SIXTH CLASS - MODERN SCULPTURE

I. INTRODUCTION

Children love sculpture! Many of them have made clay sculptures at home and in school. Today's class focuses on two works by modern sculptors, Alexander Calder and Henry Moore. Before looking at their works, it is helpful to review some of the properties of sculpture in general with younger children or those who are new to the *Learning to Look* program as follows:

(Gather about five to seven examples of sculptures made from stone, wood, clay, metal, or plastic, etc. from your home, around the school, or from the local high school artroom.)

Hold up one of the sculptures you have brought in and ask the students if they know the term for this kind of artwork?

The response is usually "a statue."

Introduce the term "sculpture" and ask in what ways sculpture differs from the paintings we have been studying. (It helps to write new vocabulary on the blackboard.)

Usual responses:
Sculpture is not flat.
Sculpture has depth.
Sculpture has three dimensions.

Can you walk around a painting and see it from all sides?

No.

Can you walk around most sculptures?

Yes.

The French sculptor, Rodin, once said that a sculpture is a painting with a thousand facets.

What is the one thing that a painting has which a sculpture does not need?

A frame

What else is different?

Sculptures are made of different materials.
The tools used to make them are different.

Display the pieces of stone, wood, metal, and clay sculpture as well as a constructed work (i.e., tinker toys or legos) that you have collected beforehand. Then use them to illustrate the three primary processes of sculpture.

Cut away (subtraction) process - the carving or chiselling process used with wood or stone sculptures. The artist begins with a piece of wood or stone and cuts away what is not needed until the finished sculpture emerges.

Build-up (addition) process - the process used with clay, plaster, and wax sculptures whereby the sculptor builds up the form bit by bit.

Construct process - the assembly of parts often used with metal or plastic sculptures.

Casting - the method of shaping a sculpture by pouring a liquid substance into a mold and allowing it to solidify.

Have sculpting tools available for each process, if possible, and demonstrate how they are used. (These can usually be borrowed from the high school art teacher.)

What tool do you always have with you that is useful when sculpting in clay or wax?

Your hands!

Now point out the ways in which sculpture and painting are alike.

Does sculpture have texture?

Yes

Let students touch sculptures of different materials to feel the natural grain as well as the textured surfaces applied by the artist.

(It is most convenient with younger children to have the teacher retain possession of each object while walking it from student to student. This speeds up the activity and helps to keep the class under control.)

Place your examples of sculpture on a table around which the students can walk.

Does sculpture have shape?

Yes.

Suggest that students walk around the sculpture, viewing it from different angles.

Does sculpture have line?
Yes.
Notice the overall directional lines of the sculpture as well as any lines the artist has carved into the surface.

Does sculpture have light?
Yes.
Point out the reflections of light on metal, glass, and polished marble.

Does sculpture have color?
Yes.
Both the color inherent in the materials and sometimes applied colors.

Does sculpture occupy space?
Yes
It occupies three-dimensional space.

All of the same elements of art used by an artist in painting are also found in sculpture.

MODELING WITH CLAY ACTIVITY

Clay is a wonderful tool to communicate the difficult concepts of relief sculpture, and positive and negative space, as well as the question of support in a sculpture.

Relief Sculpture

Give each student a clay board and a small handful of clay. Ask them to flatten it like a pancake. Explain that each student is a sculptor and shall sculpt or create a face out of clay. Remind them to keep the clay flat and work on only one side in this activity. Have different clay tools available, such as toothpicks, pencils, etc., for gouging out eyes or simulating hair texture.

Is your face flat or do some parts stick out? Which ones?
The nose, brows, cheekbones, lips, chin.

Demonstrate the "building up" process with small bits of clay to create these parts, if the students have not already done this themselves.

As the students exhibit their wonderful variety of faces, ask if these works of art have three dimensions?

Yes.

They have height, width and depth.

But instead of being a sculpture that we can walk around and view from all angles, there is one surface or side that is flat and unfinished. This kind of sculpture is called relief sculpture. It is not free-standing and relates more to a painting in that it has a background.

Can anyone guess what the name is for the sculpture that we can walk all around?

Sculpture in the round.

Who can name a common relief sculpture that we carry in our pockets every day?

Coins

They are actually two relief sculptures back to back.

Positive and Negative Space

Now ask the students to roll up their relief sculptures into a ball. (Some of them will be disappointed to destroy their clay faces. Remind them that we are learning with clay today, not making finished pieces of art. Encourage them, however, to repeat some of these activities at home where they can preserve their favorite creations more easily.)

What shape are you holding?

A sphere

Younger children may say a circle or a ball.

Introduce older pupils to the concept of three-dimensional shapes, i.e., sphere, cube, cone, pyramid, etc.

One definition of sculpture is a shape in space.

Now make a hole through the center of the sphere. What shape do we have? (Hint: what does this shape remind you of that is something to eat?)

A doughnut.

Children may also think of a bagel, spagetti-Os, cheerios, lifesavers.

Would this be a doughnut shape without the hole in the center?

No

(Some kids like to argue this point and refer to doughnut holes as still being doughnuts Tell them that we nonetheless typically identify this shape as a doughnut.)

Therefore, the hole is important to the shape of this sculpture. This hole or empty space is called negative space. The solid part of the doughnut or filled space is called positive space..

Standing with your feet slightly apart and your hands on your hips, ask the students to pretend you are a piece of sculpture and to identify the positive and negative space.

The spaces between your arms, your legs, and your fingers. Students love to find even more negative spaces, e.g., nostrils, the space between the hair and shoulders (in someone with long hair), the space between heel and floor (in someone wearing high-heeled shoes).

Supporting and Positioning Sculpture

Now direct your students to roll the clay between their palms to make a snake. Hold the clay in the air. Is this a sculpture in the round?

Yes.

Now ask them to stand the snake on its tail. As the snake collapses, it is demonstrated that the proper support and positioning of a sculpture is crucial.

How can you arrange this snake in an interesting way?

Usually a wide variety of poses ensue, some using supports, some that are coiled.

(Remind the children if necessary that they might want to utilize their toothpicks as a support.)

Older or more experienced students can begin this class with a quick recapping of some of the characteristics of modern painting as follows:

Let's see if we can summarize some of the trends we have found in 20th century painting:

Many artists simplified, flattened or distorted the objects they painted.

Paintings got more and more abstract until some paintings had no recognizable subjects matter at all.

Artists emphasized the importance of expressing their own feelings, thoughts, and interpretations, more than following any set of rules as to how a painting should look.

Many artists experimented with new materials and new ways of painting.

In today's class we are going to look at two examples of modern sculpture. Do you think we'll find some of the same trends in the sculpture of the 20th century as we discovered in its painting? Let's take a look and find out!

II. EYE EXERCISES

See earlier lesson for a description.

III. CALDER

A. <u>Lobster Trap and Fish Tail</u>

Artist - Alexander Calder American (1898-1976)

Year Made - 1939

Medium - painted steel wire and sheet aluminum

Size - About 8 feet 6 inches high x 9 feet 6 inches in diameter

Props - slide (poster) of sculpture; one wire clothes hanger for each student; thread or yarn; scissors; assorted beads and/or buttons; construction paper and crayons; hole punch; or thin florist's wire and scissors for each student.

Activity - Make your own mobile; Create a wire-figured circus.

BACKGROUND INFORMATION (for the teacher)

Alexander (Sandy) Calder was born in Philadelphia in 1898 into a family of artists. His mother was a painter and his father and grandfather were sculptors. As children, Calder and his sister Peggy loved to make their own toys, and in his twenties, he even worked briefly in a woodworking company making Toddler Toys. There is an element of playfulness in all his art. At first, Calder planned to become an engineer. He received his BS in mechanical engineering from Stevens Institute of Technology in 1919. He was also a gifted mathematician. As a young man, he took a series of diverse jobs from logger to ship's fireman until he decided that his true vocation was art. He enrolled at the Art Students League in New York City in 1923, and three years later published his first book (Animal Sketching). Later in 1926, he traveled to Paris where he set himself up in a small studio. There he began work on his famous wire circus which revealed not only his ability as a sculptor, but also his sparkling wit and creative imagination. Calder gave performances of his miniature circus with its toy acrobats, trapeze artists and animals made of wire, wood and cloth. (The circus is now part of the collection of the Whitney Museum of American Art in New York City.) Avant-garde artists and writers of the time soon flocked to Calder's studio, and the artist's career was set. He continued to give special shows of his circus both in America and abroad throughout his career. Many of his later works were inspired by ideas and images first created for the circus.

Also in Paris in the early 1930s, Calder developed his hanging wire sculptures. He had already begun to experiment with hand-directed movement with his circus. Now he used his engineering training to create balanced, suspended sculptures that moved freely. According to the artist, it was after a visit to Mondrian's studio in 1930 that he decided he wanted to work in the abstract. He envisioned Mondrian's stable rectangles and imagined "How fine it would be if everything moved." (Barbara Rose, American Art Since 1900, p. 247) When Calder first exhibited his "mobiles" in Paris in 1932, no one had ever seen a brightly colored moving metal sculpture before. It was something totally new. The French artist Marcel Duchamp coined the name "mobile" to describe the sculpture's unique ability to move on its own. Like the Surrealists, Calder was fascinated by the element of chance inherent in a sculpture that

constantly changed shape according to the direction of the air currents. His abstracted shapes reflect not only Mondrian's geometry, but also the biomorphic forms of Hans Arp and Miró. Many of his mobiles suggest objects from nature such as fish, animals, or leaves. Calder was especially fond of animals.

In the late 1930s Calder's art took a new turn. He began creating small painted sheet metal constructions that did not move. These "stabiles" evolved over time into the monumental sculptures of the 1950s and 1960s which were often placed outdoors in city parks, at corporate headquarters, or in sculpture gardens. Calder married in 1931 and had two daughters. His permanent homes were in Roxbury, Connecticut and Saché, France. The artist was interested in all art forms, and in addition to creating paintings and sculpture, also illustrated ten books, designed theater sets and costumes, decorated interiors, and designed jewelry, rugs, and wall hangings. Calder was the first American sculptor to gain international recognition.

DIALOGUE SUGGESTIONS (for classroom presentation)

Many 20th century artists were interested in depicting movement in their art. What 20th century inventions can you think of that enabled people to travel at much greater speed than ever before in history?

Car, plane, jet, helicopter, motorcycle, speed boat, space shuttle.

The American artist, Alexander Calder, was actually the first to make a sculpture that moved.

Show the slide (poster) of Lobster Trap and Fish Tail without revealing its title.

Does anyone know the name of this type of sculpture?

A mobile.

A mobile is a sculpture that moves in space.

If you were in the Museum of Modern Art, which direction (up or down, or straight ahead) would you have to look in order to see this sculpture?

Up!

Why?

Because the mobile hangs from the ceiling in a stairwell in the museum.
MOMA commissioned the artist in 1939 to make this mobile, one of his earliest ones, specifically for the museum's new building.

Do you think this mobile is large or small?
It's large, about 8 1/2 feet high and 9 1/2 feet in diameter.

Today mobiles are common. Many parents place colorful mobiles over their infant's crib. Did you have a mobile as a young child? Maybe you still have one hanging somewhere in your room or house?

What other word can you think of that has the word "mobile" in it?
Automobile.
Mobile means "able to move."

The artist Marcel Duchamp coined the word "mobile" in 1932 to describe Calder's moving sculptures. Calder invented the mobile. Tell older students that there is a special art term for all art that moves. It is called kinetic art. Calder was a pioneer of this art form.

If you didn't know that this object was meant to be a sculpture, what would you think it was?
Lots of different metal shapes and pieces of wire joined together.

What if I told you the title of this sculpture is <u>Lobster Trap and Fish Tail</u>?

What part of the sculpture might be the lobster trap, a cage-like object that catches lobsters?
The circular wires seem to form a net or trap.

What part might be the fish tail? Hint: what color is a lobster?
Red
The red, yellow, and black torpedo-shaped object at the top might be the lobster cautiously approaching the trap.

How many black shapes at the bottom can you count?
Nine.

What might they stand for?

They suggest plants waving underwater, or a school of fish swimming by.

What materials has Calder used to create this sculpture?

Steel wire and sheet aluminum.
These are new, 20th century materials.

How has Calder added color to his sculpture?

He has painted the metal.
Calder said, "You have to paint the steel anyway, to protect it, so why paint it gray, why not paint it red?"
(Greenberg & Jordan, The Sculptor's Eye, p. 80)

Are the materials he used heavy as stone or relatively light?

Relatively light.
Aluminum is an excellent material for a mobile because it is light yet strong. The artist can cut it with heavy scissors.

What do you think causes the sculpture to move?

Air currents!
This sculpture does *not* have a motor.
Air hits the sculpture like wind hitting sails, and pushes the pieces.

Do you think the sculpture moves quickly or slowly?

That depends somewhat on how fast the air currents are moving. But in a museum setting, the mobile moves slowly.

Look carefully at how each piece of this sculpture is attached to the others. Can you figure out which parts will move separately from the others?

Calder was trained as a mechanical engineer before he decided to become an artist.
He worked very hard fastening the wire rings and attachments which allow the parts to move independently.
Notice how carefully he arranged the "arms" of the mobile so that the shapes do not hit one another.

What else might have Calder worked hard at to get this work just right? Hint: Do you think balance is important in a mobile?

Yes, very important.

Calder had to make the parts balance one another so that the mobile didn't hang too far to one side.

Let's focus now on the lines, shapes, and space of this mobile.

Are there any perfectly straight lines in this sculpture?
No.

What type lines are there?
Curved lines.

What feeling do curved lines convey?
Movement, gracefulness, rhythm.

How are the black shapes similar to one another?
They are all three sided and look like flower petals or fans.

How are they different?
They range from large to small.
The largest petal has a hole in it.

Does this hole remind you of another shape in this sculpture?
Yes, the lobster trap is also oval.
The looped wires that hold the fish and trap are oval as well.

What type space does this sculpture occupy? Is it two-dimensional or three-dimensional?
Three-dimensional
It has height, width and depth, like our bodies but unlike paintings.

If both you and your friend took photographs of Calder's mobile at the Museum of Modern Art, why would they probably not look exactly alike.
Because the sculpture is three-dimensional, it looks different depending upon the angle or position from which you view it.
Because Calder's mobile moves, the sculpture may have changed position itself.
Therefore, you and your friend would have to stand in exactly the same spot at exactly the same moment and be exactly the same height in order to take identical photographs.
(If possible, show your students two different photographs of this work. They will be surprised at how different it can look.)

How is light important to this sculpture?

Not only does the light shine on the metal shapes, it also creates shadows on the walls, floor, or ceiling depending on the direction of the light.

What mood does this mobile make you feel?

Happy, playful, light, floating, humorous.
Calder was a friend of Miró's, and his art often has the same playful quality as Miró's

Calder believed art should be amusing. He even constructed a circus of wire animals and performers. (Show photographs if possible.) He once said, "I just want to make things that are fun to look at." (Jean Lipman, Calder Creatures, Great and Small, p. 7) Does his art make you smile?

ACTIVITY

Now let's try to create our own mobile. Give each child a wire clothes hanger, about a yard of thread or yarn, scissors, and an assortment of beads or buttons. (If you prefer, you can have students draw shapes or objects on colored construction paper, punch holes in them, and use them for their mobile instead of the buttons and beads. Allow extra time for this, however.) Cut the thread into five different lengths and tie them to the hanger. Then tie on your objects to the other ends. What objects will you place next to one another? Think about how their sizes, shapes, and colors will go together. Is your mobile balanced? Will the objects hit each other if you blow on the mobile? Does the mobile create an all-over pattern or design?

Younger children may lack the manual dexterity necessary for tying the threads. Encourage them instead to create their own wire animals the way Calder did. Pre-cut florist's wire into a number of segments of various lengths so that each child can have as many as necessary (about 8-10 each). Show them how to twist the wire into the shape of an animal's body and then use shorter pieces for the arms, legs, head, etc. Display your wire animals together as a Class Zoo or Class Circus.

IV. MOORE

B. Family Group

Artist - Henry Moore British (1898-1986)

Date Made - 1948-49 (cast in bronze, 1950)

Medium - Bronze

Size - 59 1/4 x 46 1/2 x 29 7/8 inches

Props - slide (poster) of sculpture; found objects (pebbles, stones, bones, seashells, pieces of wood, etc.); sketch paper and pencils; modeling clay and toothpicks.

Activity - Collecting, Sketching and Sculpting Found Objects; Sculpting your own family group

BACKGROUND INFORMATION (for the teacher)

Henry Moore, the most important British sculptor of the 20th century, was born in 1898 in Castleford, Yorkshire, the seventh of eight children. His strict father, who worked in the coal mines, believed that everything was possible through hard work. He had high hopes for his children. At age ten, Henry informed his father that he wanted to be a sculptor. His father responded that he should learn to support himself first. Moore obeyed by becoming a teacher. He never relinguished his artistic aspirations, however, and after fighting in World War I, he entered Leeds School of Art on a government scholarship. In 1921 he studied sculpture at the Royal College of Art in London. Moore dated the beginning of his fascination with bones to this period in his life. The College was next door to the Natural History Museum, and Moore began to be intrigued by the various shapes of bones there.

At age 30 Moore had his first one-man exhibition in London as a sculptor. The next year he married the Russian painter Irina Raderzsky. Their daughter Mary, an only child, was born in 1946. From 1932 until 1939 he was the head of the sculpture department at the Chelsea School of Art and continued to exhibit his works in England to growing acclaim. During World War II, Moore, who was appointed an official war artist, became famous for his many

drawings of people taking shelter at night in the underground (subway) stations to escape from the German bombings. He also made sketches of future sculptures using white chalk on the black paper which darkened peoples' windows to prevent detection by enemy aircraft.

In 1940, he and his wife moved to an old house, Hoglands, in Hertfordshire, after his London studio had been damaged in an air raid. The home was believed to have once been a butcher shop, and both he and his wife constantly unearthed bones while digging and planting in the garden. Moore would put them on shelves in his studio. The biomorphic shapes of bones and other found objects played a formative role in Moore's art as did exposure to primitive sculpture. The British sculptor was also influenced by his French predecessor, Rodin, who sculpted body parts and presented them as complete sculptures. Moore wanted to liberate sculpture from the confines of realistic representation. His work disregards anatomical correctness, yet most of it is clearly based on the female form. Moore is also well-known for his many sculptures of family groups. He was one of the first to emphasize the importance of allowing the material itself dictate the form and nature of the resulting sculpture. Moore remained productive over the long span of his sixty-year career. His sculpture captures the essence or spirit of things and expresses his deepest feelings about life and the human condition.

DIALOGUE SUGGESTIONS (for classroom presentation)

Now let's take a look at another sculpture.

Show students the slide (poster) of Family Group without revealing its title.

Can you easily identify this sculpture? What is it of?
A man, a woman, and a child.

How might they be related?
They are probably a family.

Which is the mother?
The figure on the left.
She has shoulder-length hair and wears a long skirt.

The name of this sculpture is Family Group. It was made by the most famous British sculptor of the 20th century, Henry Moore. (Tell

older students that Moore had the idea for doing a sculpture of a family group for a new school near Cambridge, England in 1934. The project was never realized. More than a decade later the idea was revived and Moore began work on what would culminate in the Family Group (1948-49) that is in front of the Barclay School in Stevenage, England. Three other casts were made of this work including the one that we are studying which is in the Museum of Modern Art.)

What material do you think this sculpture is made of?
Bronze.

Moore first made a number of drawings of families in different positions. He was inspired by his own family and the birth of his only child, Mary, in 1946. To develop his ideas, he made a series of 17 sketch-models made out of terracotta (burnt clay). They are small, (many only 5 to 7 inches tall) and sometimes include the addition of another child. (Between 1943 and 1947, 140 bronzes were cast of some of these sketch-models. Thus the image of a family group became associated with Moore's art.)

How big do you think our finished sculpture is?
It's almost life-size.
It's about 5' tall.

What is Moore's vision? What feeling is he trying to convey about families? It might help to know that he worked on this project during World War II? How might a war influence what Moore was trying to show?
During war people are often separated from their families. In England during World War II, many fathers were away at war and many families had to leave their homes to seek safety from enemy bombings in the countryside. Thus people appreciated family life even more.

Thus what is Moore saying about families in this sculpture?
That families offer love, protection, caring and togetherness.

Let's explore how the sculpture conveys this message.

Who is holding the baby?
Both the mother and the father.
The baby's figure stretches across both their laps.

Are all the figures touching?
Yes.

Where?
The mother and father's arms entwine around the child.
They create interlocking forms.
Moore said that "...the knot that connects both parents is the child."
(Henry Moore Sculpture, with coments by the artist, p. 102)

What shape do the parents' arms make?
A circle of love.
Notice how the shapes of the arms flow together.

What other gestures of the father's body show that he is close to the other two figures?
His knees lean toward the mother.
He turns his head toward them.

Are these identifiable people? Do we know who they are?
No.

Why not?
Because the artist has simplified their features.

What about their clothing. Can you describe it in detail?
No. We only see hints of what they are wearing such as the folds of the mother's skirt.

Can you see their faces? (Show a close up photograph if possible)
It is possible to see their faces, but they are not realistic.
The eyes are round circles, the nose a triangle, and the mouth a simple slit.

What type of expression does the mother show?
Her eyebrows slant downward in an expression of concern or worry. Perhaps she is fearful for her child growing up in a world of war.
She holds the child to her in order to protect it.

Moore was influenced by primitive sculpture. He wasn't trying to describe real people, but rather to capture something universal, something true about all families.

How does simplifying the image add to Moore's message of family unity?

It makes it apply to all people.
This isn't one particular family; it could be any family.

Where do you find negative space in this sculpture?

Between the father and mother's knees.
Between the father's legs.
Under the parents' arms.
Between the mother's feet.
Between the heads and shouders of the parents.
Moore was very interested in negative space. Some of his sculptures of figures have holes in the middle of them.

Is there much negative space around the child?

No.
The lack of negative space here reenforces Moore's emphasis on family unity and harmony.

What shape does the negative space between the parents' head and shoulders form?

A "v" shape.

Where can you find this same shape turned upside down?

Between the parents' legs.
The negative space there forms an inverted "v."

Where do both points of the "v" end?

At the child.
They emphasize the central importance of the child.

What other simple shapes can you find?

Circles (head, eyes, arms, drapery of skirt)
Rectangles and parallelograms (legs, space under bench, torsos)

Moore reduced his sculptures to simple shapes. He liked to collect bones, pebbles, and other natural shapes that he found while walking in the fields or digging in his garden. He would put his found objects

on a shelf in his studio and look at them while creating his sculptures.

How important are reflections of light to this sculpture? Point out some reflections.

The bronze reflects the light depending upon where it is shining.

The heads, shoulders and knees reflect the light when it is overhead.

The light makes the sculpture seem to shine.

Moore liked to see his sculptures out-of-doors in natural light. He though sculpture was an art of open air with the sky as background. This Family Group is exhibited outside in the sculpture garden of the Museum of Modern Art.

ACTIVITY:

Let's explore the world of found objects the way Henry Moore did. The *Learning to Look* teacher should bring in a box filled with stones, pieces of wood, pebbles, feathers, seashells, small bones (from chicken, fish or beef), leaves, or other found objects. Let each child pick one object from the box. Instruct students to look closely at their found object. Observe its shape, texture, color, and lines. Encourage them to let their imagination be inspired by what they are looking at. Then have them make a quick sketch of their object using paper and pencils. Now give each child a piece of modelling clay and have them create a small model of their sketch. This is called a maquette. The maquettes do not have to copy the original sketch or object, but in some way should be inspired by it. Use toothpicks to create surface texture and design. Finally have the students turn their sculptures around, observing them from all sides. Notice how even an abstract sculpture changes shape according to the angles at which it is viewed.

Younger students may prefer to make their own family group sculptures out of clay. Demonstrate how to make the head and torsos out of simple circles and how to roll bits of clay between your palms in order to make arms and legs. Encourage students to join their family members together in some way. Who did they include in their family group?