

WHITNEY

Education

October 16, 2008 - February 15, 2009  
Pre- and Post-Visit Materials for Schools  
Alexander Calder: The Paris Years 1926-1933



## Pre- and Post Visit Materials for Schools

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### About the Exhibition

*Alexander Calder: The Paris Years, 1926–1933* explores a formative seven-year period between 1926 and 1933, when Calder created his first wire drawings in space, performed his *Circus*, and invented his signature mobiles.

### How can these Pre- and Post-Visit materials be used?

These materials provide a framework for preparing you and your students for a visit to the exhibition and offer suggestions for follow up classroom reflection and lessons. The following discussions, art projects, and writing activities introduce some of the exhibition's key themes and concepts:

#### Pre-Visit Activities and Lessons

- **Calder in Paris: An Introduction**
- **Reflecting on New Experiences and Adventures**
- **Found Objects and Lyrical Lines**
- **Viewing *Calder's Circus***
- **Calder's Mobiles: Abstraction in Motion**

#### At the Museum

- **Guided Visits: What to Expect**
- **High School Dispersal Visits: What to Expect**

#### Post-Visit Activities and Lessons

- **Three Elephants, Three Ways**
- **Extended Activities and Research Projects**
- **Resources: Related Websites and Publications**

### What grade levels are these lessons intended for?

These lessons and activities have been written for Elementary, Middle or High School students. We have included activities that address different aspects of Calder's work and suggest that you take two or three to adapt and build upon in order to meet your teaching objectives and students' needs.

*Front cover:* The five suitcases in which Calder transported his *Circus*, 1926–31  
Whitney Museum of American Art, New York. 83.36.65–69a–d  
Photo © Whitney Museum of American Art. Alexander Calder  
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## Calder in Paris: An Introduction

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Alexander Calder, 1898–1976

“The King of Wire and String”<sup>1</sup>

### Early Years

Alexander Calder was born in Lawnton, Pennsylvania into a family of artists. As a child, Alexander Calder—whose nickname was Sandy—was provided with a workshop space to make drawings, toys and gifts, including valentines for his parents and a knight’s costume. Later, he pursued a degree in mechanical engineering at the Stevens Institute of Technology in Hoboken, New Jersey.

After graduating in 1919, Calder worked in engineering and began taking drawing classes in the evening. Calder had not intended to become an artist, but after four years of various jobs, he enrolled at New York’s Art Students League. By 1926 he was exhibiting in group shows in New York, including one at the Whitney Studio Club downtown, the Whitney Museum’s precursor. While taking classes, Calder worked as an illustrator for a number of publications, including the *National Police Gazette*, which sent him on an assignment to sketch illustrations of the Ringling Brothers and Barnum & Bailey Circus. For Calder, the circus would become a subject of lasting significance.

### To Paris

Like many American artists, Calder went to Paris in 1926 just before he was twenty-eight years old. Calder was familiar with the city where he would be based for seven years. His parents, painter Nanette Lederer and sculptor Alexander Stirling Calder, had attended art schools in Paris. They lived in Paris after their marriage in 1895, and their daughter Margaret was born there in 1896. During the 1920s, the Paris that Calder experienced was unlike the city encountered by prior generations of Americans. In the years after World War I—“Les Années Folles” (the crazy years)—Paris had become a vibrant, international environment where a liberal lifestyle and a multitude of artistic and literary movements flourished.

Calder’s drawings and newspaper illustrations revealed his talent for working with a fluid, single line. “I think best in wire,”<sup>2</sup> Alexander Calder once told his sister. In Paris, Calder transformed his line from two dimensions to three, from ink and paint to pliant wire, incorporating some of the materials that he had used in his childhood such as pieces of wood and metal. Calder fashioned his materials into complex toys, figurative and abstract sculpture, and his signature mobiles—a radical new art form born in the last years of his stay in France.

### *Calder’s Circus*

In Paris over the course of five years, Calder created and performed one of his most important and beloved works, his miniature circus—titled in French *Cirque Calder*, and in English *Calder’s Circus*. This early example of what is now recognized as performance art brought Calder renown in Paris as he staged it for artist colleagues who would become lifelong friends, among them were Piet

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<sup>1</sup> The origin of this title for Calder during his first years in Paris is recounted by Gabrielle Buffet-Picabia, “The performances of this miniature Circus, designed and operated by Calder, accompanied by his amusing commentary, made him unexpectedly famous in a variety of circles. People called him the king of wire and string.” In Joan Simon, “Alexander Calder: the Paris Years,” *Alexander Calder: the Paris Years, 1926–1933*, Joan Simon and Brigitte Léal, eds. (New Haven: Yale University Press, 2008) 26.

<sup>2</sup> Quoted in Jean Lipman, *Calder’s Universe*, exh. cat. (New York: Whitney Museum of American Art, 1977) 238.

Mondrian, Joan Miró, and Marcel Duchamp. Calder created his circus figures and the devices that set them in motion using ordinary pieces of metal, cork, wood, cloth, leather, and rubber as well as wire and string. Each circus element was created and engineered by hand—and these kinetic sculptures were key antecedents for his mobiles.

The circus consists of an elaborate troupe of over 70 diminutive figures and animals, nearly 100 accessories such as carpets and lamps, and over 30 musical instruments, phonographic records, and noisemakers.<sup>3</sup> In Paris, Calder's audience would sit on a low bed or crates, munching peanuts and using Calder's noisemakers while he choreographed, directed, and performed the *Circus* act by act, each a complete narrative scene.

Accompanied by music and lighting, performances could last as long as two hours while trapeze artists flew through the air, a strongman slowly lifted a barbell, and acrobats catapulted through space. There were also unpredictable "accidents": "Often the dog did not succeed in jumping through the paper hoop, the bareback rider fell off the horse, or the trapeze artist landed ingloriously in the net."<sup>4</sup> During his years in Paris, Calder made many trips to the United States, transporting his *Circus* first in two suitcases and eventually in five.

### **Caricatures, Portraits, Figures**

It was in Paris that Calder arrived at his revolutionary notion of "drawing in space", a concept that remained central to his work throughout his career. On her arrival in Paris in 1925 at the age of 18 to perform in the *Revue Nègre*, American dancer Josephine Baker had captivated Paris audiences and had become an international celebrity. Baker's image could be found on kiosks, in magazines, and in product advertisements. Calder, as were other artists, was intrigued by Baker and he created at least five wire sculptures of her. Suspended in space, the "Josephines" move gently with air currents, anticipating Calder's later mobiles. Following his first wire sculptures of Baker and a boxer in top hat and tails, Calder made smaller wire figures of other celebrities, including American tennis champion Helen Wills, piano player Jimmy Durante, and industrialist John D. Rockefeller Sr.

Calder also created wire portraits and sculptures of mythological figures and society personalities such as a policeman and a hostess. At once linear and volumetric, these works act as three dimensional, continuous line drawings. Calder's ability to "think in wire," along with his fascination with spatial relations and motion, laid the foundation for his later sculpture.

### **A Visit to Mondrian's Studio**

A visit to Piet Mondrian's studio in 1930 provided the inspiration that set Calder on a path toward abstraction and an investigation into how abstract sculpture could be charged by movement. Mondrian's method for composing his work involved his arrangement of colored cardboard rectangles on his studio walls. Inspired by the idea of setting Mondrian's rectangles in motion, Calder said: "I finally decided that the spatial relationship, to be general, should not be fixed—and later added to that the thought of composing various motions, just as one composes volumes, spaces, colors, etc."<sup>5</sup> Calder later claimed that seeing the Dutch painter's studio "shocked" him into pursuing abstract forms.

### **Stables and Mobiles**

A year later, Calder began creating "stables" and his first kinetic sculptures, named "mobiles" by his friend Marcel Duchamp. The term "stable" was coined by Jean Arp to differentiate earlier immobile

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<sup>3</sup> Eleonora Nagy "Calder's Once and Future Circus: A Conservator's Perspective" in *Alexander Calder: the Paris Years, 1926-1933*, Joan Simon and Brigitte Léal, eds. (New Haven: Yale University Press, 2008) 70.

<sup>4</sup> "Calder's *Circus*," Art Section, Newsweek, October 11, 1943.

<sup>5</sup> Calder to Albert E. Gallatin, 4 November 1934 (Albert Eugene Gallatin papers, 1898-1951, Archives of American Art, Smithsonian Institution, reel 507).

works from those that moved. Calder later noted: "The mobile has actual movement in itself, while the stabile is back at the old painting idea of implied movement. You have to walk around a stabile or through it—a mobile dances in front of you."<sup>6</sup>

In keeping with his play on language and double-meanings, Duchamp chose the French word "mobile," because it refers both to "motion" and "motive." Although "mobile" describes the suspended works that Calder began to create in 1932, it was initially used by Duchamp to refer to Calder's earlier sculptures powered by motors and hand-turned cranks. Calder soon found that his suspended and counterbalanced forms could move by air currents alone. These revolutionary, airborne works not only freed sculpture from mass but incorporated movement as a "material" itself.

### **Return to New York**

When he returned to the United States in 1933, Calder had become the international figure and defining force in twentieth-century sculpture that we know today. During the 1950s, Calder returned to France to establish a second studio and home in Saché, under two hours by train from Paris. He would continue to divide his time between France and the United States until his death in 1976.

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<sup>6</sup> Alexander Calder to Katherine Kuh, in Katherine Kuh, *The Artist's Voice: Talks with Seventeen Modern Artists* (New York and Evanston, IL: Harper and Row, 1960), 42.

## Pre-visit: New Experiences and Adventures

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Calder's experiences as a young man in Paris transformed his life and artistic career. Upon his arrival, Calder excitedly reported to his family at home, writing about trips up the Eiffel Tower, delicious new foods, and the delights of sketching in outdoor cafés. While in Paris, he established friendships with some of the most important artists of the twentieth century, including Marcel Duchamp, Fernand Léger, Joan Miró, and Piet Mondrian. During this period Calder also met his wife, Louisa James, who would assist him with performances of the *Circus*. Seven years after arriving in Paris with ambitions of becoming a painter, Calder left the city an internationally-known artist and a defining force in twentieth-century sculpture.

### Objectives

- Invite students to reflect on what they have gained from their own experiences encountering new situations, places, and people.
- Provide students with a framework for approaching *Alexander Calder: The Paris Years, 1926–1933*.

### Writing Exercise and Class Discussion

Share a little information with your students about how Calder moved to Paris in search of new experiences and new people who would help him develop as an artist. Ask your students to take a few minutes to write a response to the following questions:

- Write about an experience in which you went to a new place, met new people, saw new things, or ate new foods. Maybe you visited a friend's house, went on a school field trip or experienced a different neighborhood.
- What did you learn from this experience?
- In your opinion, why are new experiences and adventures important?

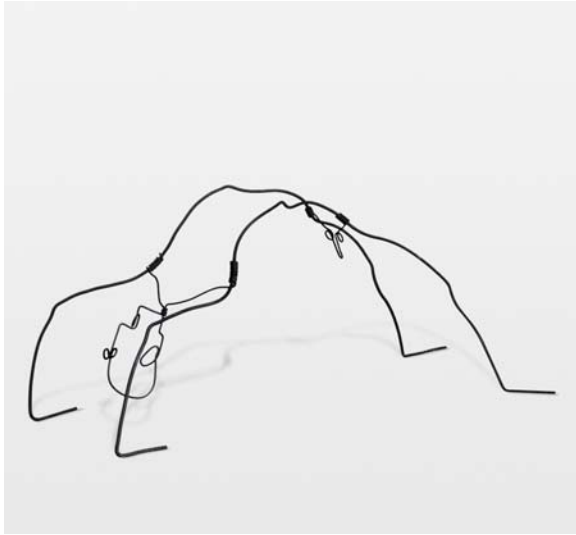
Ask students to find a partner and interview one another about their experiences. As a class, discuss their ideas about why new experiences and adventures are important (if possible, record their ideas on a board, preferably one which will not be erased).

**Extended Project:** Ask your students to interview an adult they know, using the same questions. Encourage them to reflect on shared commonalities and differences between their own experiences and those of the adult they interviewed.

**Museum Visit:** When you visit the Museum, remind your students about your discussion. Explain how the exhibition looks at Calder's seven-year adventure in Paris. Ask them to keep an eye out for how his work transformed over time—both in subject matter and scale.

## Pre-visit: Found Objects and Lyrical Lines

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Alexander Calder, *Arching Man*, 1929 Wire and paint, 13 3/4 x 35 x 11 1/2 in. (34.9 x 88.9 x 29.2 cm). Calder Foundation, New York © 2008 Calder Foundation, New York / Artists Rights Society (ARS), New York Photograph by Benjamin Krebs



Alexander Calder, *Dog*, 1926-31. Wood, clothespin, and wire, 3 7/8 x 5 5/8 x 1 1/2 in. (9.6 x 14.3 x 3.8 cm). Calder Foundation, New York © 2008 Calder Foundation, New York / Artists Rights Society (ARS), New York

The following lesson introduces students to subjects and materials which were central to Calder's early work in Paris, including animals and figures, wire and found objects.

### Objectives

- Introduce students to different methods used by Calder for making sculpture.
- Introduce students to the concept of a "found object."
- Introduce comparison as a tool for looking at art.
- Encourage students to consider the role of experimentation and play in art.

**Materials:** Writing easel/Chalkboard/SMART Board, projector or print-outs.

### Warm Up Class Discussion:

- Ask your students to think about what a "found object" might be. What does it mean? Note their definitions on a board. Now ask them to write two to three sentences using the words "found object." Invite volunteers to share their sentences, and record them on the board. Explain that you will be returning to these ideas later in the lesson.

## Looking at Images:

Project or distribute images of Calder's *Arching Man*, 1929.

- Ask your students to take a moment to look carefully at the image. What might be going on? Can they think of an *action* word to describe what they see? Share the title of the sculpture. Ask them if knowing the title adds to or changes their observations.
- Share the dimensions of the sculpture with the class. You may want to use rulers and the board, or a comparably sized object to give them a general sense of its scale.
- Now ask your students to think about how *Arching Man* was made. How many wires do they think Calder used to make this figure?

Project or distribute images of Calder's *Dog*, 1926-31.

Share the dimensions of *Dog*, once again using the chalkboard or another object as an aide.

- Ask your students what differences and similarities they see between these two sculptures. What materials did Calder use to make *Dog*? Returning to their responses from the warm-up discussion, explain how a clothespin can be considered a found object. Ask them to consider why or why not they think a clothespin was a good choice for the dog's head.

**Extended Project:** Ask your students to find an object at school or at home to bring to class. Ask them to imagine transforming their object into an animal, person, or other object. Invite them to sketch their ideas, or if possible, execute their ideas using materials available in the classroom.

**Museum Visit:** Ask your students to keep an eye out for the use of both wire and found objects in Calder's work. Along with animals and people, what other subjects or shapes does Calder explore?



## Pre-Visit: Viewing *Calder's Circus*



*From left to right:*  
Calder turning the crank to operate *Fanni, the Belly Dancer*, from *Calder's Circus*, 1926-31. Still from Jean Painlevé's *Le Grand Cirque Calder 1927*, 1955. 16mm film, color, sound; 45min.

Calder preparing to launch his dog through a hoop (out of the frame) during a performance of *Calder's Circus*, 1926-31. Still from Jean Painlevé's *Le Grand Cirque Calder 1927*, 1955. 16mm film, color, sound; 45min.

*Little Clown, the Trumpeteer, and Bearded Lady*, from *Calder's Circus*, 1926-31. Still from Jean Painlevé's *Le Grand Cirque Calder*

The installation of the *Circus* in this exhibition has been organized by act, including figures, mechanisms, and props, all of which have been identified through the study of archives and films. The *Circus*, which Calder last performed in 1961, may no longer be enacted for a couple of reasons. First, without Calder himself, a true performance of the work is no longer possible. Second, the now-fragile *Circus* participants and mechanisms would be at risk if subjected to further wear and tear.

These issues pose provocative questions about the role of artists, art, museums, and their relationships with one another. As Eleonora Nagy—a conservator working with the *Circus*—observes, “The Whitney’s mission is to preserve and safely present the *Circus* while imparting its original intention. Conservators today inevitably ask, how can a work that was performed be preserved and presented for future generations? How can its performative qualities be conveyed if the elements themselves are no longer in motion? And if the *Circus* itself must now be seen as an assembly of static objects of kinetic potential, how can the museum offer the fullest sense of the once action-filled, theatrical performance?”<sup>7</sup>

One answer to this problem is to look at the films made of Calder performing the *Circus*. One of the rare films on display in the exhibition is *Le Grand Cirque Calder 1927* (1955) by Jean Painlevé. We have included select clips from the film on our website at <http://whitney.org/learning/gallery/>. Click

<sup>7</sup> Nagy, 196.

on the thumbnail images of *Calder's Circus* in the Gallery and go to "More Stuff." If possible, preview these clips with your students before visiting the Museum.

### Objectives

- Provide students with a framework for viewing *Calder's Circus* at the Museum.
- Introduce students to the role of performance in art.
- Encourage students to consider the role of experimentation and play in art.

**Materials:** Computers with Internet access or SMART Board for viewing film clips.

### Warm Up Class Discussion:

Divide your students into small groups. Ask each group to come up with a list of possible characters, performers, and animals they might find at a circus. As a class, collect their ideas. Ask them to reflect further on what the circus might look like, or where it might take place. What sights, sounds, and smells might they expect? What might be surprising about a circus performance?

### A Closer Look: Jean Painlevé's *Le Grand Cirque Calder 1927* (1955)

As a class, or in groups on computers, watch the clips of Painlevé's film at <http://whitney.org/learning/gallery/>.

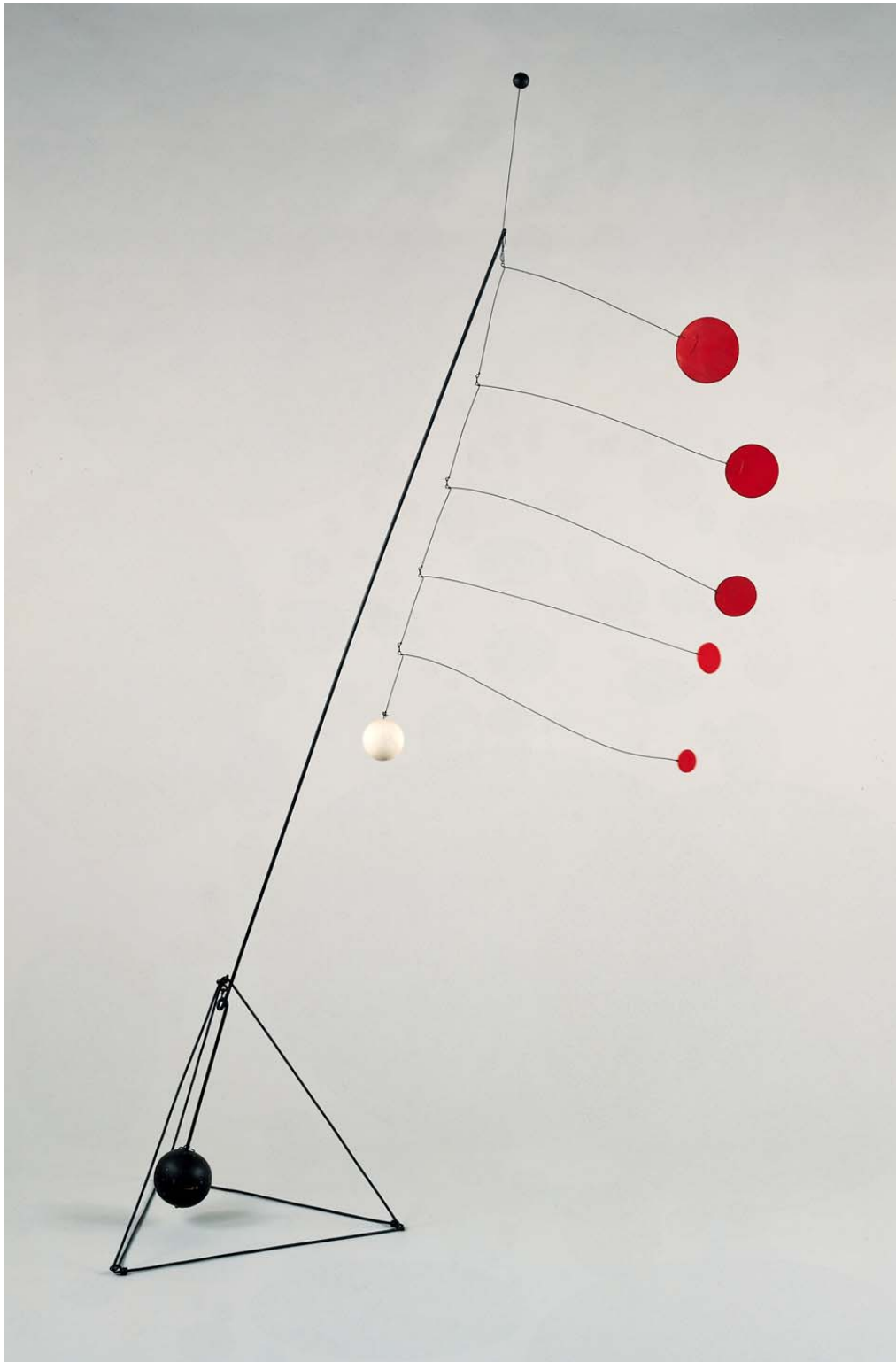
Let your students know this is Calder himself performing the *Circus*. Ask them to look for the following details while watching:

- What sounds do they hear? Do these sounds change from act to act?
- What characters can they identify in each act?
- What is Calder's role throughout these clips? What is he doing?
- How is he making his sculptures move?
- What materials do they notice?

After watching the clips, ask your students to summarize what they observed and what happened. How did *Calder's Circus* compare with their ideas about the different ingredients that go into making a circus? Share with your students the idea that Calder is not only making, but performing his art with the *Circus*.

## Pre-visit: Calder's Mobiles: Abstraction in Motion

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Alexander Calder, *Object with Red Discs*, 1931  
Painted steel rod, wire, wood, and sheet aluminum, 88 1/2 x  
33 x 47 1/2 in. (224.8 x 83.8 x 120.7 cm). Whitney Museum  
of American Art, New York; purchase, with funds from the  
Mrs. Percy Urin Purchase Fund 86.49a-c © 2008 Calder  
Foundation, New York / Artists Rights Society (ARS), New  
York

## Objectives

- Introduce students to a new kind of sculpture.
- Have students consider formal properties in Calder's mobiles such as line, color, shape, and balance.
- Introduce students to concepts of abstraction.

**Materials:** Writing easel/Chalkboard/SMART Board, projector or print-outs.

### Class Discussion:

Project or distribute image of *Object with Red Discs*, 1931. Ask them what they notice. How might they describe this sculpture to someone who cannot see it? How is this different or similar to other sculptures they have seen?

The last few years of Calder's time in Paris saw the invention and development of his mobile sculptures. "I do not know whether it was the moving toys in the *Circus* which got me interested in the idea of motion as an art form," Calder recalled, "or whether it was my training at Stevens [Institute of Technology]."<sup>8</sup> Accompanying Calder's interest in playing purely with physics and the relationships between objects in space was his move away from figuration towards abstraction.

Observing that movement had long been a central compositional goal of painting and sculpture, in 1933 Calder asked, "Therefore, why not plastic forms in motion? Not a simple translatory or rotary motion but several motions of different types, speeds and amplitudes composing to make a resultant whole. Just as one can compose colors, so one can compose motions."<sup>9</sup>

Ask students to discuss how Calder may have composed motion. What artistic choices did he make to facilitate this?

Calder's motorized sculptures and suspended mobiles provide students with a helpful introduction to looking at and thinking about abstract or non-objective art.

Ask your students to consider not only how these sculptures work, but also the shifting relationships and connections between the different forms. After viewing Painlevé's film, what similarities can your students identify between *Calder's Circus* and his motorized sculptures and mobiles? How do both forms of sculpture play with motion? What differences (such as Calder's presence or the use of identifiable props and characters) do they observe?

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<sup>8</sup> Nagy, 197.

<sup>9</sup> Simon, 53.

## At the Museum

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### Guided Tours

We welcome you and your students to visit the Whitney. To schedule a guided tour, please visit [www.whitney.org/education](http://www.whitney.org/education).

If you are scheduled for a guided school group tour, your museum educator will contact you prior to your visit. Let them know what preparatory work you have done, how this connects to the rest of your curricula, and what you'd like your visit to focus on.

Because this exhibition will be very crowded, you may have to spend some of your visit looking at related works in the Museum's permanent collection as well as the Calder exhibition. Please know that we focus on careful looking and observation in the galleries, so you can expect to examine 4 to 5 works of art during your hour-long visit.

Museum educators lead inquiry-based conversations as well as sketching or writing activities in the galleries. If you are visiting during public hours, you and your students (as long as they are in chaperoned groups) are welcome to stay after your guided tour.

All educators and students who have a Guided Tour will receive a pass which enables them free admission to the Whitney during a subsequent visit.

### High School Dispersal Visits

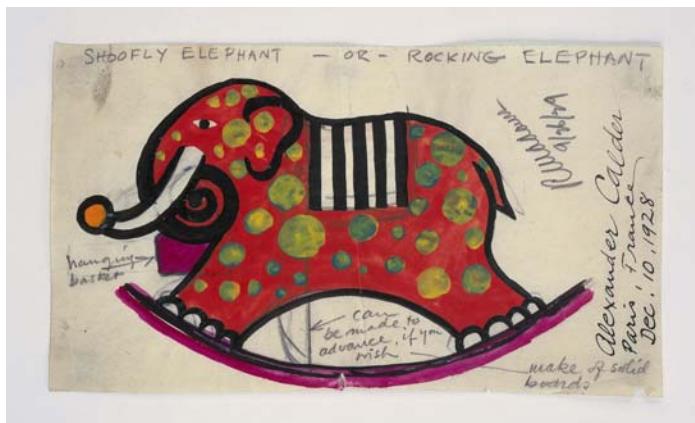
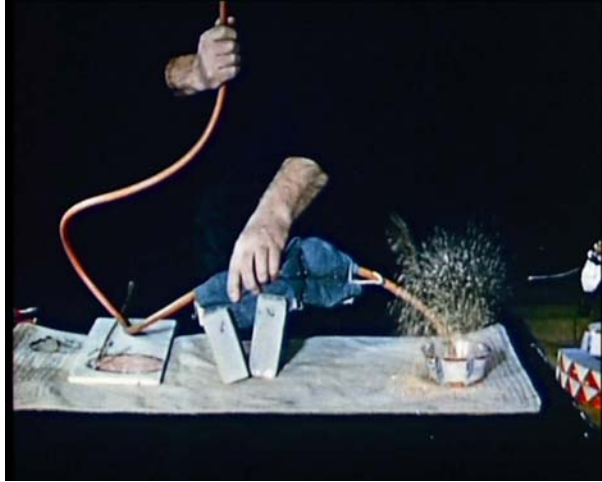
High School students are welcome to visit the museum during public hours in a self-guided capacity. A maximum of 60 students may arrive at the museum together and must then break into small groups (no more than 4 students) to visit the galleries. One chaperone must accompany 15 students.

Discuss museum rules with students before visiting the museum. We recommend giving students something to focus on or a task to complete when visiting the museum. You may want to create a worksheet, free-writing or poetry activity or sketching assignments. We have found that artworks are more accessible if students are provided with some structure or direction. For information and sample activities, visit Learning@Whitney at <http://whitney.org/learning/>.

High School Dispersals must be scheduled before the day of the visit. Please visit <http://www.whitney.org/www/information/group.jsp> for more information to schedule a visit.

We look forward to welcoming you and your students to the Whitney!

## Post-Visit: *Three Elephants, Three Ways*



Left to right:  
Calder setting in motion, *Elephant*, from *Calder's Circus*, 1926-31. Still from Jean Painlevé, *Le Grand Cirque Calder* 1927. 1955. 16mm film, color, sound; 45 min.

Alexander Calder, *Elephant*, 1928  
Wire, 9 3/4 x 11 1/2 x 4 3/4 in. (24.8 x 29.2 x 12.1 cm).  
Collection of Diane and Arthur Abbey  
© 2008 Calder Foundation, New York / Artists Rights Society (ARS), New York

Alexander Calder, *Shoofly Elephant*, 1928  
Graphite, ink and gouache on paper, 4 1/2 x 8 in. (11.4 x 20.3 cm). Calder Foundation, New York. © 2008 Calder Foundation, New York / Artists Rights Society (ARS), New York  
Photograph by Jerry L. Thompson

The following lesson builds on concepts and themes introduced in the pre-visit lesson and the Museum visit. As noted, Calder was a versatile artist open to using different materials and exploring varied applications of his ideas. As the critic Edouard Ramond noted in 1929, "Calder takes a roll of wire that a demanding plumber would not want, a sheet of paper picked up at random, some pieces of cardboard thrown on the ground—he takes whatever, I tell you, and his magician's fingers construct, draw, and bring to life an animal, a group, a mask in a style so sure, with such an intense power to evoke, that we can't help being astonished that art has so long banished these humble materials."<sup>10</sup>

This lesson takes a closer look at how Calder approaches the same subject—an elephant—in three different ways: a wire sculpture, a toy, and a member of his famed *Circus*. You may choose to divide up these discussions and activities over the course of more than one class.

**Materials:** Projector or printed copies of images, pens and paper for sketching.

<sup>10</sup> Pepe Karmel, "The Alchemist: Alexander Calder and Surrealism" in *Alexander Calder: the Paris Years, 1926-1933*, Joan Simon and Brigitte Léal, eds. (New Haven, Yale University Press, 2008) 215.

## Objectives

- Foster deeper exploration of concepts and ideas discussed during students' visit.
- Challenge students to approach drawing in a new way.
- Ask students to consider qualities of good design.
- Encourage students to consider the role of experimentation and play in art.

## Museum Visit Reflection:

- In Partners: Ask your students to take a few minutes to write about their museum visit. What do they remember most? What did they learn about Alexander Calder? What did they most enjoy seeing? What other questions do they have—for the artist, the curators who organized the exhibition, or in general? Invite them to share their thoughts with the class.

## I. Warm Up Exercise: Drawing in Space

Project or distribute images of Calder's wire *Elephant* from 1928.

- Ask your students to choose one of two starting points where the wire ends (the end of the trunk, or the mouth). Using their finger, ask them to *slowly* trace the lines of the elephant in one continuous motion. Ask them to repeat the exercise, but this time very quickly. Next, ask them to *slowly* trace the path of lines from the other end of the wire (where their last air drawing ended). Again, ask them to repeat the exercise, but at a faster pace. What do they notice about the lines?
- For younger students: Ask them to repeat the same exercise using the palms of their hands, their elbows, the soles of their feet, and finally, ask them to trace the lines of the elephant with their whole bodies.

Calder once noted "I seemed to have a knack for doing it [drawing] with a single line."<sup>11</sup> His ability to create sculptures out of a single rod of wire may have stemmed from his classes at the Art Students League where John Sloan challenged him to draw quickly and Boardman Robinson taught him to draw without lifting his pen off the paper.<sup>12</sup>

- Next, group your students into partners. Ask them to take turns creating air drawings of one another using their finger.
- As a class, define the word "continuous." Explain that you are going to create continuous line drawings, much like their air drawings.
- One minute and three minute continuous line drawings: distribute sheets of paper and a pen (preferable to pencils to avoid use of an eraser) to each student. Ask them to draw a portrait of their partner without lifting their pen from the paper. Be sure to let them know that the purpose of this exercise is not to create a drawing that looks like their partner, but to play with line. Challenge them to draw both the outside contours of their partner's face along with their facial features.
- Repeat the exercise above, but now ask your students to use their *other* hand to create both one and three minute continuous line drawings of their partner.

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<sup>11</sup> Alexander Calder. *An Autobiography with Pictures*. (New York: Pantheon Books) 1966

<sup>12</sup> Karmel, 218.

- Ask your students to compare their four drawings and to reflect on their experiences of drawing at different speeds and with different hands. What was surprising? Challenging?

## II. A Closer Look: Calder's Toy Designs.

While in Paris, Calder turned to toy-making as a means for exploring his interest in mechanics and supporting himself. He exhibited his toys in 1927, and on returning to the United States, he even designed a series of toys for the Gould Manufacturing Company of Oshkosh, Wisconsin. To gain a better understanding of how some of Calder's toys worked, visit [www.berkshireremuseum.org/galleries/calder.html](http://www.berkshireremuseum.org/galleries/calder.html).

Project or distribute images of Calder's *Shoofly Elephant*, also from 1928.

- Invite your students to compare *Shoofly Elephant* with Calder's wire *Elephant*. What similarities and differences do they see?
- Let them know this is a work on paper, only measuring 4 1/2 x 8 inches. Given its scale and Calder's notations, what might be the purpose of this drawing? If possible, encourage a few volunteers to read the text.
- Explain that "shoofly" refers to a kind of child's rocker shaped like an animal. Ask them to consider how this information adds to their understanding of Calder's drawing.

Noting the importance of Calder's early training as an engineer, Henry Petroski writes, "Many of Calder's animal toys, including 'a kangaroo that leaped, a pelican with a bill that snapped, a bear that skated, and a goldfish that swam and opened and closed its gills,' were characterized by eccentric wheels and clever linkages that imparted to them mimetic motion. Such mechanisms would have come easily to an engineer who had studied kinematics of machines."<sup>13</sup>

- Invite your students—in partners or on their own—to imagine they are entering a competition for the best new design or toy. Like Calder's *Shoofly Elephant*, the toy should be inspired by an animal, include a seat or place for a child to sit, and must move in some way. But, apart from these three criteria, the toy can include as many features as your student-designers desire. Ask them to both sketch and write about their designs (this may be turned into an extended assignment or project).

## III. *Calder's Circus Elephant*.

Calder's fascination with the mechanics of toys and of motion as an art form fluidly translated to his *Circus*. Like his *Shoofly Elephant*, *Calder's Circus* was designed to move both by human and mechanical power. But, unlike his toys, which were intended for others to set in motion and play, the *Circus* could only work with the aid of one key performer, and that was Calder himself.

Project or distribute print-outs of the image of *Calder's Circus Elephant*, 1926-31.

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<sup>13</sup> Henry Petroski, "Calder as Artist-Engineer: Vectors, Velocities", in *Alexander Calder: the Paris Years, 1926-1933*, Joan Simon and Brigitte Léal, eds. (New Haven, Yale University Press, 2008) 179-180.



- After giving your students a few moments to look at this image, ask them to share as many observations as possible. What materials or objects can they identify? How do they think the elephant may have been made? What other props are included in this image?
- Return to your discussion of found objects in the pre-visit lesson (*Found Objects and Lyrical Lines*) or Museum visit. How has Calder incorporated found objects into this circus act?

As evident in the Painlevé film clip of the *Circus* (<http://whitney.org/learning/gallery/>), one of the main feats performed by the elephant was blowing sawdust with its trunk. To do this, Calder would blow into the tail end of the tube. The elephant also stepped over the rider (or tamer), standing up on its hind legs, which could move like hinges.

- After sharing this information, ask your students to compare *Calder's Circus Elephant* with the other two elephants discussed in this lesson. How is the swirling trunk and tail both similar and different in all three? How do the motions of the *Shoofly Elephant* differ from those performed by the *Circus Elephant*?

As with all of Calder's circus performers and props, the clothing worn by the rider along with the soft head and cloth body of the elephant were carefully sewn by the artist. The bright costumes and sets were specific to each act, and along with the changing lights and music, helped create a circus-like atmosphere. The numerous carpets not only helped to indicate a change in act, but from a practical standpoint, also made it easier for small wheels to roll. Mary Rower, Calder's daughter, describes attending a show: "Mom and dad served peanuts during the intermission. There was beer in a keg. Also, various friends were given instruments to make noises—cymbals or a cardboard tube that was used when they wanted to roar like a lion."<sup>14</sup>

### **Concluding Activity:**

After looking at Calder's three different approaches to representing an elephant, invite your students to creatively tackle a subject of their own choosing, in three different ways. Their method of representation might be visual (a work in 2D or 3D), performance-based, (a dance gesture or spoken words) or musical.

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<sup>14</sup> Nagy, 201.

## Extended Activities and Research Projects



Suitcase filled with elements from *Calder's Circus*, 1926-31. Whitney Museum of American Art, New York. 83.36.65a-c  
Photo © Whitney Museum of American Art. Alexander Calder © 2008 Calder Foundation, New York / Artists Rights Society (ARS), New York  
Photograph by Sheldon C. Collins

### Portable Art

Calder had a knack for making his work and technique practical and portable when necessary. Along with fitting his entire *Circus* into five suitcases, Calder devised a way to sketch outdoors by fashioning a yoke-like device for carrying ink which he wore around his neck when he went sketching at the zoo.

Challenge your students to create a sculpture to fit neatly into their backpack or lunch box. It may require hinges or other collapsible elements as well as removable parts. In making their sculptures, students should be limited to choosing *only three* of the following five materials: tape, newspaper, string, wire/pipecleaners, and cups.

### Lab Work: Dissect a Toy

As Calder learned, much can be gained from disassembling mechanical objects and toys. Divide students into small groups, giving each one a used toy to dissect. The toy may have manual or electronic mechanical functions. Please select toys based on your students' ages and abilities. Caution should be exercised with electronics and synthetic filling and fluids.

**Materials needed:** goggles, pliers, and scissors. Ask your students to approach their dissection in a very methodical manner, identifying toy parts and taking notes (if possible, photo documentation or sketches) throughout in preparation for a final poster session.

Based on what they learned from their primary investigation, supplemented by further research online or elsewhere, students should ultimately answer the following questions: What is the purpose of the toy? For whom is it intended? How does the toy's visual design reflect its audience and purpose? What materials is it composed of? How does it work?

Based on their own experience playing with toys and what they have learned from their toy dissection, students can nominate a toy to be considered for the National Toy Hall of Fame at the Strong Museum: [www.strongmuseum.com/NTHof/about.html](http://www.strongmuseum.com/NTHof/about.html).

### **Americans in Paris: Between the Wars**

The so-called “Roaring Twenties” of 1920s America were filled with moments of creativity, economic boom and bust, social injustice and unrest. (for more about art and culture in the 1920s, visit the Learning@Whitney Timeline, <http://whitney.org/learning/timeline>. As it did for Calder, Paris became a haven and rite of passage for many American artists and writers during this time.

Ask your students to research how living in Paris during the 1920s changed the lives of one of the following American expatriates: performers Josephine Baker, “Ada “Bricktop” Smith, or Johnny Hudsins; composers and musicians Sidney Bechet, Aaron Copeland, John Cage, or Cole Porter; artists Man Ray, Isamu Noguchi, or Lee Miller; writers, playwrights, and poets Ezra Pound, F. Scott Fitzgerald, Ernest Hemingway, Gertrude Stein, e.e. Cummings or Henry Miller.

### **Found Objects:**

As a class, research two of Calder’s contemporaries, Marcel Duchamp and Kurt Schwitters, for whom the inclusion of found objects became central to their work.

## Bibliography & Links

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Calder, Alexander. *Animal Sketching*. Dover Publications, New York. 1926

Calder, Alexander. *An Autobiography with Pictures*. New York: Pantheon Books. 1966

Simon, Joan and Léal, Brigitte, Editors *Alexander Calder: the Paris Years, 1926-1933*. New Haven, Yale University Press. 2008

Calder Foundation, <http://www.calder.org/>

Berkshire Museum, [www.berkshiremuseum.org/galleries/calder.html](http://www.berkshiremuseum.org/galleries/calder.html)

Permanent interactive exhibition of Calder's toys, including explanations of how they worked.

## Feedback

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Please let us know what you think of these materials. How did you use them? What worked or didn't work? Email us at [schoolprograms@whitney.org](mailto:schoolprograms@whitney.org).

For more information on our programs and resources for Schools, Educators, Youth, and Families, please visit [www.whitney.org](http://www.whitney.org) and <http://whitney.org/learning/>

## Learning Standards

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The projects and activities in these curriculum materials address national and state learning standards for the arts, English language arts, social studies, and technology.

Links to National Learning Standards.

<http://www.mcrel.org/compendium/browse.asp>

Comprehensive guide to National Learning Standards by content area.

<http://www.education-world.com/standards/national/index.shtml>

New York State Learning Standards.

<http://www.nysatl.nysed.gov/standards.html>

<http://www.emsc.nysed.gov/ciai/home.html>

New York City Department of Education's *Blueprint for Teaching and Learning in the Arts*, grades K-12.

<http://www.nycenet.edu/projectarts/PAGES/a-blueprint.htm>

## School and Educator Programs

The Whitney Museum of American Art's School and Educator Programs are made possible by an endowment from the Walter and Leonore Annenberg Fund.

Citi Foundation



Generous support is provided by

Additional support is provided by Susan and Jack Rudin in honor of Beth Rudin DeWoody, public funds from the New York City Department of Cultural Affairs, the May and Samuel Rudin Family Foundation, Inc., Newman's Own, and by members of the Whitney's Education Committee.


## Alexander Calder: The Paris Years, 1926-1933

Sponsored by  **CIT**  
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The exhibition and catalogue are made possible through a generous grant from the Terra Foundation for American Art.

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Additional support is provided by The Brown Foundation, Inc., Donna and Benjamin M. Rosen, Faith and Philip Geier, The Florence Gould Foundation, The Jon and Mary Shirley Foundation, The Lipman Family Foundation, Julie and William Obering, Dathel and Tommy Coleman, and The Philip A. and Lynn Straus Foundation.

Opening events are sponsored by  Sotheby's

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These pre- and post-visit materials were prepared by Victoria Lichtendorf in collaboration with Heather Maxson, and Dina Helal, Education Department, Whitney Museum of American Art. Paula Santos also assisted with the production of these materials.

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