

MAKING SHADOWS

with



TRADITIONS (and BREAKING WITH THEM)

Modern Dance

Don't get nervous, I'm not going to talk about interpretative dance in which someone acts out a flower growing with their body (that could be cool if done well). But there are a few things you should know about modern dance.

1. It is one of only two art forms that were invented in the United States. Do you know the other art form? Hint: it is a musical form.

Answer: Jazz music

What do these two uniquely American art forms have in common that some would say make them American?

Answer: Both Jazz and Modern Dance place a high value on **innovation** and **expression**. They use improvisation to develop material and, at times, during performances. **Improvisation** and **Innovation** are two things that we Americans are said to be good at.

Do you think that is true? What examples can you give?

Discussion Topics:

What does **innovation** mean? What are some examples of famous innovations?

What does it mean to be good at **improvisation**? Who comes to mind as a good improviser?

2. Modern dance was born as a kind of rebellion against ballet and a reflection of the changing times.

(Rebellions and revolutions aren't limited to those that happen against dictators or oppressive governments – they can happen in all forms of art, culture, fashion and religion. Can you think of a revolution that happened in industry or a rebellion that happened within a religion such as Christianity?)

Possible Answers: Industrial Revolution; Reformation

Modern Dance choreographers such as Isadora Duncan, Doris Humphrey and Martha Graham created a new art form that sought things New and Strange and Beautiful. They wanted to be free of the highly stylized dance form born in the court of Louis the XIV called **ballet**. They took off their shoes, let down their hair and started exploring what kinds of movement a body could do. Modern dance is constantly re-inventing itself and searching for new and unusual ways of moving and

expressing. Sometimes modern dance artists push so far into new territory that many people don't believe they are doing "modern dance". That is when many of us prick up our ears and get excited that something new is happening. The new kind of Shadow Dancing that Catapult performs might be an example. But first you need to know about the old kind of Shadow Theater.

Shadow Theater using puppets made of paper or leather has been around for THOUSANDS of years! That's right people in India, China, Thailand and Malaysia and many other places have been using shadows to tell stories since about 3 centuries before the birth of Christ – that would be over two thousand years ago.

What's Changed, you might ask. Well, incredibly, not much when it comes to traditional shadow puppet theater! You can still see the ancient art of shadow puppets bringing folk tales and religious works such as the Ramayana to life today. In many Asian countries, they still use traditional methods often with live musicians, skilled artists for the cut-outs and very dedicated puppeteers. It is an integral part of many people's culture even though we don't hear about it much here in the United States.

How Does It Work? It's pretty simple, really. A light source such as a lantern, candle, flashlight, projector or other is pointed at a semi-translucent screen made of cloth, paper or vinyl. In between the screen and the light source, puppeteers manipulate cut-outs and make them move around and seem to interact. It's a lot like watching a movie and in fact this ancient art form is very likely what eventually led to [projections](#) and eventually to the films we watch today.

WHAT IS CATAPULT? It's a medieval siege engine used to hurl rocks at fortress walls! Yes, that is true but it is also a performing arts group that is coming to your school. We don't need to break down the walls of your school because y'all kindly invited us in. Thank you. But what kind of performing arts group are we? Are we a Dance Company or a Theater Company or a Shadow Puppet Company? Well, we are kind of all three and something more.

In Our Performances

1. We often use dance such as ballet and modern like a dance company
2. We often use expressions and body language just as actors do and our stories are like short plays.
3. We use some cut-outs like a Shadow Puppet show
4. The something more is that Catapult **uses bodies to make shapes**. Instead of cutting objects out of paper or leather, we have figured out how to take several bodies and make the shadow of an Elephant for instance or a Car or the Taj Mahal etc. etc. You get the idea- we can make almost anything out of bodies! You might say that using our bodies instead of cut-outs was our [innovation](#) that makes us different from ancient Shadow Puppet theater.

So, what are we? Acting company, Shadow Puppet company, Modern Dance company? We don't really know but after you see us, you can tell us what you think.

WHAT TO LOOK FOR IN OUR SHOW

During our show you should look for the following art forms:

Ballet Discussions: Could you identify the moments of ballet as distinct from other forms of movement in the show? What kind of music was playing during the moments of ballet?

Modern Dance Discussions: Modern Dance is such an inclusive term, what in the show could be said to be NOT modern dance?

Theater/Acting Discussions: We don't use words in the show but we still tell stories. How did we do that?
Can you describe moments in the show that were more acting than dance?

Story-telling Discussions: I see similarities between our Shadow Stories and the following forms of
storytelling: Film; Short Story; Poetry. See if you can say why you agree or disagree.

Sculpture Discussions: Making shapes with our bodies is kind of like sculpture – but you don't see
our bodies in the show, you see only the shadow of our bodies. Is this a kind of sculpture or more like painting? What do
you think?

Music Discussions: We have music and even sound effects throughout our show. How did the
music help tell the story? What would be missing if we turned off the music? Can you imagine our show in silence?

THE SCIENCE OF SHADOWS

WHAT IS LIGHT?

Light is made of energy filled particles called photons. They travel at incredible speed (the speed of light). They hit things and bounce off (reflect) and that allows us to see! Where there is no light, there is darkness. Where there is light reflecting and being blocked by objects, there are shadows.

WHAT IS A SHADOW?

Well, it is nothingness more than somethingness! A shadow is not made of anything – it is the absence of light. Your own shadow can only exist when your body is being hit by a light source. When light is being blocked by your body, your shadow appears like a cut-out of you! *Where* your shadow appears and *what* it looks like depends upon the kind of light and the angle of light.

Activity:

Students can work in pairs or groups. Each pair or group has a flashlight and the lights in the room are dimmed. Once calm has prevailed, they should try the following with their light source:

1. One student holds his/her hand with fingers spread above their desk or in front of a wall. Another student places him/herself one arm's length distant and shines the flashlight directly above or behind the outstretched hand. It is important to hold the flashlight still.
 - a. Observe the position of the shadow (a third student could tape paper to the wall or desk and trace the position and outline of the hand with chalk or marker.)
 - b. Observe the edges of the shadow are they fuzzy or distinct?
2. Keeping the flashlight straight (It should be at a right angle to the plane of the hand) slide the flashlight to the left or right by an inch or two.
 - a. Observe what happens to the shadow's position
 - b. Observe if there are changes to the shape

- c. Observe if there are changes to the focus of the edges.
3. Keeping the flashlight off to one side, slowly change the angle of the light
 - a. Observe if there are changes to the shape of the shadow
 - b. Observe if there are changes to position
 - c. Observe if there are changes to the edges
 4. Put the flashlight back to center and move it farther and closer to the hand
 - a. Observe and note changes to the shadow such as size and edge-focus

As the students will discover, shadows change shape, size and distinctness as the angle and proximity of the light source changes.

CREATIVITY AND SCIENCE COME TOGETHER:

1. Have students brainstorm a short shadow dance incorporating the phenomenon they observed regarding the behavior of light.
 - a. Students talk about ideas, everyone gets their say
 - b. They pick some ideas to try and see if they can discover other ideas as a result
 - c. Students finalize an order of events and then practice

Note: Students are free to use their hands or objects or to make shadow shapes with their hands. They can scout the room for fun things to use or even make their own cut-outs. If you wanted to give them more time with this activity, you could ask them to create a shadow presentation about a topic you are working on instead of or in addition to writing a paper. Eg. Show through shadows one of the most important moments in the book they just read or the moment in history they just studied or even how Pipefish move through their environment. Use your imagination and let them use theirs.