Interspecies Communication or Marriage Made in Heaven?

Science/Art Collaborations
Advancing Sustainability

Marda Kirn
EcoArts Connections

CLEAN Webinar
May 22, 2018
Conservation of Mass

Solid Mechanics:

mass #1
Volume #1

Move

mass #2
Volume #2

Object keeps shape.

mass #2 = mass #1
Vol #2 = Vol #1

Fluid Statics:

mass #1
Volume #1

Move

mass #2
Volume #2

Object changes shape

\[ \rho = \text{Density} \]

 Fluid Dynamics:

\[ t = \text{Time} \]

\[ tV \]

\[ A_1 \]

mass #1

\[ V = \text{Velocity} \]

\[ A = \text{Area} \]

Move

\[ A_2 \]

mass #2

\[ (\rho t V A)_2 = (\rho V A)_1 \]

\[ (\rho V A)_2 = (\rho V A)_1 = \text{constant} \]

Slide source: Tim Butler, Director of the Center for Urban Ecology
Butler University, Indianapolis
Levitated Mass by artist Michael Heizer

Slide source: Tim Carter, Butler University
EcoArts 2006
July 6–16

PERFORMANCES EXHIBITS TALKS TOURS

Program Highlights:
PERFORMANCES: Colorado Shakespeare Festival "The Tempest" July 6, 12, 14 • Colorado Music Festival:
The Kronos Quartet July 11, Symphonic Music July 13-14 • Elko & Karma in Denver July 8, in Boulder July 16-15
EXHIBITS: Museum of Contemporary Art/Denver Creative Acts That Matter: The Environment; North, South, East, West; 360° of Climate Change • National Center for Atmospheric Research: Climate Discovery
TALKS: SOLAR 2006 Conference July 8-13 • Boulder Museum of Contemporary Art: Hollywood & Climate Change July 7, Climate Change in Boulder County July 8 • NCAR: Creeping Environmental Problems: What Can We Do? July 12
TOURS: Eco-Cycle Recycling Center July 7 • ReSource Building Materials Sales Yard July 7 & 15
Thorne Ecological Institute: Sombrela Marsh July 7 • Valmont Station Coal-Fired Plant July 7 & 15 AND MUCH MUCH MORE

www.ecoartsonline.org for a full schedule of events: 303.325.5637
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PHOTO CREDITS & TOP VANDAL TRIBUTES COURTESY OF JOHN LARSEN, HANDS WITH FIRE • OSCAR SANTILLAN, BUGS SURROUNDING MUSEUM DAY • LIZ KLANDER, ROCKY MOUNTAIN • GREGORY THOMPSON, FIBER OPTIC ARTS COUNCIL • NAVY CENTER FOR THE ARTS • SHEDWORTH EXHIBITION CONTROLS • TONY A. MITCHELL • DENVER ARTMUSEUM
The Big Question

Why is it that so many people know about multiple environmental crises but so few people are doing anything about them - let alone responding to the science?
“Environmental Education and Attitudes: Emotions and Beliefs are What is Needed”

By Julie Ann Pooley and Moira O’Connor

Environment and Behavior, September 2000

Online version available at:
http://eab.sagepub.com/cgi/content/abstract/32/5/711
RESEARCH


More Research

The Affective Domain
http://serc.carleton.edu/NAGTWorkshops/affective/index.html

Entertainment – Education (E-E)
http://www.jhuccp.org/legacy/topics/ee.html
Cognition + Affect = Effect
Cognition + Affect = Effect

Mind  Heart
Intelect  Emotions
“Facts”  Feelings
Reasoning  Attitudes
Analysis  Values & Beliefs

What?  So What?
Religion & The Arts
Education Entertainment & The Arts
Political Change & The Arts

THE JUNGLE

UPTON SINCLAIR
Environmental Change & The Arts

Randy Newman: “Burn On Big River Burn On”
Personal Change & the Arts

“STORM”
Source: John Flax, Theater Grottesco  www.theatergrottesco.org
City Change & The Arts?
Amager Bakke Steam Ring Generator
Oscar Wilde 1854 -1900
Théophile Gautier 1811-1872
Algernon Charles Swinburne  1837-1909
Plastic Bottles - Detail

Chris Jordan
Office Paper

Chris Jordan
Kim Abeles
Paper Person
Presidential Commemoration
Smog Plate Series

Kim Abeles: “Presidential Commemoration Smog Plate Series”
California Bureau of Automotive Repair
& Kim Abeles’ Smog Collector Commission

The Smog Collector

On-site Smog Collector Sculpture Project: In 1991, the California Bureau of Automotive Repair Department of Consumer Affairs sponsored on-site Smog Collector Sculpture by Abeles in a creative campaign to inform citizens about the Smog Check Program and facts about smog. Moving through the project, February 1992, the media’s support for the campaign was said to be unprecedented, reaching 30 million people and a total of the equivalent number of times to 1 million. The completed sculptures toured to forty corporations and agencies during 1993, primarily to encourage participation in reduction programs and use of mass transit. In 1992, Abeles received a Clean Air Award from the South Coast Air Quality Management District (SCAQMD) for this project.

The Smog Collector Sculptures were created from recycled automobile mufflers and catalytic converters, each holding a car sized image on plexiglass. Placed in the environment, visitors to the site see the accumulation of particular matter deposited by the polished surface of the metal. For each sculpture, Abeles created an accompanying informative “table” using text and set in English and Spanish to describe solutions for cleaner air. The table displays were an effort to empower the audience with facts and phone numbers for further information. After eight weeks, the sculptures were removed from each sculpture, revealing the images made of smog: hemp, cranes,Giveaway, win, automobile engine, and a wheel of walking tips.

Polls show that 79% of the public thinks that air pollution is a serious problem, yet few are willing to make a change in their lifestyle. Public education
Eve Mosher: HighWaterLine
New York
Eve Mosher: HighWaterLine
visualizing sea level rise
Eve Mosher: HighWaterLine
Miami
Eve Mosher HighWaterLine
Action Guide
ECO: Exploring Culture & Opportunities
combining natural history, energy and water conservation, and the arts
in a mobile home park
for Latino youth and their families
ECO Program Results: 99% of youth participants reported that they changed their energy and water use behavior as a result of ECO workshops.
Benefits of Collaborating with the Arts

- Increase audiences – more people
- Attract new audiences – different people
- Increase media attention – new, more
- Make climate science and sustainability solutions accessible, personal, tangible, visceral, actionable
Where to Find Arts People?

Colleges/universities
NASAA – National Assembly of State Arts
Regional, State, and Local Arts Agencies
Artist Directories, Curators, Centers
  Artists and Climate Change
  Center for Energy & Environmental Research
    in the Human Sciences
Curating Cities
ecoartspace
EcoArt South Florida
Greenmuseum.org
WEAD – Women Environmental Artists Directory
Ways to “Do” Science/Arts/Sustainability Collaborative Projects?

- Identify a sustainability challenge or problem that needs to be solved
- Find arts people and have coffee/tea (bring questions to explore and start from “the point of wonder”)
- Bring “sustainablists” into the conversation/collaboration (e.g. sustainability professionals) to help with the “and then what?” to move from awareness to action steps
- Think ecosystemically - find out where your goals, needs, skills, and resources might complement, overlap or help each collaborator
- Suggest a collaboration as individual scientists, artists, and/or educators as academic departments/institutions/organizations to shift from discipline-centric to solutions-centric thinking
Ways to Collaborate with Artists

• Work in collaboration with a local arts entity (performing arts center, art museum, gallery, curator, arts service organization, etc.)
• Work directly with artists
• Offer money through
  - paying a fee for services or an existing work
  - commissioning a new work
  - creating a competition (e.g. LACI, Buckminster Fuller Institute)
• Offer access, time, space, and/or co-marketing
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