle, R. (2016). A tale of Two cities. London: Puffin.
- Grosse, E. (2010). Beginnings of art. Nabu Press.
- Huang, Y. (2016). Artistic Features of Barbara Nanning's Ceramic works "Galaxy". Thesis of China Academy of Fine Arts.
- Huyan, A. (2018). The expression of natural form language in the series of "everything in itself". JINGDEZHEN CERAMIC INSTITUTE.
- Lei, Y. (2006). Ecological basis of environmental holism [Abstract]. Journal of Tsinghua University (Philosophy (Social Science Edition). doi:CNKI:SUN:QHDZ.0.2006-04-017
- Liu, H. (2013). Ecological Study of Ceramic Art -- Taking Environmental Ceramics as an Example. Doctoral Thesis of the Chinese Academy of Arts.
- Liu, H. (2013). Research on Environmental Ceramics in the Ecological Context -- On the Ecological Nature of Creative Ideas. Art Review. doi:10.16364/j.cnki.cn11-4907/j.2017.06.031
- Nash, R. (1990). The rights of Nature: A history of environmental ethics. Madison, WI: University of Wisconsin Press.
- Odum, E. P. (1959). Fundamentls of Ecology: 2nd ed.
- Odum, E. P., Barrett, G. W., & Lu, J. J. (2009). Sheng Tai Xue Ji Chu = Fundamentals of Ecology. Bei jing: Gao deng jiao yu chu ban she.
- Sun, X. (2010). Public Art Based on Interaction -- Research on Environmental Factors Affecting Contemporary Public Art Creation. China Academy of Arts.
- The work of Sadashi lnuzuka. (2018). Chinese Ceramic Artist.
- Xiao, L. (2018). Place and Zen -- The space construction of Zhu Legeng's environmental ceramic art. Art Space.
- Yang, K., & Xu, S. (2016). Research on contemporary environmental ceramic art design under the influence of ecological concept [Abstract]. Chinese Ceramics. doi:10.16521/j.cnki.issn.1001-9642.2016.08.019
- Zhu Legeng: Symphony of Gold, Wood, Water, Fire and Earth. (2004, January 13). China Culture Daily, p. 70.
- Zhu, L. (2020). Zhu Legeng: My Way to Create Environmental Ceramics. ART OBSERVATION.
- Zou, Dongsheng, & Gao, Zhiqiang. (2007). Sheng Tai Xue Gai Lun = conspectus of ecology. Zhangsha: Hu nan ke xue ji shu chu ban she.