Shakespeare’s *The Tempest* / *La Tempête*

**Tuesday, March 13, 2007**
**10:00 am Concert Hall**

Study Guides are also available on our website at [www.fineartscenter.com](http://www.fineartscenter.com) – select *for school audiences* under *education* in the right column. Once there, select *Resource Room* on the left.

The Arts and Education Program of the Fine Arts Center is sponsored by [TD Banknorth](http://www.tdbanknorth.com).
**THE TEMPEST SYNOPSIS:**

Prospero, a sorcerer and the rightful Duke of Milan, dwells on an enchanted isle with his daughter, Miranda. Twelve years earlier, the duke's brother, Antonio, and Alonso, the King of Naples, conspired to usurp his throne. They set Prospero and Miranda adrift in a boat, and they eventually found themselves marooned on the island. Prospero is served on his island by Ariel, a spirit who he freed from a tree with magic, and Caliban, son of the witch Sycorax. When magic reveals that a ship bearing his old enemies is sailing near the island, Prospero summons a storm to wreck their ship. The survivors make it to shore in scattered groups. Among these is Ferdinand, the son of Alonso. He is lulled to Prospero's abode by the singing of Ariel; there he meets Miranda, who is enthralled with the young prince.

Meanwhile, Antonio, Alonso, Sebastian, and Gonzalo wander the island in search of Ferdinand. Antonio now plots with Sebastian to murder Alonso, but this plot is thwarted by Ariel. Elsewhere on the island, Stephano and Trinculo encounter Caliban. After sharing a few drinks, Caliban tries to enlist the two in a plot to kill Prospero and rule the island himself. He even promises Miranda to Stephano. Ariel, however, reports all these goings-on to Prospero. In the meantime, Miranda and Ferdinand pledge their troth to each other.

Prospero isn't finished with his sport of Antonio and Alonso, either. He creates a magical banquet for the two men that vanishes whenever they try to eat. He also sends Ariel in the guise of a harpy to hound them for their crimes against Prospero. Later, at a masque to celebrate the upcoming marriage of Miranda and Ferdinand, Prospero remembers Caliban's plot and abruptly calls the revels to a halt. He sends Ariel to punish them as well; the spirit does so by first luring them with some fancy clothes, then setting other island spirits upon them in the shape of hunting dogs that chase them around the island.

Finally, Prospero confronts his brother and Alonso, revealing his true identity as the rightful Duke of Milan. He demands that Antonio restore his throne; he also rebukes Sebastian for plotting against his own brother. To Alonso, he reveals Ferdinand alive and well, playing chess with Miranda. As a final act, Prospero abandons his magic and releases Ariel and Caliban from their servitude. From Ariel, Prospero asks for one last boon: calm seas and favorable winds for their trip back to Naples.

Synopsis: [http://www.bardweb.net/plays/tempest.html](http://www.bardweb.net/plays/tempest.html)

Alonso, King of Naples  
Sebastian, his brother  
Prospero, the rightful Duke of Milan  
Antonio, his brother; the usurping Duke of Milan  
Ferdinand, son of the King  
Gonzalo, an old and honest councilor  
Caliban, Prospero's slave  
Trinculo, a jester  
Stephano, a drunken butler  
Miranda, Prospero's daughter  
Ariel, an airy spirit
4D ART PRESENTS THE TEMPEST/LA TEMPÊTE

La Tempête (The Tempest) becomes a metaphor for our ever-virtualizing planet. Prospero creates worlds where all boundaries disappear, just like our contemporary lives are changing with new technologies blurring our perspectives and perceptions, bringing the frontiers of the real and imaginary closer together. This approach will be based on reconciliation and will bring together reality and virtuality, power and submission, revenge and forgiveness, heart and reason.

Magic, spells, and bewitchment! When the wind blows on this island, words and ideas find no rest...

Words from the Directors

The magic of theatre performances can sometimes be found, quite simply, in the haziness that surrounds the boundaries between dreams and reality. In The Tempest, Shakespeare decided to concentrate on that grey zone, to make it his theme, and to create a universe in which the certainties disappear, the eternal becomes ephemeral, and human nature is revealed from the inside.

The play is unsettlingly relevant today and it resonates with us. Prospero abandoned power in favour of knowledge, and his search for life’s essential truths caused him to lose everything, isolating him from the rest of the world. Knowledge of that kind is no more valued now; we are propelled to merely absorb instead of thinking and analyzing. Are we not all confined to our four walls, where our windows on the world are screens projecting predigested images? After all, we are created from “the stuff that dreams are made on” - but what became of those dreams? Are we still able to distinguish between our own dreams and those of others, between one reality and another?

Prospero created his own universe, dictating the rules and moving the pawns to please himself. He tried to avenge his past, and in doing so, moved on and realized that forgiveness was the only option opened to him. His books allowed him to visualize an ideal society, a just and peaceful utopia, a world that can only exist if the ghosts return to their place of origin and if reconciliation is accompanied by hope, tolerance, and humanity. The world can keep turning at its frenetic pace, but certain human beings are able to transcend it, to exist in a quiet place and very much in the moment, far from the inevitable race towards war, fear, selfishness, and power. This is undoubtedly an important message in The Tempest, a message that touched us deeply. Everything is vanishing – the only goal to which we can aspire is to become better human beings.

Michel Lemieux, Victor Pilon and Denise Guilbault

4D art, the company...

Founded in 1983, 4D art Lemieux/Pilon is based in Montreal. The multidisciplinary company, directed by Michel Lemieux and Victor Pilon, has presented more than 300 performances of its various productions.

4D art proposes a hybrid type of show that merges reality and virtuality, performing arts and new media. The borders that separate performance, scenography, cinema, video, dance, poetry, visual arts, lighting design, music and sound exploration disappear, bringing about a total integration of the various forms of artistic expression.

The initial works of 4D art, L’Œil Rechargeable (1982), Solide Salad (1984) and Mutations (1986), were the fruits of musical and multimedia experimentation carried out by the creator and performer Michel Lemieux. They earned him international recognition. In 1990, the visual artist Victor Pilon joined the company as artistic co-director. This partnership lead to the creation of Free Fall (1991), Grand Hôtel des Étrangers (1995), Pôles (1996), Orféo (1998), and Anima (2001).

Over the years, 4D art has developed an unequalled avant-gardes mastery of multimedia techniques applied to the performing arts. The presentation of audacious multidisciplinary performances during international tours has allowed the company to present its creations across Canada, the United States, Mexico, Europe, South America, Australia and Asia.
**SCENE SUMMARY***

*La Tempête* by William Shakespeare  
Translation and adaptation by Normand Chaurette

*Please remember that this production is in French with English supertitles.

**PROLOGUE – The Shipwreck**

**SCENE 1.** The deposed duke of Milan Prospero and his daughter Miranda have been living on an uninhabited island for several years. When a storm, set into motion by Prospero thanks to his knowledge of the occult sciences, swoops down over the surrounding sea, the father decides to reveal his royal origins to his daughter. He tells her of the conspiracy organized against him by his own brother Antonio, in conjunction with Alonso, the King of Naples. He also reminds her that without the help of Gonzalo, they would never have been able to survive the exile to which they have been condemned.

**SCENE 2.** Assigned the task of orchestrating the tempest, the volatile sprite Ariel (Prospero’s servant whose doppelgänger is the evil spirit Caliban) returns from the open sea to give an account of his mission. He confirms to his master that the storm shipwrecked the King of Naples’ fleet, and that the king and his retinue have been washed ashore and are wandering round the island. In exchange for rendering this service, Ariel asks his master to set him free. Prospero refuses to do so until his servant has helped him obtain his revenge.

**SCENE 3.** The King of Naples’ son Ferdinand has also been washed ashore and is wandering the island alone, convinced that he is the sole survivor of the shipwreck. He comes across Miranda, and the two young people immediately fall in love with each other. Prospero, however, is planning his vengeance and decides to make the young man his hostage.

**SCENE 4.** Fearing that his son was drowned, Alonso has sought refuge with his court in another part of the island. Overcome with grief, he falls into a deep sleep.

**SCENE 5.** While the King of Naples sleeps, Antonio and Sebastian (the heir apparent since the presumed death of Ferdinand) keep watch. Antonio uses the opportunity to try to convince Sebastian to kill the king. When they are about to strike, Ariel (sent by Prospero) intervenes to stop them.

**SCENE 6.** Forced to work at physical labour by Prospero, Ferdinand works from morning to night. Saddened by this turn of events, Miranda tries to convince him to rest a moment, but he refuses. Taking advantage of Prospero’s absence, the two young people declare their love for each other.
SCENE 7. In a fit of rage, the evil spirit Caliban complains about his master’s tyranny. Trinculo and Stephano, two of the shipwrecked castaways from the Neapolitan fleet, encounter Caliban on a path. Frightened by his appearance, they attempt to mollify him by getting him drunk.

SCENE 8. Alonso and his court despair of finding Ferdinand alive. They are visited by Ariel who, to torment them, appears as a mirage. He reminds the king of his wrongful treatment of Prospero before subjecting the poor wretches to ill-treatment.

SCENE 9. Hoping to escape his master’s tyranny, Caliban suggests to Trinculo and Stephano that they kill Prospero, thereby robbing him of both his powers and his daughter. The two sailors agree to his proposal.

SCENE 10. Noting that Ferdinand has done an excellent job performing the tasks he had assigned him as a test, Prospero grants him permission to wed Miranda.

SCENE 11. With Ariel’s help, Prospero foils the plot hatched against him. Ariel fools Caliban and the two castaways, turning their plans awry by means of various stratagems.

SCENE 12. Still prisoners of the spell cast by Ariel, Alonso and his retinue are captives of a hallucinatory delusion. Acknowledging that even the sprite Ariel is affected by the nature of the punishments he has imposed, Prospero concedes that forgiveness is the only solution. He agrees to put an end to the spell, but demands that everyone be brought before him.

SCENE 13. Welcoming his enemies to his makeshift court, Prospero presents them with the spectacle of Ferdinand’s and Miranda’s love for each other, with their marriage now uniting the two kingdoms. Thus avenged, Prospero decides to renounce his powers of magic and to free the two spirits who have been his servants.

EPILOGUE. Having won back his dukedom after pardoning the impostor, Prospero enjoys the liberty that comes with reconciliation.
This production of The Tempest uses cutting-edge technology. In fact, our own production staff here at the UMass Fine Arts Center was required to sign non-disclosure statements promising not to reveal the methods used to create the visual splendor you will see. We have chosen optical illusions and holograms as the focus of this study guide.

For supplemental information including detailed lesson plans, classroom activities and information on Shakespeare please visit our website resource room at http://www.umass.edu/fac/centerwide/school/resourceroom.html

You will find a pdf of this guide along with wonderful materials developed by the National Endowment for the Arts.

**Discussion Questions**

- Certain images of characters appear enormous compared to the live actors – why do you think the director made this choice?
- How or why did the director make the selection of which actors are live and which ones are holograms?
- Why do you think the same actor played both Caliban and Ariel? Do you think it worked? Why or why not?
- Discuss how the use of technology affected the production? Do you prefer a traditional adaptation? What worked for you and what didn’t work?

**WHAT IS HOLOGRAPHY?**

![Diagram 1](image)
1. **What is a hologram?**

   It is a light wave interference pattern recorded on photographic film (or other suitable surface) that can produce a 3-dimensional image when illuminated properly.

2. **How is a hologram made?**

   A laser beam is **split** into two beams: {see diagram above}
   The **reference beam** is spread by a lens or curved mirror and aimed **directly at the film plate**. The **object beam** is spread and aimed at the object. The object reflects some of the light on the holographic film-plate. The two beams interact forming an interference pattern on the film. This is the hologram. Laser light is needed because it is made of coherent waves (of same wavelength and phase).  
The principle of holography was discovered in Britain by Dennis Gabor in 1948. He was awarded the Nobel price for this discovery in the early 70’s.

3. **How is a hologram viewed?**

   When the hologram is illuminated **from the original direction of the reference beam**, a 3-dimensional image of the object appears where the object was originally. Some holograms must be viewed with laser or monochromatic (single color) light, and others with white light.

4. **What are the main types of holograms?**

   **Transmission Holograms:** Viewable with laser light. They are made with both beams approaching the film from the SAME side.

   **Reflection (White Light) Holograms:** Viewable with white light from a suitable source such as spotlight, flashlight, the sun, etc. They are made with the two beams approaching the holographic film from OPPOSITE sides.

   **Multiple channel holograms:** Two or more images are visible from different angles. There are different types of multiple channel holograms:
   - Simple ones with 2, 3, or a few images each viewed from a different angle.
   - Multiplex: A large number of "flat" pictures of a subject viewed from different angles are combined into a single, 3-dimensional image of the object. A COMPOSED hologram.
   - Rainbow holograms: The same image appears in a different color when viewed from different angles.

   **Real Image Holograms (H-2's):** These are usually reflection holograms made from a transmission original (H-1). The image dramatically projects **IN FRONT OF THE PLATE** toward the viewer. Most holograms in holography museums are of this type. The procedure for making them is quite elaborate and demands precise control of angles.
Mass-Produced Holograms

- Embossed – Made by stamping on foiled backed mylar film using a metal master (most common method).
- Polymer – Made from light sensitive plastic. The Polaroid Corporation mass produces holograms by this method.
- Dichromates – Very vivid holograms on jewelry, watches, etc. They are recorded on a light sensitive coating of gel that contains dichromate.

5. What are some applications of holography?

**Holographic Art** – Holography museums, advertising, postage stamps, jewelry, etc.

**Security from Forgery** – Credit cards, tickets, etc.

**Optical Devices** – Holographic lenses, diffraction gratings, etc. These are holograms in which the "object" is a mirror or a lens.

**Holographic Interferometry** – A very precise technique for measuring changes in the dimensions of an object. Useful in industrial stress analysis and quality control.

**Pattern Recognition** – Using electro-optical devices with computers to interpret what is "seen" by a machine. Peace-time and military application of lasers and holographic optical devices.

**Medical Applications** – Combining CAT scans into a 3-dimensional image, A multiplex. Ultrasound holography, etc.

**Other** – Holographic computer memory storage, holographic microscopy, holographic radar, etc.

http://members.aol.com/gakall/holopg.html

HOLOGRAPHY: FREQUENTLY ASKED QUESTIONS
By Jason Sapan / Holographic Studios: http://www.holostudios.com/holohelper/faq.htm

- **Can you suggest any good books on holography?**

- **Is the right word Hologram or Holograph?**
  The preferred word is Hologram. The dictionary defines a Holograph as a hand written document, as in a holographic will or deed. A Holographer is someone who makes holograms. Holography is the word for the technology and artform. According to Isaac Asimov, a Holographist is a person who collects or
studies holography but does not make holograms. Things pertaining to holography are said to be **Holographic**.

- **Are holograms projections?**
  No, holograms are not projected. There is no projector. It is simply a piece of film. Light fills up a hologram like plaster would fill up a cast. Technically, they are reconstructions of the light that reflected off the object.

- **How many lasers do you need to make a hologram?**
  One. However, you can shoot several different holograms on the same piece of film. Each holographic exposure can be shot with a different color laser if, for example, you are making a multi color image of red, green, and blue. A color hologram can also be made with a single laser using tricks of the trade like emulsion swelling or multiple reference angles.

- **What does the word LASER mean?**
  It is an acronym or abbreviation of the first letters of **L**ight **A**mplification through **S**timulated **E**mission of **R**adiation.

- **Is there a word to describe where an image appears in a hologram?**
  Yes, there are a few common ones that are quite helpful. If an image appears to be on the other side of the hologram, like looking through a window, it is called **virtual**. If an image jumps right out of the hologram and appears in front of the film, it is called **real**, since it has left the "virtual" world inside the film and entered the "real" world. When you flip a hologram over, the image is inside out and called **pseudoscopic**. Flip it back over and view it normally, right side out, and it is called **orthoscopic**. An image can be orthoscopic and real or orthoscopic and virtual. Or an image can be pseudoscopic and real or pseudoscopic and virtual. An image can be both real and virtual, as in the case of an image that starts behind the film and then protrudes right out of it. Holograms can be made (especially by artists) that have both orthoscopic and pseudoscopic images in them. Any combination of these terms is possible. So, to quickly rehash, **Real** = in front; **Virtual** = behind; **Orthoscopic** = right side out; **Pseudoscopic** = inside out.

**WHAT ARE OPTICAL ILLUSIONS?**

Optical illusion - An image that deceives a person, leading to a misinterpretation of its meaning. Optical illusions can be found in nature as well as in art. Their strengths rely upon various assumptions in which humans perceive optical phenomena.

There are several classic optical illusions. One is an alternating figure variously called a magic cube or a Necker cube (Louis Necker, a Swiss crystallographer, first published his analysis of this design in 1832): the wireframe cube in the center
below. Which of its sides is nearest to you? Is it the one made solidly green on the cube to the left or is it the green side on the cube to the right, or is there no nearest side at all?

More people interpret a magic cube as the one on the left than the one on the right. The most likely reason seems to be that people see boxes more often from above than from below.

Here is an "impossible" version pictured with a high degree of realism. The two points where the linear edges must overlap have been purposely confused. The resulting figure produces an even more jarring figure-ground dilemma, likely to be interpreted as humorous or upsetting.

Here's another classic, known as the Muller-Lyer illusion. Which of the horizontal lines is longer?

Measure them. You may be surprised to learn that they are the same length. Our tendency to misjudge the length of such lines (as with our tendency to be confused by magic cubes) stems from experiences which have "taught" us to use certain shapes and angles to tell us about size and placement. Such experiences established the conventions of linear perspective.
How many black dots can you count?

The illusory black dots you see are afterimages. This gridded figure is known as a "Hermann grid," named after its designer. L. Hermann visualized it in 1870, while reading a book about sound.

Here is a very active radial design that relies upon afterimages.

REFERENCES AND LINKS TO CLASSROOM ACTIVITIES

The Tempest: classroom activities and lesson plans:
http://www.webenglishteacher.com/tempest.html

Classroom activity on color spectrums:
http://school.discovery.com/lessonplans/programs/colorspectrum/

Classroom activity on optical illusions: http://www.iit.edu/~smile/ph8702.html

Holography art work:
http://www.pearljohn.co.uk/holography.html

NEA teachers guide for Shakespeare:
http://www.umass.edu/fac/media/SIAC-TeachersGuide.pdf

NEA recitation contest for students:
http://www.umass.edu/fac/media/SIAC-Recitation.pdf

NEA Shakespeare activities including simple quiz, "Shakespeare Said it First” list of common words credited to Shakespeare, famous quotes, and crossword puzzle:
http://www.umass.edu/fac/media/SIACActivitiesREV.pdf
Evacuation Procedures

In the event of an emergency requiring evacuation of the building, procedures are in place to ensure that the audience can exit safely.

Sections 4, 5, 6
Exit through the lobby.

Sections 1, 2, 3 & Pit
Exit toward stage.

Note: Interior house conditions may necessitate alternate exit routes.

Mezzanine 1, 2, 3
Exit rear through lobby.

Balconies 1, 2 exit toward stage, up two flights and down interior fire escape.
NOTICE TO ALL TEACHERS AND CHAPERONES

- **PERFORMANCES BEGIN PROMPTLY AT 10AM OR NOON.** Many of our performances sell out. This means we can have up to 1,600 students to seat. Please help us by arriving **30 minutes** prior to the start of the performance. This will allow our ushers to get everyone seated and for you and your students to visit the rest rooms and get settled. It is important that we begin our performances on time so that all schools can meet their lunch and/or dismissal times.

- **PLEASE CHECK LOCATION OF PERFORMANCE WHEN MAKING YOUR BUS RESERVATION.**

- The staff of the Fine Arts Center needs your help! An increasing number of students are coming into the performance space with gum, food, beverages, cell phones and portable music players. **None of these items is allowed in the halls for performances.** Many of these items are stowed in backpacks and are not easily noticed. Our goal is to offer high quality performances for young people. In order to enhance the experience, we ask for your cooperation in preventing these items from entering the hall.

- For the comfort of all concerned, we ask that backpacks, lunches and other gear be left on the bus. Our long-standing policy of no cameras or tape recorders still is in effect.

- At the conclusion of the performance please remain in your seats until your school group is dismissed.

*We hope that you and your students enjoy your theatre experience!*
PARKING AND DIRECTIONS FOR THE FINE ARTS CENTER’S
CONCERT HALL and RAND THEATER

School Bus Parking: Students should be dropped-off at Haigis Mall off of Massachusetts Avenue. University Security will direct buses to an appropriate parking lot during the performance (typically by the football stadium). PLEASE BE SURE YOUR BUS DRIVER KNOWS THAT ALL PERFORMANCES LAST APPROXIMATELY 1 HOUR AND THEY SHOULD RETURN A FEW MINUTES BEFORE THE ANTICIPATED END TIME. If drivers are not with the buses, they may miss the radio call from security asking them to return for pick-up, resulting in unnecessary delays returning to your school.

Individual cars: If necessary, individuals may drop-off students with a chaperone at Haigis Mall (you will be directed by security to the mid-point turn of Haigis Mall - see map) prior to parking. We recommend parking in the Campus Center Parking Garage to avoid searching for a metered space. It is a five-minute walk to the Concert Hall. All other available parking during weekdays is at meters. Available lots and pricing (current as of 1/1/07) are listed below:

- **Parking in the Garage is available to our patrons at a discounted rate of $1.** To receive this rate you MUST give the Garage attendant a parking pass. To receive your pass, please call our office to let us know that you will be arriving by car. Parking passes are sent with the invoices. Please call (413) 545-2116 if you didn’t receive one.
- **Parking meters are enforced Monday - Friday, 7AM - 5PM. Meter rates are $1.00 per hour.**

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<tr>
<th>Parking Location</th>
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<tbody>
<tr>
<td><strong>Parking Garage</strong></td>
<td>near Campus Center, across from the Mullins Center off Commonwealth Avenue</td>
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<tr>
<td><strong>Lot 34</strong></td>
<td>Behind Visitors Center with 3, 5 &amp; 10-hour meters available</td>
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<td><strong>Haigis Mall</strong></td>
<td>2 hour maximum on meters</td>
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<td><strong>Lot 62</strong></td>
<td>Adjacent to Fernald Hall with 3 hour maximum on meters, limited spaces available</td>
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From the North: (Vermont, Greenfield) I-91 south to Route 116. Follow signs on 116 “To the University of Massachusetts.” Exit ramp leads to Massachusetts Avenue. Turn left (east) on to Massachusetts Avenue toward the campus. Continue through one light and watch for Lot 34 by the Visitors Center on your right and the entrance to Haigis Mall on your left.

From the South: (Springfield, Holyoke) I-91 north to Route 9. Turn right (east) on Route 9 over the Coolidge Bridge and through Hadley. Turn left (north) on Route 116 (across from Staples) heading toward campus. Turn right at first exit at “University of Massachusetts,” then bear right onto Massachusetts Avenue toward campus. Continue through one light and watch for Lot 34 by the Visitors Center on your right and the entrance to Haigis Mall on your left.

From the West: (Northampton, Pittsfield) Route 9 east through Northampton and over Coolidge Bridge. Follow remaining directions under “From the South”.

From the East: (Belchertown, Ludlow) North on Routes 21, 181 or 202 to Route 9 into Amherst. Right on to North Pleasant Street (main downtown intersection), north through center of town. Turn left at Triangle Street (Bertucci's Restaurant on your right), rejoining North Pleasant Street. To reach Lot 34 and Haigis Mall continue on main road, which becomes Massachusetts Avenue. Haigis Mall will be on your right, Lot 34 on your left.
For Concert Hall, Rand Theater and Bowker Auditorium – Patrons traveling by car are encouraged to park in the parking garage. Discounted parking is available in the garage for $1. A parking permit is required for discounted parking in the garage. Please call the Arts & Educational Programs Office if you require permits at (413) 545-2116. All other parking on campus is at available meters at the rate of $1 per hour. Parking is enforced Monday – Friday, 7AM – 5 PM.

Buses will drop-off students as indicated on map. Buses will be given parking instructions by Campus Security.