

Dear Educator,

Thank you for booking a tour with the Museum of Glass. We look forward to your visit!

We're sending you this curriculum to help enhance the visit for you and your students. These activities have been carefully prepared to go with the exhibit you will visit. You can use them as pre-visit materials or post-visit, but we strongly encourage that you spend some time with the packet before your visit. We've found that students understand and learn so much more if they're prepared before they come.

Along with this packet, we have extensive curriculum and interactive activities on our website about glassblowing and working with hot glass as an art form. Please visit www.museumofglass.org and click "Learn" on our home page. From there, visit the Virtual Hot Shop, where your students will get a chance to experience glassblowing by creating a *macchia*. Participants walk through the process step-by-step until they get a finished work of art! Along the way they can also choose to learn more about glass. You and your students can even watch the Hot Shop Live, by clicking "Watch" on our home page and selecting the "Live Web Streaming of the Hot Shop" link.

We sincerely hope you enjoy these materials and your visit to the Museum of Glass.

Glass Eats Light: Innovations in Glass by Bertil Vallien

February 22 - June 22, 2003

Lesson One: Giving Objects Meaning

- Transparency One: *No Game* Bertil Vallien, 2000
- Essential Academic Learning Requirements-
Arts: 1.1, 1.5, 3.2
Writing: 1.1, 1.3, 3.1-3.5, 4.2

Lesson Two: A Map of the World

- Transparency Two: *Area II Map III* Bertil Vallien, 2001
- Essential Academic Learning Requirements-
Arts: 4.1, 4.4
Communications: 1.2, 2.1, 3.1, 3.2
Social Studies-Geography: 1.1, 2.1

Lesson Three: “Found: Object...”

- Transparency Three: *Aran Blue* Bertil Vallien, 1988
- Essential Academic Learning Requirements-
Arts: 1.3, 2.1, 3.2, 4.4
Communications: 1.2, 2.1, 3.1, 3.2, 3.3
Writing: 1.2, 2.1, 2.2, 3.1-3.5, 4.2

Lesson Four: Bridging the Gap

- Transparency Four: *Bridge* Bertil Vallien, 1999
- Essential Academic Learning Requirements-
Arts: 1.3, 1.5, 4.1
Science: 1.5, 1.6, 2.2, 2.4, 3.1

Recommended Reading

Teacher Resource Material

Giving Objects Meaning

Teaching Process: School Educator

- Introduces the art of Bertil Vallien
- Uses visual arts to communicate feelings
- A creative process incorporating necessary skills of art with the steps of the writing process
- Students draw connections with visual art forms and the creative process

Materials: found objects (must be able to be wet and frozen), milk cartons or other freezer safe containers, freezer space, camera and film (or disposable camera), food coloring

Recommended Reading: see page 7, Lesson One

Learning Process: Students

Bertil Vallien is fascinated and inspired by stories of people frozen in ice and later brought to life again. For instance, Mr. Movo, and man from Portland, Oregon who froze himself and was later brought back to life, played a large role in his work. In his art he is trying to capture a moment between dead and alive or waking and sleeping where beings and objects are in a frozen state, yet remain alive. Other images and objects in his work include: men, women, houses, bridges, boats, stair-steps, maps, stars, crosses, pyramids, and rings. In some of his pieces the glass is clouded to represent how our view to the ancient past is foggy.

- View art of Bertil Vallien, especially No Game, 2000 Sandcast glass (see Transparency One).
- Students find an object with some significance in their lives.
- The objects will be frozen in blocks of ice in milk cartons (easy to tear-off).
- Frozen pieces should be photographed.
- Photograph of work should be titled and can be displayed on classroom or hallway walls.

Respond

- What significance does this object have to you?
- What is the object (if unclear), and how can it be described?
- Who gave it to you or where did you find it?
- Students answer questions while writing a nonfiction or fiction story or expression of the objects history and significance.

Reflect

- Students view photographs of artwork and discuss and critique as a group discussion.

Outcome

- Students express feelings and emotions through the creative process and document the process through a written description.
- Students learn to look at art through the eyes of the artist to realize that art has many facets of meaning and emotion.
- Students use the writing process to document their art.

A Map of the World

Teaching Process: School Educator

- Introduces the art of Bertil Vallien.
- Leads students in creative process.
- Allows students to incorporate art and geography.
- Facilitates skills and strategies to work effectively with others.

Materials: paper grocery bags, newsprint paper, butcher paper, colored pencils, markers, paint, and any images the students find that they would like to include in their map (Educator: paper can be made to look old by soaking it in lemon juice or milk and then ironing it with a standard iron, allow the paper to become dry, brittle, and brown. Adult supervision required.)

Recommended Reading: see page 7, Lesson Two

Learning Process: Students

- View work of Bertil Vallien, especially Area II Map III, 2001 Sandcast glass (see Transparency Two)

Bertil Vallien uses the theme of maps in his art in many interesting ways, but his maps have been altered to fit his style. Mapmaking, or cartography, was at one time a form of art that required the depiction of particular features in their respective forms, sizes, and relationships. The mapmakers, or cartographers, would incorporate patterns and designs as borders, and add mysterious or fantastic animals in open areas of water or land while designing, compiling, constructing, drafting, and reproducing the maps.

- What kind of map will it be?
- Who would have used this map?
- What special features will the map have?
- Distribute tasks among the group members.
- Seek agreement and solutions through discussions.
- Seek and offer feedback.

Form Groups:

- Students form groups and begin brainstorming to create their own plan for a map.
- Encourage students to communicate ideas through action, sound, and language.
- Allow students to demonstrate working as group members cooperatively.

Reflect:

- Students present their maps to the class.
- Groups take questions and provide answers to classmates in an evaluation and discussion of their work.

Outcome:

- Students enhance communication skills, presentation skills, and are involved in a creative process.
- Students use art, social studies, and communication skills to solve problems, and to understand spatial orientation, and arrangement of people, places, resources, and environments.

“Found: Object...”**Teaching Process:** School Educator

- Introduces art of Bertil Vallien.
- Students practice writing skills for a specific audience and purpose.
- Uses the steps of the writing process.
- Combines two creative procedures of making and writing about art.

Materials: newspapers, magazines or journals, found objects and camera and film (or disposable camera)

Recommended Reading: see page 7, Lesson Three

Learning Process: Students

Many objects have made it into Bertil Vallien’s work and have taken many forms. He has often incorporated images such as rope, swords, boats, arrows, nails, ladders, and even letters of the alphabet into his solid blocks of glass. Each image is unique with a story behind them. The artist chose the specific object for a reason; as viewers of the art we do not always know the story behind the piece.

- View art of Bertil Vallien, especially Aran Blue, 1988 Sandcast glass (see Transparency Three)

Form Groups:

- Students form groups and begin discussing what found objects they have available.
- Seek and offer feedback on the group's ideas.
- Pose questions to the students to allow for further discussion.
- What does the object represent?
- In what situation would the object have been found?
- How old is the object?

Respond:

- Students to write a newspaper or magazine article on their found object, for instance, "Sword found encased in ice, scientists believe it is of Scandinavian heritage."
- Students photograph their object and include it in their articles.
- Students may interview other students and use those responses as quotes; i.e. the object is described as being "vivid blue with a seam running its length" Emily Brown, fourth grade, Hunt Elementary School.
- Group members should work cooperatively to assemble a newspaper or journal article with a heading, title, pictures, and captions.
- Groups present their articles to their class.

Outcome:

- Students understand how the arts connect to other areas, life, and work.
- Recognize the influence of the arts in shaping and reflecting cultures and history.
- Students communicate ideas clearly and effectively.

Bridging the Gap

Teaching Process: School Educator

- Introduces the art of Bertil Vallien.
- Applies science knowledge to other subject areas and real-life situations.
- Students draw connections with the communication skills, scientific investigations, and the creative process.
- Students learn to construct and use models to predict, test, and understand scientific phenomena.

Materials: wood glue, paper, balsa wood or popsicle sticks (each group receives the same amount of materials)

Recommended Reading: see page 9, Lesson Four

Learning Process: Students

- View art of Bertil Vallien, especially Bridge, 1999 Sandcast glass (see Transparency Four)

Bertil Vallien has used the concept of a bridge much in his art. To him a bridge could be seen as the cold hardness of technology versus metaphysical or humanistic qualities. A bridge is also a path from waking to sleeping, water to ice, and life to death. In the literal definition a bridge is a structure spanning an impassable formation that allows for passage. Realistic or symbolic bridges play an important part in understanding art and the natural world.

Form Group:

- Students to form groups and begin developing plans to construct a bridge using basic materials.
- Construct a bridge using agreed-upon design.
- Bridge will be tested for strength, endurance, and design practicality by allowing it to span an area and placing increments of weight on top until breaking point.
- Students awarded for best plan-conception, construction, group interaction, or for bridge withstanding most weight.

Reflect:

- What bridge design seemed the most effective versus the bridge that withstood the most weight?
- What could have been improved upon, or omitted in the design.

Outcome:

- Students work together developing communication skills.
- Students use scientific skills and principles while thinking logically, analytically, and creatively

Recommended Reading Pierce County Library System

Lesson One:

Getz, David. *Frozen Man*. New York: H. Holt and Co., 1994. J937.3 GETZ

Lessem, Don. *The Iceman*. New York: Franklin Watts, 1995. J393.3 LESSEM

Spindler, Conrad. *The Man in the Ice: The discovery of a 5,000-year-old body reveals the secrets of the Stone Age*. New York: Harmony Books, 1994. 937.3 SPINDLE

Lesson Two:

Brown, Lloyd Arnold. *The Story of Maps*. New York: Houghton Mifflin, 1994. 526.09 BROWN

Hapgood, Nigel. *Maps of the Ancient Sea Kings: Evidence of advanced civilization in the Ice Age*. Kempton Ill.: Adventures Unlimited Press, 1996. 912 HAPGOOD

Pickford, Nigel. *The Atlas of Shipwrecks and Treasure: The history, location, and treasures of ships lost at sea*. London, New York: Houghton Mifflin, 1994. 910.4503 PICKFOR

Lesson Three:

Colum, Padraic. *The Children of Odin*. New York: McMillan, 1962. J293 COLUM

Mabie, Hamilton Wright. *Myths Every Child Should Know*. Garden City, NY: Junior Deluxe Editions, 1955. J398 MABIE

Ober, Hal. *How Music Came to the World*. Boston: Houghton Mifflin, 1994. J398.2089 OBER

Osborne, Mary Pope. *Favorite Norse Myths*. New York: Scholastic, 1996. J298.13 OSBORNE

Lesson Four:

Doherty, Craig A. and Katherine M. Doherty. *The Golden Gate Bridge*. Woodbridge, Conn.: Blackbirch Press, 1995. J624.5097 DOHERTY

Oxlade, Chris. *Bridges and Tunnels*. New York: F. Watts, 1994. J624.02 OXLADE

Petroski, Henry. *Engineers of Dreams: Great bridge builders and the spanning of America*. New York: Knopf, 1995. 624.2097 PETROSK

Teacher Resource Material

Glass Eats Light: Innovations in Glass by Bertil Vallien

Organized by the Smålands Museum, Växjö, Sweden in collaboration with the Museum of Glass: International Center for Contemporary Art
February 22 – June 22, 2003

Many adjectives have been used to describe the work of Bertil Vallien; magical and puzzling are a few, as well as contemplative and inventive. But no matter what words you choose, Vallien's work forces his viewers to think. His technical innovation in the medium of glass has made it possible for him to create works of art that are filled with mystery. As a result, each of his sculptures reveal an extraordinary tale, trapped within a world of its own.

For more than three decades, Vallien has explored the themes of art versus industry, darkness versus light, the natural versus the spiritual and the past versus the present. *Glass Eats Light: Innovations in Glass by Bertil Vallien* focuses on his most recent body of work, *Somna/Vakna (Sleeping/Waking)*. All of his work up to this point seems to have been groundwork for *Somna/Vakna*—a reexamination of each of these previously explored themes.

The brilliance of Vallien's innovation lies in his ability to develop skills that serve his artistic intentions. Known internationally as the master of sandcasting, he has transcended the traditional limitations of his medium. Vallien was the first artist to apply sandcasting to glass and with this application, launched an entirely new way of thinking. Sandcasting opened up new modes of expression for glass, the most significant of which was its effect on light. Essentially, Vallien captured light and placed it inside his work where it seemed to radiate from an unknown source.

Glass gives Vallien the opportunity to create his own, self-contained world in each of his sculptures. Adding an additional layer of mystery, he places symbols within the glass. These symbols, such as arrows, ladders, nails, rope and skulls, are part of a visual alphabet he has been creating since he began sandcasting. He also includes images of people from the past throughout his work, usually as figures who appear to be frozen in time. Often, the seemingly contradictory message of the work resides in these multifaceted objects.

Vallien's earliest glass vessels were fairly decorative and he often included images of landscapes and other subjects on his surfaces. Over time, his forms have become more strict and his work has gradually moved toward abstraction. *Somna/Vakna* represents his most minimal form where the complex subject matter of the work is a striking contrast to the simple rectangular shape. In *Somna/Vakna* Vallien tells the stories of the figures trapped within his sculptures.

Glass Eats Light features Vallien's work from the late 1980s through today. With this latest series, Vallien goes further than forcing his viewers to think; he carries his viewers into the

world inside his sculptures. As a whole, his sculptures act as a means to deflect interest from the surface of the glass to a deeper dimension below the surface, but the imagery in *Somna/Vakna* has grown even more vivid and dramatic. All of the work is *Somna/Vakna* is made of cloudy, murky glass. This forces his viewers physically closer to the sculptures—where he can grab them and place them inside the world he has created.

Glass Eats Light **Innovations in Glass by Bertil Vallien**

Bertil Vallien's work has been described as magical, puzzling, contemplative and inventive—but regardless of what words are chosen, Vallien's work compels his viewers to think. His technical innovation in the medium of glass allows him to create works of art filled with mystery. As a result, each sculpture reveals an extraordinary tale, trapped within a world of its own.

Glass Eats Light: Innovations in Glass by Bertil Vallien features Vallien's work from the 1980s through today, including a number of sculptures which have never before been seen in the United States. *Glass Eats Light* explores the groundbreaking innovations that make this artist among the most respected in his medium.

Known internationally for developing a revolutionary sandcasting technique, Vallien has transcended the traditional limitations of glass. Although sandcasting was previously used in the metal industry, Vallien was the first artist to apply it to glass and with this application, opened up new modes of expression for the medium. Most dramatically, the technique introduced a new facet to the personality of glass by altering its texture. The process creates a rough sandy surface that rests on the glass like a thin layer of skin, a departure from the traditional vision of the material with a shiny, smooth texture.

Glass gives Vallien the opportunity to create his own, self-contained worlds. Placing symbols within the glass, he adds a layer of mystery. These inclusions—arrows, ladders, nails, rope and skulls—are part of a visual alphabet he has been creating for over three decades. Often, the seemingly contradictory message of his sculpture resides in these multifaceted objects. As a whole, Vallien's sculptures act as a means to deflect interest from the surface of the glass to a deeper dimension—the world inside the glass.

The Museum of Glass is honored to present this exhibition. The Museum and its Board of Trustees would like to sincerely thank the Smålands Museum in Stockholm, Sweden and Orrefors Kosta Boda, for it is their generosity that has made this exhibition possible.

The Realm of Glass

The province of Småland is part of the richly forested lands of southern Sweden. Home to a long tradition of glassmaking, it is known as the *Realm of Glass*, where forty of the most notable glass companies in the country are located. The miles of forestland that populate the region are scattered among small communities that have developed around timber, mechanical or glass industries. The natural resources in the area, specifically wood and water, made the establishment of a glass industry possible. For over 250 years, the art of making glass has been passed down from one generation to the next.

In 1917, "beauty in utility" became the motto of the glass industry. The way to achieve this was to recruit more artists to the factories. New technology and the contribution of these artists made it possible to maintain high quality standards and it soon became a regular practice for the artist to lead production. By the Second World War, it was the work of these artist-designers that established the concept of Swedish design.

Bertil Vallien joined the Åfors glassworks in 1963. Since that time he has worked as a designer, technical advisor and leader for the company. In the early 1970s the industry faced crisis and Åfors was in jeopardy of closing. Vallien formed an influential group which set out to inspire a new generation of artists. They argued that people who bought Swedish glass were art aficionados and with this idea, created the "Artist Collection"—molded glassware suitable for manufacturing in large numbers, but possessing the appearance of an original. Sales greatly increased. The contributions of Vallien and other artists had paved the way to survival for the Swedish glass industry.

In 1981, the Swedish government put forth a proposal to subsidize the industry, recommending the mechanization of glassmaking. Vallien and his colleagues protested, claiming, "The hand can never be replaced." They convinced the government that the skills of glass artist were what set apart the Swedish glass industry. As a result, the Swedish glass houses have never invested in the automatic machinery commonly used in European glass factories.

Heads

Bertil Vallien began his *Head* series in 1994, inspired by a story he read about a thirteen year-old girl named Karolina Olsson. Karolina was walking home from school on a cold February evening in 1876 when she slipped on a patch of ice, hitting her head. The next morning, she fell into a coma lasting thirty-two years. In 1908, she finally awoke at age forty-five. When she was questioned about her absence from the world and the effect of that evening, Karolina replied, "All I remember is a great darkness and blue men."

Since its creation, Vallien's *Head* series has undergone a continuous evolution. He began the series by creating only in blue, which he explains, "Blue glass is to me a material, not a decoration. Blue is the color of the blues, of melancholy, of the sky, of the sea ... There is a transparency within the blue glass, and you can look into the faces, and see auras around them." The early works have a classic beauty with a smooth, polished surface where later *Heads* exhibit coarser texture. But in all of his *Heads*, the glass acts as a transparent skin, or membrane, allowing the viewer to see into the darkness.

Vallien often emphasizes the coarseness of his later *Heads* by adding materials to the glass. A number of the works are wrapped in colored threads. Some have protruding metal spokes. In others, either the eyes or upper portion of the face have been removed and are covered with a metal grate, obscuring the view inside. The silver-gray tone present in some works is a result of the mold having been lined with aluminum foil.

The Process

During the 1960s, Bertil Vallien made his first attempts at sandcasting glass—a process in which molten glass is poured directly into a mold made of sand. Through continuous experimentation, he developed a revolutionary sandcasting technique. Vallien's application of this technique, originally utilized strictly in the metal industry, represented not only an artistic achievement, but also a technical triumph. For Vallien, casting glass in sand was the answer to his personal search for a more expressive method of creating sculpture.

The technique, Vallien explains, is simple. The real work is in the preparatory phases. The drafting stage is the first and most difficult step in the process when ideas must be carefully considered. When the idea has been fully developed, a mold is fabricated. In the next stage, the irregularities seen on the surface of the finished sculpture are prepared by imprinting seals and other objects onto the walls of the mold. Additional effects are obtained by placing sheet metal and/or glass threads in the mold. Colors are obtained by applying powdered metal oxides sifted directly onto the walls of the mold with a small strainer.

When the mold is complete, the actual casting takes place. During the pouring process, Vallien adds the contents of his sculptures—pre-warmed and pre-formed details such as metal plates, glass figures and colored forms that are carefully inserted in the hot glass. As the glass cools slowly, the implanted objects gradually become visible and the colors of the metal oxides begin to emerge.

Somna/Vakna

Bertil Vallien's earliest glass vessels were fairly decorative and often included images of landscapes and other subjects on the surface. Over time, his forms have become more formal and his work has gradually moved toward abstraction. *Somna/Vakna* (*Sleeping/Waking*) represents his most simple form, rectangular shaped boxes that resemble coffins. The complex subject matter of the work, however, is a striking contrast to the minimal form. In the *Somna/Vakna* series, Vallien tells the stories of figures trapped within his sculptures.

The inspiration for this series was a man named Mr. Moro from Portland, Oregon. Mr. Moro, who lived during the 1930s, attempted to preserve his life by allowing himself to be frozen in a block of ice. After learning about Mr. Moro, Vallien began to collect stories about people who were buried in ice, whether purposefully or by accident.

Vallien used a number of different forms throughout his earlier series—heads, boats, maps—but this latest series utilizes only the austere rectangle form. While his *Head* series provides a view inside the sculpture, *Somna/Vakna* provides an entry into the world the artist has created. While his *Maps* and *Findings* reference an indefinite time and place in the distant past, *Somna/Vakna* points to a specific time in an individual's life, through the artist's use of inclusions. While his earlier series include a number of objects which collectively provide clues to the artist's narrative, *Somna/Vakna* tells the story through one central figure or image.

Somna/Vakna calls for a new vocabulary to describe Vallien's work—dreamlike, meditative, reflective. The characters in the series are barely visible through the opaque surface of the glass, leaving their stories somewhat ambiguous. The foggy appearance of the glass is characteristic of Vallien's work where the surface is simultaneously revealing and concealing, and the story is simultaneously specific and ambiguous. Vallien's surfaces absorb, rather than reflect light. The cloudy, murky glass in *Somna/Vakna* draws his viewers physically closer to the sculptures—where he can grab them and place them inside the world he has created.

Boats

I make boats that sink through memories and dreams. The boats I make require no latitudes to navigate by, but steer like vessels turned to glass, towards the horizons of imagination. A receptacle for Moses, and one for a Viking chieftain, a traveler must put his trust in the delicate skin that separates him from the unknown.

I have always been fascinated by boats, for their beauty of form and for what they signify—adventure, travel, a livelihood, birth and death, a symbol belonging to our collective unconscious, an archetype, revered by all.

An island fisherman does not use his old, worn out boat for firewood, but leaves it to lie until gradually it gives sustenance to new boats.

I can understand why the rough-hewn sailor refers to his craft (and life insurance) and she. She is a life-giving mother to rely on in a floating society.

Bertil Vallien

Area II: Findings, Maps

I had this newspaper clipping pinned up in front of me, on my studio wall for several years. It was an exciting picture that had caught my eye, though I was not exactly sure what it represented.

It gradually faded and I decided to throw it out. But just as it was going into the bin, I hesitated and read the caption. It was an aerial photograph of a bombed out village in northern Iraq. One could make out an ordered system of roads leading off the circular marketplace, with remains of houses and walls enclosing small fields. A settlement which had been laboriously built up over hundreds of years into its present form was now raised to the ground in a matter of seconds, by a deed of animosity.

Knowing the true significance of the picture made me feel bad, but how erroneously I had constructed it. All I had seen was a decorative pattern of graphic marks, which I imagined to be the face of a man staring at me.

The picture assumed a special significance and prompted an exhibition titled *Area II*, the theme of which is an imaginary archaeological excavation. It consists of a series of Maps and Findings of glass or ice, from a site that has been exposed to a most terrible catastrophe—volcanic heat, or nuclear explosion of the abysmal cold of the Antarctic. The man with the menacing stare, however, remained in the maps as an image of evil.

Bertil Vallien

Photo Credits for
Glass Eats Light: Innovations in Glass by Bertil Vallien



Transparency One

Bertil Vallien
No Game, 2000
Sandcast glass
14 ½ x 4 ¾ x 8 in.
Photo: G. Ortegren



Transparency Two

Bertil Vallien
Area II Map III, 2001
Sandcast glass
25 ½ x 25 ½ in. (650 x 650 mm)



Transparency Three

Bertil Vallien
Aran Blue, 1988
Sandcast glass
43 ¼ x 4 ½ in. (1100 x 15 mm)



Transparency Four

Bertil Vallien
Bridge, 1999
Sandcast glass and encaustic metal
67 x 23 ¾ x 19 ¾ in. (1600 x 600 x 500 mm)
Photo: Andres Qwarnstrom