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RESEARCH ARTICLE

DEFAMILIARIZATION IN GLASS

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Abstract

This article aims to focus on the versatile material of glass and to explore the unique potential of glassblowing techniques for creating organic and transient glass forms for site-specific installations. The objective is to transform something mundane into something new and unexpected and deepen our appreciation for the natural world. Through defamiliarizing glass, this article explores its qualities and properties, examining the way light interacts with it, how it reflects and refracts, and the innumerable ways it can be moulded and shaped. Site-specific installations will invite the viewer to engage with the art in a specific context, creating a deeper connection between the artwork and its environment. The scope of this article is to push the boundaries of the traditional use of glass, and to explore new ways of creating and experiencing art through defamiliarization. Ultimately, this research aims to inspire a greater appreciation for the world around us and encourage viewers to see the beauty in the ordinary. The construction stages and resulting site-specific installations were recorded by photography, and the figure section provides visual representations of these documented stages. This research employs a qualitative approach, including a review of relevant literature, and will primarily utilize an experimental, practice-based methodology.

Introduction:-

This research explores the concept of defamiliarization and its potential for creating new perspectives and a deeper understanding of the world around us. Specifically, it focuses on the versatile material of glass and the unique potential of glassblowing techniques for creating organic and transient glass forms for site-specific installations.

The research methodology is practice -based and employs an experimental approach which involves the intuitive composition of glass forms in previously examined locations, creating otherworldly and ambiguous environments that prompts questions about the nature and origin of the objects in display. This study concentrates on the use of glass in Cyprus, where the material has been utilised for thousands of years. This research offers insights into how traditional mediums can be used in contemporary art pieces and to create meaningful and relevant artworks.

Furthermore, this research aims to inspire a greater appreciation for the world around us and to encourage viewers to see the beauty in the ordinary.

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The figures section of this study provides visual representation of the glass being formed in Arkin University Creative Arts and Design (ARUCAD) Glass Studio, construction stages and resulting site-specific installations, documenting the journey from experimentation to final artwork.

Ultimately, through the exploration of defamiliarization as a concept, this research serves as an important reminder of the unique ability of art to shape and influence our perception, connection, interaction with the world around us. In the future this research can be expanded in various ways, such as exploring more of the possibilities of glass as a medium, with different glass types and forms, and creating site-specific installations in different places and contexts.

Work Methodology:-

The research methodology employed in this study is practice-based, with the creation of the forms occurring in the glass workshop before being composed in the landscape. The objective of the study was to examine the ambiguity between natural and man-made materials and forms and to create compositions that highlight the complementary relationships between the two. The construction stages and results of the site-specific installations are recorded through photo documentation, and the images can be viewed in the figures below.

These pieces are intuitively composed in the ancient city of Lambousa, including its cave cemeteries and limestone fishponds on its beach, to create otherworldly and ambiguous environments that challenge viewer perceptions and invite questions about the nature and the origin of the objects on display. This facilitates the concept of defamiliarization. The study concentrates on the traditional glass material used for thousands of years in Cyprus. Given the longstanding tradition of glass used in the region, expression was challenging and rewarding. This research was conducted through a combination of exploration into experimental techniques and artistic practice, contributing to the understanding of how traditional mediums can be used in contemporary art practices and how they can be used to create meaningful and relevant artworks.

Defamiliarization

Defamiliarization is the artistic technique of forcing the audience to see common things in an unfamiliar or strange way (literally "making it strange"), in order to enhance perception of the familiar. (Defamiliarization, 2020)

The concept of defamiliarization was first discussed in 1917 in Victor Shkovsky's essay "Art as Technique", which described the concept of defamiliarization as an artistic technique of presenting to audiences everyday things in an unfamiliar or strange way so they could gain new perspectives and invite the audience to see and examine the world differently. According to literary critic Shklovsky:

> "The purpose of art is to impart the sensation of things as they are perceived and not as they are known. The technique of art is to make objects 'unfamiliar,' to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged." (Shklovsky, 1965)… "I personally feel that defamiliarization is found almost everywhere form is found." (Shklovsky, 1965, s. 12-16, 18)

Another prominent Russian art critic Boris Tomashevsky also contributed the development of the concept of defamiliarization on his essay "Thematics" in 1925, he viewed the defamiliarization device as a unique example of creative inspiration. If non-literary content was incorporated into a piece of work, it must be justified by fresh, unique interpretation of the content. The familiar and routine must be discussed as brand-new and unexpected. Every day must be described as though it were unusual. Defamiliarization techniques were often acceptable since the items had been perceived through the thoughts of an unfamiliar character. (Tomashevsky, 1965)

The purpose of the creating an image is not simply to perceive the simplified meaning of an object collectively, but also to form a unique perception of it. The way we perceive an object can vary depending on the setting in which it is observed. In the context of art, this perception is often achieved by stripping an object of its structures and using it as a means to convey an idea. The concept of defamiliarization, which originated in literature, has been explored by many art forms. For instance, Marcel Duchamp used recontextualization to defamiliarize everyday life. By presenting familiar object in unfamiliar ways, artists aim to challenge people's perception and encourage them to think differently. A great example of this is the installation by Doris Salcedo at the Istanbul Biennial 2003 (Fig 1), which exemplifies defamiliarization in contemporary art.

Figure 1:- Doris Salcedo, Untitled, 2003. 1,550 wooden chairs; approx. 33 x 20 x 20 ft. (10.1 x 6.1 x 6.1 m). ephemeral public project, 8th International Istanbul Biennial, Istanbul, 2003, photo: with the permission of Muammer Yılmaz.

Through the use of defamiliarization, this research aims to challenge the notion of man-made objects in a natural and specific setting. Nature offers an infinite range of forms, and when the man-made objects are introduced that resemble natural forms, a sense of ambiguity is created. This ambiguity forces them to ask themselves whether the object is natural or man-made and if it has always been there. Many artists have explored this concept starting with Marcel Duchamp, but this research will focus on artists who use man-made objects in natural or site-specific settings to create installations that provoke the audience's perception. Some of the influential glass artists in this field include Dave Chihuly, Kait Rhodes and Ritsue Mishima. They will be examined later in this research's influential artists section.

Choice Of Material: Glass

The art of glassmaking involves heating a mixture of silica sand, soda, and lime to a molten state. Glass has been a crucial material for centuries, with the earliest evidence of glassmaking dating back to roughly 2500BC in present day Syria and Iraq (Moorey, 1994). At first, glass was primarily used to create beads. It wasn't until about 1000 years later that bigger quantities of raw glass were generated, and the first core-formed vessel emerged in the from Bronze Age. As a result, there was a time frame of around 1000 years where only small amounts of glass were made (Handerson, 2013).

In his article title "The Late Bronze Age Core Formed Glass Vessels in Cyprus". Peter Cosyns sheds light on the role of Cyprus in the production and consumption of glass during the Late Bronze Age. While studies on glass production and use during this period typically focus on regions such as the Aegean, Egypt, and Mesopotamia/Levant, Cosyns highlights that Cyprus is a crucial island that is often overlooked despite the significant discoveries made in the island.

As an active hub in the Mediterranean trade network, Cyprus played a significant role in the production and consumption of glass during Late Bronze Age. The island's strategic location made it an important centre for trade, and many glass artefacts on the island suggests that it was a crucial player in the distribution and exchange of glass in the region. Cosyns focuses specifically on core-formed glass vessels from Cypriot settings, where the physical properties and chemical compositions of these artefacts reveal critical information about techniques that were utilized by the ancient glass makers. Through his analysis, he demonstrates that the glass vessels found in Cyprus share many similarities with those found in other regions but also have distinct characteristics that point to the island's unique role in developing glass technology and trade (Cosyns, 2017). A Crucial component of this research is the focus on a location in the North part of Cyprus, specifically emphasizing the ancient city of Lambousa in Kyrenia.

For this research, the glassblowing technique was initially investigated and experimented with. Although glass has been around since 2500 BC, the glassblowing technique was invented by Syrian craftsmen in the first century BC, in regions such as Sidon, Aleppo, Hama and Palmyra. Glassblowing is a creative process that involves shaping a mass of molten glass by blowing air through a tube. They created blown vessels for everyday and luxury purposes, which were commercially exported to various parts of the Roman Empire. The art form has evolved, with glass blowers developing new techniques and experimenting with different materials to create various objects, from functional vessels to intricate sculptures (Origins of Glass Making, 2023).

Glassblowing provides an ideal medium for creating objects that capture and reflect light in unique ways. In recent decades, there has been a resurgence of interest in glassblowing as artists explore the possibilities of using this medium to create site-specific installations. Site-specific installations are works of art designed to be experienced in a particular space or environment.

This article examines the fundamental principles and considerations involved in creating site-specific installations using glass-blowing technique, highlighting the importance of experimentation, context, and the transient nature of the work. This article demonstrates the unique potential of glass as a medium for creating site-specific installations that respond and enhance the natural environment through the concept of defamiliarization.

Process Of Glassblowing

There are many different types of glass that can be used in glassblowing, each with its own unique properties and characteristics. For example, soda-lime glass is the most common type of glass used in Glassblowing, as it is easy to work with and produces a clear, colourless finish.

Borosilicate glass, on the other hand, is a type of glass that is resistant to thermal shock and is often used in scientific glassware and laboratory equipment. Coloured glass, which is created by adding metal oxides to the glass mixture, is also commonly used in Glassblowing to create a wide range of colours and effects (Shelby, 2005). This research used the common commercial glass type, which is a mix of silica, sodium carbonate and calcium carbonate.

Glassblowing is an ancient art form that It involves heating glass to a molten state and shaping it into various forms using a variety of tools and techniques. The process of glassblowing requires skill, patience, and attention to detail, as even the slightest mistake can ruin a piece. It must be performed as a team.

This part of the research will provide a step-by-step guide to the glassblowing process, from gathering the materials to finishing the piece. The practice was based in the Glass Studio of Arkın University of Creative Arts and Design in Kyrenia.

Step 1: Materials

In glassblowing, several essential equipment and specialized tools are used to shape, manipulate, and cool the glass. Among these are furnace, bench, blowpipe, marver, jacks, yoke, shears, block, paddle, punty mould (Fig 2-3) and annealer (Fig 18). The furnace is a crucial part of the process, with a hole called the "glory hole" that reaches temperatures as high as 1200 Celsius (2000 Fahrenheit) (Fig 5). These furnaces are usually powered by gas and electricity providing the high temperatures needed to melt the glass. The bench is where glassblowing is done, with arms supporting the blowpipe (Fig 9). The yoke is a stand that is placed in front of the furnace to support the blowpipe, guiding it in and out of the furnace (Figure 5).

After shaping the molten glass, it must be cooled down slowly to prevent it from cracking or breaking. This is done using an annealer, which is essentially an oven or kiln that is kept at a temperature of 550°C and then gradually cooled down for a minimum of 14 hours, usually 24 hours (Figure 18).

Other essential tools in glassblowing include the block, typically made of wood and used for shaping molten glass into a round shape (Fig 7). The blowpipe is used to blow air into the molten glass, with a mouthpiece on one end and the molten glass on the other (Fig 9). Jacks are metal blades that look like very large tweezers, used for shaping and sometimes expanding the inflated glass, as well as separating the glass from the blowpipe. Shears are used for cutting or tightening the hot glass, with sizes varying according to the shape and size of the glass. The paddle is a wooden shovel used to create a flat surface on the glass, while moulds are usually made of wood and used to shape the molten glass to predetermined dimensions. The marver is a surface, often made of steel, brass, or graphite, used to shape the molten glass into its final form (Fig 4). The punty is a metal rod that can be attached to the bottom of an inflated glass, making it easier for the glassblower to work on the top of the glass (Fig 12). Finally, Sophietta is a tool used as a puffer to further inflate a vessel after it has been removed from the blowpipe and is attached to the punty (Corning Museum of Glass, 2023).

During the process of glassblowing, heat-resistant pads are used to handle the very hot glass piece, and specifically designed thick gloves are worn to protect the hands. Goggles are also worn to prevent possible eye damage from flying debris or hot glass.

Moreover, folded wet newspaper may be used to shape and smooth the surface of the glass, while buckets of water are available to cool the wooden block and steel tweezers used in the process. All these tools and equipment have been developed and refined over the centuries to facilitate the art of glassblowing.

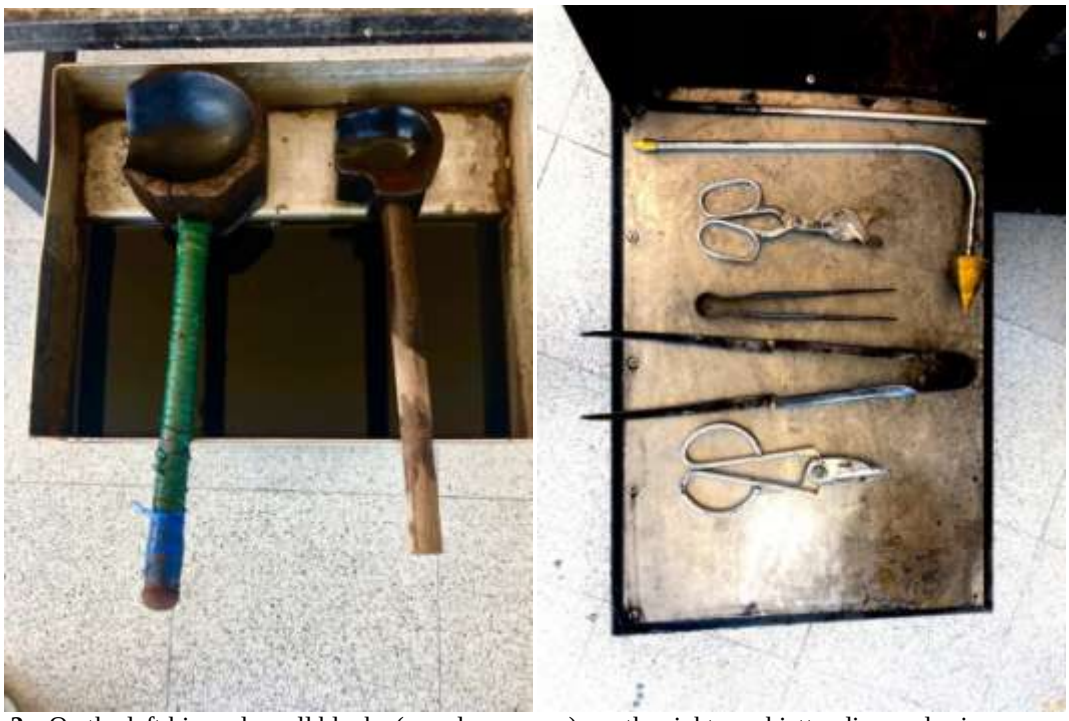

Figure 2:- On the left big and small blocks (wooden spoons); on the right; sophietta, diamond scissors, small and big jacks and shears.

Figure 3:- Blowpipes and punties, ARUCAD glass studio, 2023.

Figure 4, Shaping the first take of molten glass on the surface of the marver, ARUCAD glass studio, 2022

Figure 5:- The mouth of the furnace is called "glory hall", the blowpipe is resting on the yoke, ARUCAD glass studio, 2022.

Step 2: Heating the Glass

Once the materials are gathered, the glass is heated in the kiln to a temperature of approximately 1200°C. This process is called "charging" the glass. The glass must be heated to a molten state so that it can be manipulated. The viscosity of the molten glass in the furnace looks like honey, smooth and malleable. The colour of the molten glass turns bright orange yellow. The mouth of the furnace called “glory hall”, is pictured in Figure 5.

Figure 6:- Many visits in and out of the (furnace) glory hall, ARUCAD, 2022.

Step 3: Gathering the Glass

The blowpipes are put at the mouth of the furnace to heat before taking molten glass onto the pipe. The warmed pipe then dipped into the molten glass in a rotating fashion. The first layer is usually a small amount of glass to form a smaller than a tennis ball size, gradually building the glass layers on top of each other. If the glass piece exceeds the size of the furnace entrance, the furnace doors must be opened to safely remove the piece without contacting the furnace surface. This precaution is taken to prevent damage to the glass piece and to ensure the furnace’s integrity.

Figure 7:- Shaping the molten glass with block, ARUCAD glass studio. 2023.

Step 4: Shaping the Glass

After gathering the molten glass on the blowpipe, the glassblower then proceeds to shape it into the desired form with the help of various tools. The glassblower sits on the bench putting the molten glass part of the pipe first while constantly turning the pipe slowly to make sure the molten glass stays on the pipe intact. The other end of the pipe is then placed on the bench and moved back and forth on the arms of the bench. The jacks are utilized to craft rounded shapes by incrementally adding molten glass to the glass piece, thereby increasing its size. The jacks utilized increase in size proportionately with the growth of the glass piece. Due to their wooden composition, the jacks must be kept submerged in a water bucket to prevent them from being damaged by the heat of the glass. Jacks are one such tool employed while the glass remains attached to the blowpipe. Paddles and blocks, on the other hand, are utilized when the glass is being blown. These tools are essential in the glassblowing process, as they allow the glassblower to shape and manipulate the molten glass into the desired form. The jacks are used to form rounded shapes, while the paddle is used to create flat surfaces and to shape the glass. The sophietta, on the other hand, is used to further inflate the glass and to create more complex shapes. The process of shaping the glass into a round form with a block is depicted in figure 7.

Figure 8:- the bench, blowpipe with molten glass and sitting of the glass blower, Glass Studio, 2023

Step 5: Blowing the Glass

Once the glass has been heated to the desired temperature, The glassblower can start blowing air into the molten glass, which inflates it like a balloon (Fig 9). The glassblower must control the pressure and timing of the blowing to ensure that the glass is evenly inflated and does not become too thin or uneven. The glassblower can use the jacks, shears, paddles, and other tools to shape the glass while it is being blown to achieve the desired shape and thickness. This process requires experience, patience, precision, skills that built for very long time to create a piece that is well formed and aestatically sound.

Figure 9:- Sevda Orr, glassblowing on the bench, glass studio, 2023.

Figure 10:- Making a glass bubble, ARUCAD glass studio, 2022.

Figure 11:- Getting colour onto the molten glass from the marver, glass studio, 2022.

Once the glass has been heated and shaped in the glory hole, the next stage involves adding colour to the piece. Various forms of coloured glass, including powders, frits (glass granules) and bars (tubes of glass) are used to create a range of patterns and designs within the glass. The heated glass on the blow pipe is rolled over the coloured glass

to pick up pieces, and then reheated in the glory hole to melt the colours into the clear glass (Fig 11). During this process, the glass blower turns the pipe continuously to maintain the shape at the end of the pole.

Once the glass has been reheated and coloured glass melted into the clear, the blowpipe is rested on the steel arms of the bench and turned with one hand. Tools such as cherry wood blocks, wet newspaper, wooden paddles, and stainless-steel tools are utilized to shape the glass. The process requires perfect coordination between the right and left hands.

At the bench, the shape of the glass piece is determined, which can be round, oval, or a wide-open plate, bowl or completely serendipitous nature. The piece may undergo further addition of clear glass or colour, followed by reheating in the glory hole and further shaping at the bench. This process is repeated multiple times until the desired shape is achieved.

Following the shaping of the glass piece, the actual blowing process begins. A puff on the end of the blowpipe creates a bubble, after which the glass is reheated and turned in the Glory hole before returning to the bench for further shaping. This cycle is repeated many times, depending on the desired size and shape of the piece.

Figure 12:- Attaching the punty to the bottom of the piece with a molten glass, the one on the pipe on left is the punty, glass studio, 2022.

When the shape is satisfactory, the glass piece must be transferred from the blowpipe to a punty, which is another steel pipe that has been heating next to the mouth of the furnace. This transfer is necessary to create the opening of the piece. The punty is attached to what will become the bottom of the piece, and the glass blower continues to shape and refine the piece until it reaches the desired final shape.

To transfer the glass piece from the blowpipe to the punty, a small amount of clear glass is gathered from the furnace. The glass piece is stooped turning briefly and by the help of using molten glass, the punty is attached to the other end of the piece (Fig 12). The water from the bucket carried by the jacks put onto the area where the separation needed. At a particular moment, the blow pipe is wrapped around the piece, causing it to break away and leaving it attached to the punty. This step is challenging and carries the risk of dropping the piece. During the process if the glass piece is cracked, dropped, or shattered, unfortunately, glass is difficult to rescue, so the entire process starts from the beginning.

Figure 13:- Sevda Orr, experimentation with the molten glass, 2022.

Figure 14:- The glass piece is formed and then put it the furnace to make it malleable, 2022.

After the attachment of the glass piece to the punty, it is subjected to further heating within the glory hole. The shape of the piece is then altered using various tools available on the bench, such as the creation of a glass piece's mouth or the opening of a vessel. The heat emanating from the glory hole and other bench tools is used to shape the glass piece to the desired form. Once the intended shape is obtained, the glass piece is separated from the punty by firmly tapping it (Fig 15). The piece then falls into a container filled with layers of fire blanket, preventing damage from sudden temperature changes.

Figure 15:- The glass piece was put on the heat resistant blanket to detach from punty, glass studio, 2022.

Figure 16:- Sevda Orr, the use of torch, and wooden paddle to smooth the surface of the area of where the glass was detached from punty, 2022.

Figure 17:- The team of glass studio of ARUCAD working on a glass piece, 2022.

Due to the rapid solidification of the molten glass, a glassblower must work with great speed and precision to ensure that the glass piece is formed correctly. When glass cools too quickly, a significant temperature differential between the inside and outside of the piece can create stress on the glass surface, leading to potential shattering and breakage if left unaddressed. Therefore, a small team of highly skilled individuals in specialized studious often perform glassblowing. The glassblowing technique is involved working as a team. Working with molten glass requires the upmost attention and following strict safety rules.

Figure 18:- Annealer kiln, ARUCAD glass studio, 2023.

Step 6: Annealing the Glass

After the glass piece has been formed, it needs to be slowly cooled down to room temperature to prevent it from cracking or shattering. This process is called annealing and is typically done in a temperature-controlled annealing oven or kiln. The glass is placed inside the oven, and the temperature is gradually lowered minimum 14-15 hours to allow the piece to cool down evenly and prevent any thermal shock. The temperature of the kiln this research used was about 500-degree Celsius (Fig 18).

Figure 19:- Sanding Machines to Make the Glass Sharp Edges Smooth, ARUCAD Glass Studio, 2023.

Step 7: Finishing the Piece

Once the glass has been annealed, it can be finished using a variety of techniques, including cutting, polishing, and etching. Colour can be also added to the glass using various techniques, such as adding coloured glass to the molten glass or painting on the surface of the finished piece. Figure 19 shows the machines for smoothing the surface of the glass in ARUCAD Glass Studio.

This research explored the unique challenges and opportunities of creating site-specific installations using Glassblowing techniques. Installations are site-specific works of art that are designed to be experienced in a particular space or environment. Glassblowing installations can take many forms, from large-scale sculptures to small-scale installations that incorporate a few glass pieces into a larger installation.

One example of a Glassblowing installation is the work of the contemporary artist Dale Chihuly. Chihuly's installations are often composed of multiple glass elements that are arranged in a way that creates a sense of movement and flow. His works are designed to be experienced as a whole, with the viewer moving through the installation to explore the different elements and perspectives (figure 19).

Creating site-specific installations using Glassblowing techniques requires a deep understanding of the properties of glass and the techniques used in Glassblowing. Glass blowers must also have a strong artistic vision and the ability to manipulate the glass in real-time to create the desired effect.

Another principle of creating artworks using Glassblowing techniques is the importance of experimentation and exploration. Glassblowing offers endless possibilities for experimentation, with different types of glass, tools, and techniques allowing for the creation of a wide range of effects and textures. One of the unique aspects of glass sculpture is the way in which it captures and reflects light, creating a sense of luminosity and movement that is difficult to replicate with other materials.

In conclusion, creating site-specific installations using glassblowing technique is a unique and exciting way to explore the possibilities of this ancient material and art form. The process of creating artwork encourages glass blowers to push the boundaries of what is possible, exploring new techniques and ideas to create works that are unique and compelling.

Artists Who Have Used Glassblowing Technique To Create Site-Specific Installations

This research focused on glass artists who were relevant to this research, which they challenge traditional notions of permanence and value.

Dale Chihuly

Chihuly is a well-known American glass artist who has created a wide range of glass art, including large-scale installations that incorporate natural elements like water, light, and plants. His work often features brightly colored organic forms that seem to flow and move through space.

Figure 20:- Dale Chihuly, Ethereal White Persian Pond, 2005, Kew Gardens. Source: (CC BY-SA 2.0).

Ritsue Mishima

Mishima is a Japanese glass artist who is known for her delicate and ethereal sculptures that seem to capture the fleeting beauty of nature. Her work often incorporates fine lines and intricate patterns that give the impression of movement and fluidity.

Figure 21:- Ritsue Mishima, Paricelle Silenziose, site-specific installation, Vangi Sculpture Garden Museum, 2007, Source: https://shugoarts.com/en/artist/173/73

Kait Rhoads

Rhoads is an American glass artist who creates intricate, biomorphic sculptures that seem to be alive with movement and energy. Her work often features organic forms that are inspired by marine life, and she uses a variety of Glassblowing techniques to create the illusion of movement and fluidity.

Figure 20:- Kait Rhoads, Red Polyp, blown glass, woven by copper wire, 2007, photo source: https://www.biartmuseum.org/exhibitions/kait-rhoads-bloom/

Results Of The Experiment With Glass:

An experimental and serendipitous approach was explored, involving the use of limestone caves and nearby shoreline as a setting, with the goal of creating forms that blended seamlessly with the natural surroundings. The manipulation of various variables, including the shape and thickness of the glass, as well as the placement of light sources, were systematically tested using a trial-and-error method. Through this process of iterative experimentation, the optimal conditions were ultimately identified and achieved, resulting in a previously targeted outcome. The experimentation and iteration process led to the identification of successful techniques and approaches, resulting in the creation of glass forms that complemented the natural setting of the necropolis. The forms created with molten glass showcased the versatility of this material and its potential for artistic expression.

Installations:

Site-specific installations were created using the glass pieces in and around the Necropolis- a cave cemetery and fishponds in Lambousa. The Necropolis and the fishponds in Lambousa are historically significant sites, dating back

to the Phoenicians. This unique setting, combined with the glass material, created an atmosphere that evoked a sense of otherworldliness. The glassblowing technique and the concept of defamiliarization were used to create a series of installations called Ghosts Series 1-8.

Ghosts Serious-1, (Fig 21-22-23-24): This particular glass piece was produced using the technique of Glassblowing, which involved gathering the molten glass onto a blow pipe. Subsequently, the glass material was elongated with the aid of jacks, and then manipulated with jacks from various angles to create an object that emulates the organic features of plant roots. The resulting piece was designed to show as if something was hidden inside the stones trying to come out, almost oozing out.

The organic root-like shape was well-suited to the limestone cave walls, and the transparency of the glass material allowed it to blend with the surrounding environment. This complimentary relationship between natural and man-made elements enhanced the overall effect of the installation.

Figure 21:- Sevda Orr, Ghosts Series-1, cave chambers of Lombousa Necropolis, Kyrenia, 2022.

Figure 22:- Sevda Orr, Ghosts Series-1, Lambousa Necropolis, Kyrenia, 2022.

Figure 23:- Sevda Orr, Ghosts Series-1, chambers of Lambousa Necropolis, Kyrenia, 2022.

Figure 24:- Sevda Orr, Ghosts Series-1, Lambousa Necropolis, Kyrenia, 2022.

Ghosts Serious- 2 (Fig 25): The glass pieces were created by accumulating molten glass on the end of a blow pipe, and then manipulating the glass with various tools to create organic forms. These forms were carefully shaped to resemble the growth patterns of plants and other natural elements. Once the forms had taken shape; they were placed outside of the cave cemetery. The resulting glass pieces exhibited a degree of ambiguity in their origin, resembling natural growth of plants in their appearance, the forms' placement outside the cave cemetery further enhances this experience.

Figure 25:- Sevda Orr, Ghosts Series-2, Lambousa Necropolis, Kyrenia, 2022.

Ghosts Serious- 3 (Fig 26): The glass works in this installation were created through the same method employed in making the Ghosts Series 2. The components were constructed around the Lambousa Necropolis, whereby the interplay between the sky's reflection, limestone backdrop, and the surrounding flora's green hues came together to produce the final assemblage. The integral properties of reflectiveness and transparency were crucial in executing the intended effect of this composition.

Figure 26:- Sevda Orr, Ghosts Series-3, Lambousa Necropolis, Kyrenia, 2022.

Glass is an extraordinary material, notable for its unique properties that distinguish it from other substances. Its distinctive ability to transmit light results in a striking visual interplay of luminosity and shadow, creating a multi-dimensional effect that resembles the appearance of water. Glass pieces were often created in an experimental and spontaneous manner, with organic forms that mimic nature.

Moreover, glass installations were designed around the concept of defamiliarization by presenting glass pieces in an unusual and contextual manner to draw attention to the viewer's perception of the environment. Through this approach, the aim is to create a heightened sense of awareness of the World around us, challenging us to see it in a new light.

To achieve this effect, glass installations are composed in a way that blurs the boundary between natural and man-made objects. This approach creates the impression that the installations have always existed in their surroundings, as though they are integral parts of nature itself. By situating these installations within natural environments, the viewer is invited to engage in a dialogue with nature and reflect on our relationship with the environment. The use of glass, rock formations and the sea were critical aspect of this part of research, and the selection of the materials was intended to create a sense of fragility. The contrast between the delicate glass and the tough rocks served a focal point for these installations.

Ghosts series- 4 (Fig 27-28) and Ghosts series- 5 (Fig 29-30-31: The glass bubbles in the installations were created using a Glassblowing technique. The wet newspaper was used to press and deform the glass bubble, to achieve the desired organic forms. The molten glass went into the furnace many times, with bubble blown ever so slightly each

time. The goal was to create the desired form without causing the bubble to collapse. However, there were failed attempts during the process, with some bubbles shattering inside the annealer due to this or unevenly distributed glass layers or due to lack of experience with Glassblowing technique.

The installation was carefully composed to evoke a sense of naturalness, with the arrangement of the glass bubbles and rocks intended to create seamless integration with the surrounding environment. The goal was to create a sense that the installation had always been there, as if it was a natural part of the environment. This required careful consideration of the placement and orientation of the glass bubbles and rocks.

Incorporating the details of the Glassblowing technique and the challenges faced during the process provides a deeper understanding of the craftmanship behind the installations, as well as the research involved in creating it.
The juxtaposition of the delicate glass bubbles and the sturdy rock formations served to highlight the fragility of the glass material. Through the use of the Glassblowing technique to create organic forms that mimic the shapes and patterns found in nature. The transparency of the glass and its resemblance to water further reinforces this connection to the environment.

Furthermore, the hands-on approach taken during the Glassblowing process underscores the importance of skill and experience in creating the glass pieces. The repeated blowing and shaping of the glass bubble, as well as the use of wet newspaper to press and deform it, demonstrated the level of attention to detail required to achieve the desired form without to shatter. The failed attempts during the process further emphasize the experimentation and trial-and-error involved creating the final product.

Figure 27:- Sevda Orr, Ghosts Series-4, Lambousa Necropolis, Kyrenia, 2022.

Figure 28:- Sevda Orr, Ghosts Series-4, Lambousa Necropolis, Kyrenia, 2022.

Figure 29:- Sevda Orr, Ghosts Series-5, glass bubbles and limestone fishponds of Lambousa, Kyrenia, 2022.

Figure 30:- Sevda Orr, Ghosts Series-5, glass bubbles and limestone fishponds of Lambousa, Kyrenia, 2022.

Figure 31:- Sevda Orr, Ghosts Series-5, glass bubbles and limestone fishponds of Lambousa, Kyrenia, 2022.

Ghosts Serious-6, (Fig 32-33): The glass form was strategically placed within the limestone caves and illuminated with a light source to accentuate the layers of glass. This creative arrangement produced a surreal and otherworldly ambiance, as the glass form appeared to look like a luminous, glow-in-the-dark creature. The interplay between the glass form and their limestone environment creates an illusion of organic growth and transformation, as if the limestone is itself in a state of metamorphosis. This installation showcases the manipulation of glass to create artwork that integrates with the natural world while raising questions about its origin.

Figure 32:- Sevda Orr, Ghosts Series-6, glass piece with light in Lambousa Necropolis, Kyrenia, 2022.

Figure 33:- Sevda Orr, Ghosts Series-6, glass piece with light in Lambousa Necropolis, Kyrenia, 2022.

Ghosts series- 7, (Fig 34- 35-36-37): During the process, the molten glass was collected onto the blowpipe by frequently visiting the furnace to collect more glass, and this particular instance, the amount was notably more substantial and weightier. Next, a central hole was made within the glass with the help of the jacks. Finally, the molten glass was encouraged to further course by swinging the blowpipe laterally to encourage the glass to flow further. The resulting pieces resembled somewhat big flower buds.

When the glass forms were positioned within the crevices of the cave walls, their presence created an illusion of biological entities taking roots in those spaces. The transparent glass pieces resembled ghostly, otherworldly, big flower buds. In addition, their transparent nature allowed the limestone to be visible through them, resulting in the perception that the forms were present and absent at the same time.

The installations were situated within the limestone caverns of the ancient Lambousa in Kyrenia, which had been excavated to serve as a burial ground. As a result, the site possesses considerable significance, effectively juxtaposing the themes of life and death alongside the featured installations.

Figure 34:- Sevda Orr, Ghosts Series-7, glass forms in the chambers of necropolis in Lambousa, Kyrenia, 2022.

Figure 35:- Sevda Orr, Ghosts Series-7, glass forms in the chambers of necropolis in Lambousa, Kyrenia, 2022.

Figure 36:- Sevda Orr, Ghosts Series-7, glass forms in the chambers of Necropolis in Lambousa, Kyrenia, 2022.

Figure 37:- Sevda Orr, Ghosts Series-7, glass forms in the chambers of Necropolis in Lambousa, Kyrenia, 2022

Overall, the glass pieces installed in the Necropolis represents a remarkable example of the creative and cultural significance of glass artistry. Combining the familiar material of glass and historically significant setting of Lambousa had allowed the creation of ambiguous outcomes.

Ghosts serious 8, (Fig 38-39-40-41-42); The glass- blowing technique employed to create the glass forms for the final installations involved the accumulation of the molten glass on the blowpipe, which was then shaped into a round form. Additionally, molten glass was attached to one end using a punty, then put droplets of water with the help of jacks (tweezers) and a firm hit on the blowpipe to separate the blowpipe from the glass piece. To make the hole larger, jacks are skilfully used to manipulate the molten glass. Finally, the glass form was continuously rotated inside and outside of the furnace to achieve a disc shape.

Once the glass form had been shaped into a disc, it was carefully separated from the punty and placed onto a fire blanket (Fig 15). Using a torch and a paddle, the punty marks were smoothed out to achieve a flawless finish (Fig 16). The glass disc was then placed into the annealer with the help of protective gloves for cooling overnight (Fig 18) The safety is utmost importance while working with molten glass and extreme temperatures.

The process of finalizing the glass forms through smoothing the punty marks and annealing showcase the high level of technical skill required for Glassblowing. The careful attention to detail in smoothing out imperfections and the meticulous cooling process highlights the challenges inherent in working with this material.

The placement of the disk forms on the beach of the Lambousa Necropolis was a deliberate choice, with careful consideration given to the location's surrounding and natural light source. The site had been visited many times prior to the installation, with the aim of identifying the optimal placement for the glass pieces. The use of light and shadow was a key element in the composition of the work, with the play of light on the glass forms heightening their visual impact.

The close proximity of the installations to the sea was essential to the overall effect, with the glass pieces appearing almost as if they had almost washed up on shore. Despite being clearly man-made, the glass forms blended seamlessly with their natural surroundings, creating a sense of organic harmony between the art and the environment.

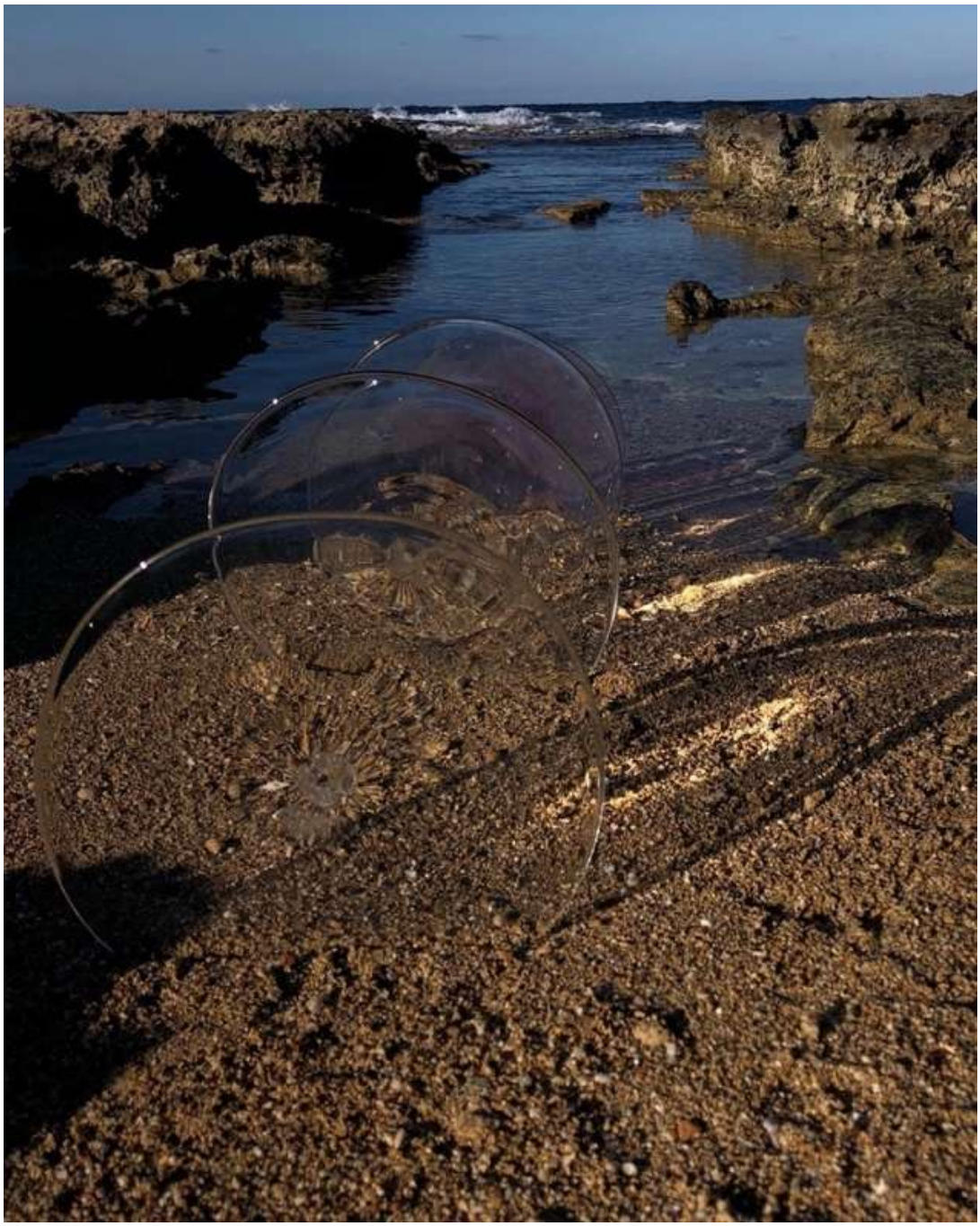

Figure 38:- Sevda Orr, Ghosts Series-8, glass forms placed on the carved limestone fishponds in Lambousa, Kyrenia, 2022.

Figure 39:- Sevda Orr, Ghosts Series-8, glass forms placed on the carved limestone fishponds in Lambousa, Kyrenia, 2022.

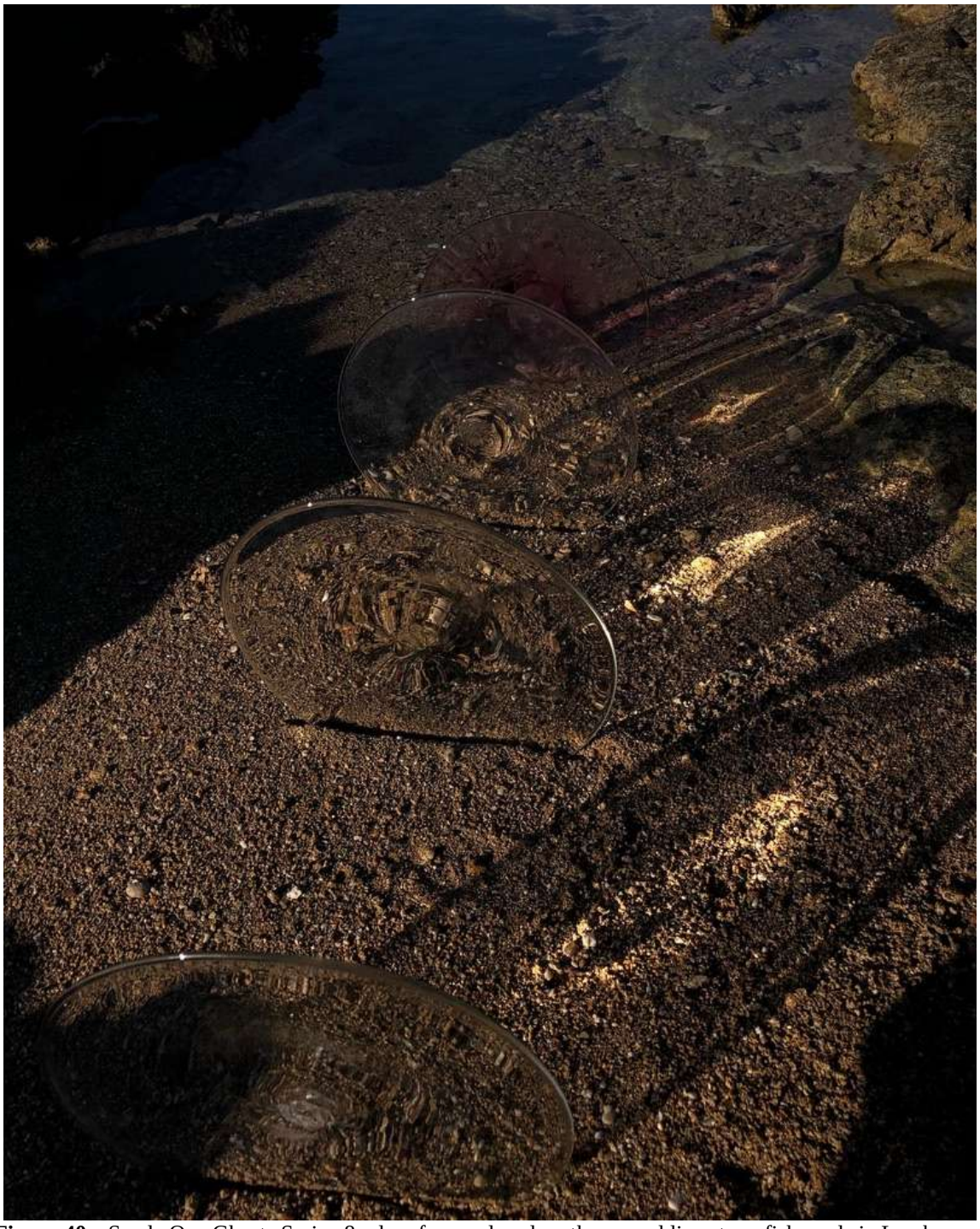

Figure 40:- Sevda Orr, Ghosts Series-8, glass forms placed on the carved limestone fishponds in Lambousa, Kyrenia, 2022.

Figure 41:- Sevda Orr, Ghosts Series-8, Glass Forms Placed on the Carved Limestone Fishponds in Lambousa, Kyrenia, 2022.

Figure 42:- Sevda Orr, Ghosts Series-8, Glass Forms Placed on the Carved Limestone Fishponds in Lambousa, Kyrenia, 2022.

In summary, this research involved in creating the installation go beyond simply placing glass forms on rock formations. The process of creating the organic forms through glassblowing, as well as the challenges faced during

this process, adds a layer of complexity to the final product. The result was characterised by the deployment of installations that served not only confront individuals with a novel perspective on their immediate surroundings through the utilization of the defamiliarization but also draw attention to the delicate and intrinsic beauty of the natural world.

Conclusion:-

The research's experimental and practice-based methodology involved glassblowing in the workshop and creating site-specific installations with glass forms. The aim of this qualitative methodology was to investigate the concept of defamiliarization in the common medium of glass, and its ability to offer fresh perspectives and enhanced comprehension of our surroundings.

The examination concentrated on glass as a versatile material and the exceptional capabilities of glassblowing technique in crafting organic glass forms and composing site-specific installations. The aim was to transform the familiar into something unexpected and draw attention to the natural world. By defamiliarizing glass, this study analysed its characteristics and qualities, exploring how light interacts with it, its reflective and refractive properties, and its limitless possibilities for moulding and shaping. The research also focused on glass in Cyprus, which has been utilised for thousands of years. It provided insights into how traditional mediums can be used to produce relevant artworks in contemporary art practices. The figures section of this research article provides visual representation of glass being formed in Arkın University of Creative Arts and Design Glass Studio, construction stages, and resulting site-specific installations, documenting the journey from experimentation to final artworks. Through the experimentation and iteration process, successful techniques and approaches were identified, resulting the creation of glass forms that complimented the natural setting and showcased the versality of this medium. The glass pieces, with their smooth, transparent, 'ghostly' forms, were particularly effective in the near-shore settings, interacting with water, but also evoked intriguing organic remains in the low-light of the ancient burial caves, their fragility contrasting with the surrounding hard limestone. Defamiliarization in glass contributes to our understanding of how art can be used to explore new perspectives and gain a deeper understanding of our world.

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8. New World Encyclopedia. (n.d.). Retrieved May 25, 2022, from Defamiliarization or ostranenie (остранение) is the artistic technique of forcing the audience to see common things in an unfamiliar or strange way (literally "making it strange"), in order to enhance perception of the familiar.
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