



SCIENCE / ART; ART / SCIENCE

Modern Art and Mystery Materials

[The following is from an article by Jason Palmer in *New Scientist*, February 2008. Palmer was in the process—in collaboration with MOLAB, a roving team of Italian art conservation researchers—of examining Piet Mondrian's *Victory Boogie Woogie* at the Gemeente Museum in The Hague, Netherlands.]

[*Victory Boogie Woogie*] is a feast of color and motion—an impression created by patterns of interlocking colored squares, some painted, others simply bits of colored paper, card and plastic tape that are stuck or glued to the canvas. Mondrian almost certainly planned to replace the paper and tape with paint, but he died before he could complete the task. So the researchers' aim is to find out exactly what materials he used, which parts were painted first or painted over later, or if bits were removed altogether. The secret hope of almost everyone...is to get a glimpse of Mondrian's working style, a chance to get inside his head—and perhaps even discover how he intended this work to look when completed.

In the last weeks of his life, Mondrian worked furiously on his final painting. Those who saw it say it changed dramatically during this period as Mondrian used colored paper and plastic tape to quickly change the composition. The complexity this created makes the painting enormously difficult to analyze: it comprises some 582 different colored sections which the Gemeente Museum team has meticulously numbered and recorded. No one is sure what bits the artist may have painted over or removed, or what bits he intended to change.

Figuring it out

Researchers photograph the work under ultraviolet light, which makes certain pigments fluoresce. By calibrating the color of the fluorescence against a known standard...they can determine the precise wavelengths and get a handle on the identity of the chemicals present. The UV transforms the picture's primary color scheme into blues and browns with the occasional splodge of brilliant red.

Identifying the layers and constituent pigments in the painting is a complex piece of detective work. First, to spot the characteristic fingerprints of atoms, the researchers shine X-rays onto the pigments and measure the fluorescence they generate. The resulting spectrum provides a list of the atoms present, but reveals little about the

way they are arranged into pigment molecules. Other tools are required: absorption spectroscopy (how much light goes in) and reflectance spectroscopy (how much light bounces back). And others: photography under UV and spectroscopy with infrared.

Challenges

...For conservators modern art breaks new ground. In preserving oil paint on canvas, for example, they can draw on centuries of experience and so understand many of the main processes by which these materials degrade. Preserving modern materials like acrylic paint or plastics, meanwhile, throws up a completely new set of questions. How should these works best be displayed, transported and cleaned? And... is there any way to halt the process [of deterioration, which happens faster in modern works of art than in older paintings]?

...Modern art...presents a number of challenges to researchers and conservators. One problem is the pigments themselves: products of a lab rather than a mine. Think of the blue pigments used by, say Renaissance artist Giotto: azurite, lapis lazuli—they were grated stones....The advent of cheap synthetic pigments, many in the past 70 years, means that a host of



Continued on page 11

Do Rules of Physics Govern the Art World?

[Information for this article was gleaned, and in some instances quoted from an article entitled "The Artist as Neuroscientist" by Patrick Cavanagh in *Nature* magazine.]

Rules of physics are optional in paintings. Deviations are common: note Picasso's skewed faces, or the unorthodox colors used in unorthodox ways by the Impressionists, or the black outlines and purple and green shadows of the Fauvists. These oddities are meant to be noticed, and are inherent in the styles of the artists.

There is, however, an "alternative physics" that operates without our noticing: alterations in the norm—impossible shadows, colors, reflections, or contours—that pass unnoticed and do not change the meaning

of the picture, nor the viewer's understanding of it. The fact that they go unnoticed attests to the fact that our brains use a simplified physics to comprehend the world—an alternative physics which artists use as shortcuts to present their view of the world more econom-

Continued on page 10

GROWING AN ART MUSEUM



by Ruth Waters
[The following story was told in *Blaze: Discourse on Art, Women, and Feminism*, a book published in 2007 by Cambridge Scholars Publishing.]

Art museums are founded by major collectors and/or philanthropists, mostly men, as monuments to their taste and a legacy to their communities.

The Peninsula Museum of Art (CA) was founded by a working artist, a woman—me. I have an interesting collection of art from fellow artists and travels, I have run an art center since 1977 (complex of working studios for 28 visual artists, small gallery), and I have an enduring dream, but no money to speak of.

The dream emerged when we (husband, three children) returned to the San Francisco Peninsula from the Washington, D.C. area. For twenty years after our move, I introduced the need for an art museum in northern California into art community conversations with no noticeable effect. Everyone assumed that San Francisco's art scene was and would always be sufficient.

Then our world shook with the 1989 Loma Prieta earthquake, and everything changed. Transportation issues, especially, encouraged residents of the San Francisco Peninsula to look around their own neighborhoods for their cultural amenities. BioTech had already developed in the northern part of the county, and high-tech had expanded from the south. The expansion of the corporate world altered all the patterns, and we were no longer just a collection of bedroom communities.

By 1997, a public forum hosted by ARTshare of San Mateo County identified two major holes in our cultural fabric—an art museum and a performing arts center. That day I convened the Working Committee for an Art Museum, scheduled monthly meetings, and started brainstorming ways and means, goals and strategies, and names.

The committee decided the art museum should be centrally located in an urban area, preferably within walking distance of public transit. We searched for a suitable existing building and found one, a large WPA building in Redwood City, the county seat, which the county was vacating in favor of

Continued on page 4

Top: R. Lynwood Kreneck, *Poor Kitchen, Rich Kitchen* (detail), 1986. Screen print/air stencil. In "60 x 60," Guilford College, NC

Right: Barkley L. Hendricks, *Misc. Tyrone (Tyrone Smith)*, 1976. Oil and magna on linen canvas. In "Barkley L. Hendricks: Birth of the Cool," Nasher Museum, NC



SEIZE THE DAY

by Frank Robinson

This is a golden age for museums of every kind all over the world, but especially for American art museums. We are prominent, we are respected, people pay attention, we are visited in massive numbers. It is not just our directors who have become famous; curators have received star status. Spectacular new additions become iconic specimens, and the architects who design them become rock stars. The revival of cities and even whole regions has been attributed to such "signature" landmarks. Collections are growing, in spite of the explosive rise in prices. (In fact, museums have played a role in those increases.) And money is flowing in—money for acquisitions, for exhibitions, for construction, even for directors' salaries.

Let us not squander the moment. The competition is fierce for audience and for dollars. Some of the other arts, such as classical music, are stumbling; careers, especially those of directors, are on the line, made or broken by the season's gate. But we are not corporate CEOs, and museums are not corporations.

This is the moment to make it clear to our trustees and our public that we are not just leisure time recreation centers; that we are the heirs and preservers of the accumulated culture of the past and the engine of culture for the present; that we are the symbol and embodiment of standards of scholarship and integrity and education for all, a place for community and personal growth, and for serious fun.

Now is the time to build up our "capital." Yes, that capital includes money in the form of endowment, to prepare us for the bad times. But it also includes intellectual, moral, even spiritual capital. Now is the time for us to make clear who we are and what we do, the time to focus on two great assets: our art and our ability to educate. It is the time to acquire the best we can afford, even the most difficult works of art; the time to take chances with contemporary video, medieval reliquaries, and Egyptian shabtis; the time to explore the vast labyrinth of world culture. And while we maintain the standards of scholarship that museums have created over the last century, we can show (or write) footnotes, so long as the works of art are chosen for their quality and historical importance, and what we write about them is up to snuff.

This is the moment, also, to capitalize on our ability to educate, in the broadest sense of the word. Because of the increasing respect for museums in America, we are able to reach out into our communities as partners with our public schools, senior centers and retirement homes, prisons and hospitals, and universities, helping everyone understand and enjoy the world of art and culture. These are the best guarantees we will ever have of our relevance and survival; the best capital we could possibly accumulate. All it takes is a sense of urgency and energy, faith in our abilities, and, above all, faith in our mission.

[Frank Robinson is the Richard J. Schwartz director of the Herbert F. Johnson Museum of Art at Cornell University (NY)] □

Discovering Art

In his first "Director's Message," which was published in the Speed Art Museum (KY) publication, Dr. Charles L. Venable said: "When I went off to college in Houston, my dream was to become a medical doctor. However, amidst lots of science courses, I took an art history survey course as an elective and quickly found myself spending time at the Museum of Fine Arts just down the street. I came to feel that the museum was a magical place where one could experience human creativity from cultures around the world and across immense spans of time.

Eventually, I became a curatorial intern....That museum experience changed my career path and my life...."

To shed light on its new director the Speed's publication staff posed several questions:

Q: What attracted you to the museum field?

A: Under the best of circumstances museums can truly be magical places for enjoyment and enlightenment. But making sure a museum reaches this potential is a complicated task that fascinates me. I have always had a great interest in art collecting, art interpretation, and scholarly research, as well as not-for-profit finance and the interplay between staff and volunteer museum leadership.

All of those aspects of museums pertain to the Speed, plus we have the relationship with the University of Louisville. When I worked in Cleveland we had a formal partnership with Case Western Reserve University. While the Speed already does great things with the university, I hope to work with President Ramsey and his staff to build our relationship further. I think we can "dare to dream" more and do something together that would make a big impact and be more high profile.

Q: How are the current trends in the art world, such as paintings being purchased at auction for hundreds of millions of dollars, affecting today's art museum; how do museums build their collections henceforth?

A: Pretty much how they've been building them all along. Art goes through cyclical rises and falls like any other thing that gets bought and sold; it's a commodity, if you will.

What people forget is that in 1900-1910, when the great American industrialists were out buying Old Master paintings they were also driving prices through the roof that would not be seen again for another 20 or 30 years. So there have been other times in the history of American art museums that were also considered stratospheric in terms of how high prices got. But that doesn't mean that all the museums of that time weren't able to acquire a Rembrandt or a great Rubens or other pictures that were valued very highly....

My point is that the way museums build col-

lections is based on the largesse of collectors who eventually give works of art to the institution and [on] individuals with great vision who give to the annual fund and endowment. Behind every great collection are great and generous people.

Now, it may very well be that any given museum may not be able to replicate the collection of another museum that might have started acquiring 100 years ago with a lot more resources. I don't find that daunting because who would want every museum to be just like every other museum?

Part of the great thing about the Speed is that its collection is different than other institutions. It will continue to grow in ways that reflect the collecting interest of those in the community. Therefore, there will be a natural emphasis on areas like contemporary art and Kentucky art because many collectors in the state collect that. There will always be things that we can't collect right now, but it doesn't mean that somebody won't eventually give them to us. I do think one is always tied to individuals who have vision and who love art and culture and want a city like Louisville and a state like Kentucky to have a truly great art museum.

Q: What challenges face the Speed?

A: Well, there are challenges, but often challenges are also opportunities.

The Speed, over the course of the years, has held some extraordinary exhibitions, some of which were organized by the Speed: The highly respected Ingres show...is a good example. Periodically, I would like the Speed to be organizing shows like that again.... But we certainly can't organize every show we do. We are making sure that we have a regular exhibition schedule of exciting shows that we bring to

Louisville....

Beyond that there are always the challenges of figuring how to cope with a growing collection.... As the collection and programming grows you have to expand the institution...think about what kind of space the Speed is going to need...and how it will take on an architectural form. If done well an expansion that relates beautifully to the university and the surrounding neighborhood of Old Louisville and the Third Street corridor would be a great thing for this part of the city. □



Max Burchartz, *Lotte's Eye*, c. 1928. In "Looking Through the Lens," Blatimore Museum of Art, MD

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New Master's Program in Quad Cities

The **Figge Art Museum** (IA) and **Western Illinois University** have developed a new master's degree in museum studies. It will be based in the Quad Cities and, pending final approval by the Illinois Board of Higher Education, will begin offering courses in the 2008 fall semester. The program, administered through the WIU College of Fine Arts and Communication, will offer course work through the departments of Art and Recreation, Parks, and Tourism Administration at Western Illinois University, working in conjunction with museum professionals at the Figge.

"Combining the academic excellence of the professors at Western Illinois University and the museum expertise and experience of the professionals at the Figge Art Museum will result in a significant graduate degree program here in the Quad Cities," said Sean O'Harrow, Ph.D., executive director of the Figge Art Museum.

The program requires 34 graduate hours of coursework that full-time students can complete in 18 months. Potential students include regional museum professionals, teachers, docents, and undergraduates from art and recreation, parks and tourism administration, as well as other disciplines.

De-accession Announced

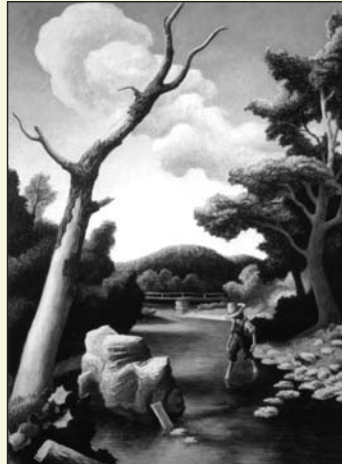
The **Museum of the City of New York** will de-accession its Rockefeller Rooms in order to modernize its building on upper Fifth Avenue in Manhattan. One of the two period rooms from the Manhattan townhouse of oil baron John D. Rockefeller, a dressing room, will likely devolve to the Metropolitan Museum of Art, where the American period rooms are being reinstalled. Other institutions have also expressed interest in acquiring these gems of the Gilded Age.

Created in 1881 in the house on 54th Street just west of Fifth Avenue, the rooms were sumptuously furnished with hand-crafted furniture and fixings for the original owner, Arabella Worsham Huntington. Rockefeller acquired the house in 1884, fully furnished. In 1889, his daughter Bessie was married there. And in 1918, the house was used by the Red Cross as workrooms for volunteers who sewed clothing and surgical dressings for troops overseas.

Following his death in 1937, John's son John D. Rockefeller Jr. had the house demolished to make way for the sculpture garden of the Museum of Modern Art, which had been co-founded by his wife Abby in 1929. Three of the rooms from the original house were donated to the Museum of the City of New York: the American Renaissance dressing room, the Anglo-Italianate bedroom, and the Moorish-style smoking room. The smoking room went to the Brooklyn Museum.

De-accession Blocked

In February of this year it was reported that **Fisk University** (TN) awaited a ruling from the Nashville county court on whether or not it could sell a portion of the O'Keeffe collection that had been donated by Georgia O'Keeffe herself. Lawyers for the **O'Keeffe Museum** (NM) argued that Fisk had lost the right to the collection, having violated the terms of the 1949 gift when it failed to display the works and tried to sell some for the purpose of shoring up a depleted budget. Fifty percent of the collection was tentatively marked for sale to the **Crystal Bridges Museum of American Art** (AR) for \$30 million. Fisk had responded with the assurance that it now had the wherewithal to display



Thomas Hart Benton, *Shallow Creek*, 1938. Oil and tempera on canvas mounted on board. In "Shallow Creek," Indiana University Art Museum, Bloomington

the works, as prescribed in the gift. The judge had reserved decision on whether Fisk had forfeited its right to the collection, and whether it should go to the O'Keeffe Museum, which represents the artist's estate.

Early in March, the judge's decision was reported. She ruled that although Fisk had, in fact, violated the terms of the gift, the collection should remain at the university. She permanently banned the sale of any of the 101 works, and ruled that

the university must take them out of storage and put them on display by October 2008.

Celebrating Maps in Baltimore

Through the spring season (ending June 30), some 22 arts organizations in Baltimore (MD) are offering map-related performances, exhibitions, and special events. The Baltimore Festival of Maps is a citywide celebration organized to encourage residents and visitors to explore the local museums, theatres, galleries, and educational institutions.

Central to the festivities is the **Walters Art Museum's** "Maps: Finding Our Place in the World," an exhibition of more than 100 of the world's greatest and most unique maps. Included in the exhibit are: a marble street plan dating from the Roman Empire; three original maps created by Leonardo da Vinci; maps loaned from the Queen Elizabeth II library and the Library of Congress, original maps created by Benjamin Franklin, Abraham Lincoln, George Washington, William Clark of the Lewis and Clark expedition, and more. They range from maps detailing the first boundaries around the new American nation to the oldest road map of Britain; from wood-carved sculptural maps to maps of imaginary worlds; from an 1850s London World's Fair diagram to a jigsaw puzzle of Europe. Some participating organizations are: the Baltimore Jazz Alliance which launched the event with a free concert and created a map, "Where IS Baltimore's Jazz? Where WAS

Baltimore's Jazz?" showing where jazz originated in Baltimore; the **Contemporary Museum**, showing "RE-MAPPING," an exhibition that reinterprets the concept of maps; **Jewish Museum of Maryland**, holding a family History and Archival Exploration Day during which participants use color-coded maps to find families in historic Lombard Street.

Broad Museum to Open

Philanthropist Eli Broad selected Renzo Piano to design a building on the Los Angeles County Museum of Art campus to showcase roughly 1,600 works of art held by his non-profit Broad Art Foundation and 400 pieces from his personal collection. The \$56 million construction costs were paid for by Broad; he made a \$10 million pledge for acquisitions; and he opted to hold the works in his possession for the purpose of loaning to museums, with LACMA having priority for requests. The number of Broad works on display will vary.

Mr. Broad explains that his private collection will eventually be given to the foundation and none will be sold. "As the collection grew a lot larger, our thinking evolved.... Why not create a new paradigm, create a common collection in a foundation and make it available to whoever wants to show it? The Broad Art Foundation has made 7,000 loans to some 400 institutions.

"Every museum wants to have its own collection, but I don't think it makes sense...in contemporary art especially.... Why don't they form common collections and share?"

Curators Study Business

The inaugural class of the Center for Curatorial Leadership was held in New York for two weeks this past January with ten curators participating. The fellowship program (the center absorbs all participants' costs) was founded last year to prepare curators in the business techniques needed for them to become effective directors. As better business administrators with enhanced knowledge and experience of business practices, curators could transfer their talents more easily to directorships, thereby negating the need for business administrators with little knowledge of art at the helm of museums.

The center is run by Elizabeth W. Easton, former chairwoman of the European paintings and sculpture department at the Brooklyn Museum. Faculty members come from the executive education program at Columbia Business School. It is supported to the tune of more than a half million dollars annually by Agnes Gund, president emerita of the Museum of Modern Art (NY), in the hope that the program will "keep the people who are in charge focused on the most important thing about museums, which is the art part. I've seen time and again when the selection committees just wouldn't consider curators because they hadn't been in directorship positions, and they didn't think they had the wherewithal to assume such jobs. And I think curators just need the imprimatur of something extra to show that they can do this."

In 2001, the Metropolitan Museum of Art's Philippe de Montebello said, "If we are to win the battle of the 'curator/director' over the 'administrator/director,' a profile with which

a new modern office building. By this time we had named ourselves San Mateo County Art Museum, or SAMCAM for short.

This first manifestation of the dream come true was smashed on the shoals of bureaucracy. The building we had chosen had once been the historic County Courthouse and the powers that be were determined to destroy the WPA building in order to restore the courthouse. We bowed out after two years of hard work.

Our next step took us to the Internet. Having just welcomed a new member to the core group, a retired professor of corporate strategy and consultant to high-tech start-ups, and mindful that the Peninsula is the northern sector of Silicon Valley, we renamed ourselves Silicon Valley Art Museum and proceeded to create our museum in cyberspace. SVAM was launched in August of 2000.

We added a few more corporate-type board members who brought potentially useful experience and resources, and we continued to dream of a real, physical, bricks-and-mortar art museum where everyone could experience the power and magic of wonderful art. Then, when a local non-profit organization that occupied an historic building collapsed from fiscal malnutrition, the City of Belmont offered us the lease.

We now had a "starter home" that could hold a formal gallery, museum store, and art reference library. We shared the building with two other arts non-profits and a flock of studio artists.

But the board was irreparably divided: half the members (the corporate types) were only interested in the Internet museum; the other half still dreamed of a real physical museum serving the community. The first indication of a serious problem came with the lease offered by the city. The virtual museum proponents insisted that they would approve the lease only with the assurance that none of the corporate budget would be spent on the physical museum.

Two facts are pertinent here: First, our primary source of operating funds since 2000 had been the O.P. Decker Foundation (Arabella Decker, an artist, is a core member of the museum board and one of the three Decker Foundation trustees). Second, the studio artists were renting the upstairs rooms and their cash paid the city lease (services were provided by the three non-profits in lieu of cash).

We tried strategic planning, we endured a board retreat, but the split merely widened: the board was evenly divided. We couldn't risk a substantive vote; it became increasingly clear that the objectors intended to take over the corporation.

In late summer of 2003, Arabella Decker was planning her annual trip to Chicago for the annual Decker Foundation trustees meeting and the dispensing of grants. She was reluctant to hand over a check to board mem-

bers who were obviously planning a corporate coup. We talked. I reminded her that most foundation grants came with a letter specifying restrictions on the spending of the money. With that under her hat she went off to Chicago and returned with a check and a letter stating that the funds could be spent only on the development and operation of the physical museum.

The letter was presented at the January board meeting; it was then that the financial impact was made clear. Board members who objected to the stone-and-mortar museum were not pleased. The solution was a "divorce": We split the assets. The objectors took all the virtual assets, the website, the name, and the 501(c)3 status. The stone-and-mortar group kept all the physical assets, the lease, and the money, took the name Peninsula Museum of Art, and applied for (and received) its own 501(c)3 status.

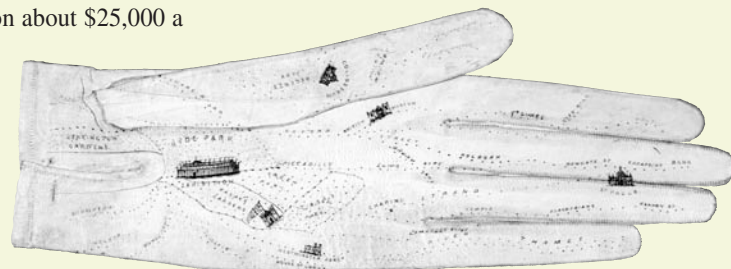
A Good Outcome

The Peninsula Museum of Art has settled into a workable schedule of four exhibitions a year, each opening followed by a newsletter with pictures from the reception and articles about what's coming next. Periodically we present a Sunday Seminar on art.

We're still operating on about \$25,000 a year (\$20,000 from the O.P. Decker Foundation plus Board contributions and memberships). We have no paid staff, just one independent contractor who maintains our website, www.peninsula-museum.org, and volunteers.



Lewis W. Hine, *Children Cotton Pickers*, c. 1912. In "Let Children be Children," George Eastman House, NY



London glove map, 1859. In "Maps," Walters Art Museum, MD

LESSONS LEARNED IN THE PROCESS OF "GROWING"

1. Look every "gift horse" in the mouth and check references, informally if possible. It's much easier to "not need" or to divert an eager volunteer than to get rid of an albatross or shark.
2. Assume everyone has a private agenda. Some of it may overlap with yours; some of it may not. Find out and plan accordingly.
3. Don't be shy. But learn to recognize the body language of boredom and know when to shut up and listen.
4. Pester your elected officials. It isn't really pestering. They need to be "insiders," and they need constant reminders of how important they are in the community.
5. Look for your natural allies and develop "creative partnerships" (collaborations). The goal: To make new friends and get your mission and message out.
6. Leaders wear the white hat, but you are likely to need a "black hat" from time to time (preferably a board member who is willing to ask the tough questions and point out the elephant in the room).
7. Timing: A concept or project may need to ferment until the timing is right. Of course, when the time IS right, you need to be ready to run through the door that has opened.
8. Fundraising: Even if neither you nor your board members have any money, or access to it, you will have to raise a lot of it. The solution is to recruit ever-higher circles of connection and gradually move the campaign up the food chain. Cold calls and knocking on doors don't work, connections do. Research is vital—who in the community loves art AND has disposable income or assets? Who do we know who knows someone who knows them? Patience and perseverance are keywords.
9. An attractive package is essential. The support you need will only come when your project is socially irresistible to your potential supporters. So dream well out of your range knowing that you may have to scale back.
10. Know that nothing like this happens quickly. Believe in your heart and soul that the goal is worth years of your life—or don't start.
11. Fun and laughter are essential to the creative life: it's true here as in everything else.

—Ruth Waters

Continued on back page

Arizona

Phoenix Art Museum □ “When Gold Blossoms: Indian Jewelry from the Susan L. Beningson Collection” (May 11) An assortment of adornments, primarily from South India, 17th through 19th centuries.

California

Berkeley Art Museum, University of California, Berkeley □ “Joan Jonas: The Shape, the Scent, the Feel of Things” (July 20) Multimedia installation inspired by Hopi rituals in the American Southwest. □ “Enrique Chagoya: Borderlandia” (May 18) Paintings on metal, ink drawings, prints, and codices reflecting the impact of centuries of contact between Mexico and neighboring cultures. □ “Protest in Paris 1968: The Photographs of Serge Hambourg” (June 1) Student and worker strikes that brought the country to a standstill. □ “Bruce Conner” (July 20) Photos of San Francisco’s thriving punk scene in the late 1970s.

Fresno Metropolitan Museum of Art □ “Temples and Tombs: Treasures of Egyptian Art from the British Museum” (June 1) Sculpture, reliefs, papyri, ostraca, jewelry, cosmetic objects, and funerary items dating from the third millennium B.C. to the Roman occupation in the fourth century A.D.

Hearst Art Gallery, St. Mary’s College of California, Moraga □ “You See: The Early Years of the UC Davis Art Faculty” (June 22) Paintings, sculpture, drawings, and prints by faculty members Arneson, De Forest, Neri, Thebaud, and Wiley.

California Museum of Photography, University of California, Riverside □ “Balancing the Lenses: Stereoviews of the Middle East” (July 12) Images depicting the cultures of the Middle East and India from 1890-1940.

Crocker Art Museum, Sacramento □ “The Language of the Nude: Four Centuries of Drawing the Human Body” (May 10-July 27)

Cantor Arts Center, Stanford University, Stanford □ “Frederic Church, Winslow Homer, and Thomas Moran: Tourism and the American Landscape” (May 4) Pictures that inspired tourists to visit locales opened up to travel by railroad and steamship companies. □ “Makishi: Mask Characters of Zambia” (June 29) Wooden masks from ethnic groups living in the “Three Corners” region of Zambia, Angola, and the Democratic Republic of the Congo. □ “Experiments in Navigation: The Art of Charles

Hobson” (July 6) Artist’s books and preliminary works. □ “Recent Acquisitions” (July 27) Arp, Hayter, and Wood.

Colorado

Museum of Natural History, University of Colorado, Boulder □ “Kate Breakey, Small Deaths” (May 16) Hand-colored photographs of bird, flower, and reptile specimens.

Mizel Museum, Denver □ “Symbiosis: Cultural Alarm, Buddhist Animal Wisdom Stories, and Evolution” (May 1) Works that illustrate the complex relationship between human beings and the natural world.

Museum of Outdoor Arts, Englewood □ “Joellyn Duesberry: The Big Picture” (June 28).

Sangre de Cristo Arts Center, Pueblo □ “Some Rocks: Some Water: Richard Hansen Exhibition” (May 3) Stone sculptures, works on paper, and photos designed to reflect the sweep of water along the Arkansas River valley. □ Through May 10: “S.K. Cothrun: Captured Earth”; “Christo and Jeanne-Claude”; “Kate Leonard: Shallow Water”; “S.W. Pisciotta: Nature on the Grid” □ “Shelter: Beauty, Sustainability, Function” (May 17) An ecovillage model explores topics such as energy, food, water, waste, building materials, and design.

Connecticut

Bruce Museum, Greenwich □ “20th-Century American Prints from the Bruce Museum Collection” (July 6) Hassam, Freeman, Bishop, Raphael Soyer, Bearden, Calder, Posen, Rivers, and Coe.

Yale Center for British Art, Yale University, New Haven □ “A New World: England’s First View of America” (June 1) Watercolors and drawings by John White, the Elizabethan gentleman-artist who documented England’s 1585 expedition to the coast of present-day North Carolina. □ Through April 27: “The Lure of the East: British Orientalist Painting, 1830-1925” 19th-century British artists’ encounters with the people and places of the Middle East; “Pearls to Pyramids: British Visual Culture and the Levant, 1600-1830” The intersections between British visual culture and the Eastern Mediterranean through political and economic changes.

Lyman Allyn Art Museum, New London □ “Fifty Years of Collecting Contemporary Art at the Lyman Allyn Art Museum” (July 14) Carey, LeWitt, Reinhardt, Fetting, Gray, and others.

Florence Griswold Museum, Old Lyme □ “Impressionist Giverny: American Painters in France, 1885-1915: Selections from the Terra Foundation for American Art” (July 27) Oils by American expatriate artists who worked in this French village.

District of Columbia

Anderson House, Society of the Cincinnati □ “The Secret History of the Society of the Cincinnati” (July 15) Art, artifacts, manuscripts, and rare



pamphlets exhibited on the 225th anniversary of the founding of the society by Revolutionary War officers, with George Washington as the first “president general.”

Art Museum of the Americas, Organization of American States □ “Of Rage and Redemption: The Art of Oswaldo Guayasamin” (May 29) An Ecuadorian’s paintings, drawings lithographs, and serigraphs.

Kreeger Museum □ “Philip Johnson: Architecture as Art” (July 31) The relationship between art and architecture as seen by the great one in his late works as well as models, drawings, sculpture, and photographs; also on display are paintings by Johns, Stella, and Warhol.

Smithsonian Institution □ At the **Sackler Gallery** □ “Color as Field: American Painting, 1950-1975” (May 26) Gottlieb, Hofmann, Motherwell, Rothko, Frankenthaler, Olitski, Stella, and others. □ “MURAQQA: Imperial Mughal Albums from the Chester Beatty Library (May 3-Aug. 3) Early 17th-century paintings and calligraphies that depict the imperial family, Sufi saints, and natural history subjects. □ “Falnama: The Book of Omens” (May 17) Manuscripts of divination created in Safavid Iran and Ottoman Turkey in the 16th and early 17th centuries.

Florida

Boca Raton Museum of Art □ “Degas in Bronze: The Complete Sculptures” (Apr. 27) 73 sculptures cast in bronze from the original composite and wax models. □ “Looking at Art: A Primer” (June 22)

Museum of Florida Art, DeLand □ “Equus IV: Celebrating the Art of the Horse” (May 25)

Miami Art Museum □ “Wilfredo Lam in North America” (May 18) A Cuban’s paintings and works on paper.

Museum of Fine Arts, St. Petersburg □ “Revelation: Works by Self-Taught African-American Artists” (July 27)

Vero Beach Museum of Art □ “Face Forward: American Portraits from Sargent to the Present” (May 25) Henri, Bellows, Kuhn, Warhol, Close, Katz, and more. □ “Woolies: A Sailor’s

Art” (June 8) Embroidered ships on stretched sail canvas by (mostly) British sailors while at sea. □ “Barry Flanagan” (May 18) British sculptor best known for his bronze hares in whimsical and humorous poses.

Cornell Fine Arts Museum, Rollins College, Winter Park □ “Louise Nevelson” (May 12) Large-scale wall sculptures.

Idaho

Boise Art Museum □ “John Taylor: Submerge” (May 25) □ Through June 22: “Marsden Hartley: American Modern”; “Andrea Marrell: Measure of Man.”

Illinois

Museum of Contemporary Art, Chicago □ “Jim Nutt: Coming into Character” (June 1) Line drawings and paintings of female heads. □ “Collection Highlights, 1949-2007 (June 8) Bacon, Christo, Magritte, Oldenburg, Rauschenberg, Warhol, and many more.

Museum of Contemporary Photography, Columbia College, Chicago □ “Building Pictures” (May 31) Connections between architecture and photography: the real and virtual worlds.

Northern Illinois University Art Museum, DeKalb □ Through May 10: “Specimens and Studies” Scientific specimens that coincide with spring nature-themed exhibitions; “Peggy Macnamara: ‘Nature Paintings’ ” Large-scale watercolors of indigenous flora and fauna; “Examining Audubon” Audubon prints through many editions; “Gabriel Bizen Akagawa: Unpacked/Offset” Students, artists, and community members work with visiting artist to recreate “nature” within reused art shipping crates.

Krannert Art Museum, University of Illinois, Urbana-Champaign □ Through May 11: “Jay Ryan: Animals and Objects In and Out of Water” Surprising images: barefoot superheroes pole-vaulting over a minefield of explosive cupcakes; a pail-banging drummer teetering on a pair of roll-away speaker cabinets, etc.; “MusiVerse” a 3-D virtual environment for the algorithmic creation of music. □ “Landscapes of Experience and Imagination: Explorations by Midwest Latina/Latino Artists” (July 27) Via the genre of landscape, Chicago-based artists address their self-identities and their understandings of the Latina/Latino presence in the U.S.

Indiana

Indiana University Art Museum, Bloomington □ “Shallow Creek: Thomas Hart Benton and American Waterways” (May 18) Rivers, streams, gullies, and creeks—a subgenre of American landscape painting, 1938-1942.

Midwest Museum of American Art, Elkhart □ “In Search of Motion: John



Top: Dave Lynas, *Musicians*. Ink on paper. In “A Handful of Clay,” Tweed Museum of Art, MN

Left: Roy Lichtenstein, *Bull III*, 1973. Lithograph, screenprint, and line-cut Arjomari paper. In “Limited Editions,” Dayton Art Institute, OH

Cavanaugh Sculpture Collection” (July 6) Women, children, and animals in hammered lead, bronze, and clay.

South Bend Regional Museum of Art □ Through May 11: “Made in America: Contemporary & Historical Art from the Permanent Collection” (May 11) Focusing on local and regional artists; Hoosier Impressionists and Chicago Imagists; works on paper by Avery and Fairfield Porter, Benton, Sloan, and Grant Wood for starters. □ “Richard Koenig: Photographic Prevarications” (May 18) Manipulated photographs.

Kansas

Salina Art Center □ “Leaded: The Materiality and Metamorphosis of Graphite” (June 1) Two- and three-dimensional works by 16 artists.

Maine

Portland Museum of Art □ “The Powerful Hand of George Bellows: Drawings from the Boston Public Library” (June 1) A range of subjects from friends and family to sporting events and social gatherings. □ “New Natural History” (May 11) Works by Maine artists.

Maryland

Mitchell Gallery, St. John’s College, Annapolis □ “St. John’s College Community Art Exhibition” (May 11) Ceramics, paintings, drawings, prints, sculpture, textiles, and photographs □ “Image and Imagination: Anne Arundel County Juried Exhibition” (June 11) Multi-media works by artists who live in the county.

Baltimore Museum of Art □

“Meditations on African Art: Pattern” (Aug. 10) Textiles, dye stamps, ivories, shields, and figurative works. □ “Looking Through the Lens: Photography 1900-1960” (June 8) Man Ray, Stieglitz, Weston, Lange, and Parks, to name a few.

Walters Art Museum, Baltimore □

“Beyond the Compass: Beyond the Square” (May 20) Contemporary art that seeks new understandings of mapping concepts. □ “Mapping the Cosmos: Images from the Hubble Space Telescope” (July 27) New facts about the cosmos revealed in images that are also aesthetic objects. □ Through June 8: “Maps: Finding Our Place in the World” Maps created by Lewis and Clark, Ptolemy, and da Vinci, among others; “Maps on Purpose” Mapping projects in Baltimore city neighborhoods.

Washington County Museum of Fine Arts, Hagerstown □

“The Horses are Coming!” (June 22) 19th- and 20th-century American and European equestrian art. □ “Valley Art Association Exhibition” (May 18) Local artists in juried show.

Massachusetts

Attleboro Arts Museum □ “The Viktor Schreckengost Legacy Exhibition” (May 16) Retrospective of work by industrial designer, ceramist, and sculp-

tor who died earlier this year at age 101.

Institute of Contemporary Art, Boston □ “Accumulations: More Than the Sum of Their Parts” (July 16)



Nicola Tyson, *Untitled #67*, 1997. Charcoal and pastel on paper. In “Out of Shape,” Loeb Art Center, NY

Layered sculptures, painting, photographs, prints, and projections. □ “The World as a Stage” (April 27) Installations, sculptures, performances, and participatory works explore the relationship between visual art and theater. □ “Momentum 10: Ranjani Shettar” (July 13) Bangalore-based Indian artist’s sculptural installations blend natural and man-made materials. □ “Street Level: Mark Bradford, William Cordova & Robin Rhode” (July 13) Photography, video, large-scale canvases, works on paper, and sculptural installations all drawn from street culture.

McMullen Museum of Art, Boston College, Boston □

“Tree of Paradise: Jewish Mosaics from the Roman Empire” (June 8) Reconstruction of a mosaic floor from a sixth century synagogue in Hammam Lif, Tunisia, and other Roman-period mosaics, jewelry, coins, marble statues, ritual objects, and textiles.

Cape Cod Museum of Art, Dennis □

Through May 18: “Paul Giambarba: Photographs from CapeArts—25 Years Ago” Images of people in the art world during the 1980s; “Rebecca Brown: Photographs of Coney Island” Documentary street photos. □ “Art Rugs of Karen LaFleur and Tommy Simpson” (May 4) Rugs displayed together with supporting artwork used in their creation: original paintings, digital artwork, and a digital presentation on the making of the rugs in Nepal.

DeCordova Museum, Lincoln □

Through Apr. 27: “Presumed Innocence: Photographic Perspectives of Children” Adams, Arbus, Cartier-Bresson, and Hine, among more than 80 others; “Photographs of Children from the DeCordova Museum Permanent Collection”

Peabody Essex Museum, Salem □

“Origami Now!” (June 8) Depictions of nature, self-portraits, and abstract forms

with some interactive displays.

Mount Holyoke College Art Museum, South Hadley □

“Janet Fish” (June 1) Four decades of work in oil, watercolor, pastel, and graphic media. □ “Side by Side” (June 1) □ “Docents’ Choice: Works on Paper.” (June 1)

Davis Museum and Cultural Center, Wellesley College, Wellesley □

Through June 8: “Grand Scale: Monumental Prints in the Age of Dürer and Titian”; “Upton Pyne” British photographer chronicles the evolution of a pond on the site of a former manganese mine near his home in Cornwall.

Rose Art Museum, Brandeis University, Waltham □

Through July 27: Alexis Rockman: *The Weight of Air* Works on paper; “The New Authentic: Artists of the Post-Jewish Generation” Works that raise questions about cultural, ethnic, and religious identity in the U.S.; “Paper Trail 11, curated by Odili Donald Odita” Second in a series in which artists integrate their own work with pieces they select from the museum’s works-on-paper collection. □ “Lynne Avadenka: A Thousand and One Inventions” (May 21) Site-specific installation whose inspiration is an imagined conversation between the heroine of the Book of Esther and Scheherazade.

Michigan

University of Michigan Museum of Art, Ann Arbor □

“William Christenberry: Photographs, 1961-2005” (June 1) Documenting changes over time in the architecture and landscape of his native Hale County, Alabama.

Jacob Gallery, Wayne State University, Detroit □

“Still Pulling: Traditional Printmaking in the Digital Age”: (May 16) □ “Earth and Sky: John Torreano Paintings and Sculptures” (July 18)

Krasl Art Center, St. Joseph □

Through May 18: “Sculpture drawings, Kerry Binnington”; “Abstract Painting, Dale Threlkeld”; “Glass Art, Paul Stankard.” □ Through July 20: “Lighthouse Photography, Greg Martin”; “Abstract Landscape, Stephen Moss”; “Tension Sculpture, Patrick McKearman.”

Marshall M. Fredericks Sculpture Museum, Saginaw Valley State University, University Center □

“Street Sense: Celebrating 20 Years of the Heidelberg Project” (May 24) African-American artist Tyree Guyton’s environmental art project aimed at countering the deterioration of his once-vibrant Detroit neighborhood—Photographs, paintings, and sculpture.

Minnesota

Tweed Museum of Art, University of Minnesota, Duluth □ “A Handful of Clay:

Ceramics and Drawings” (June 15) Showcasing more than 100 ceramic works by this master ceramist, ceramics studio manager of the Duluth Art Institute, illustrator, musician, and maker of clay musical instruments.

Mississippi

Lauren Rogers Museum of Art, Laurel □

“The Floating World: Ukiyo-e Prints from the Wallace B. Rogers Collection (July 13) Woodblock prints from the Edo Period (1600-1868).

Missouri

Laumeier Sculpture Park, St. Louis □

“Deborah Aschheim: Reconsider” (May 11) Drawings, paintings, and “neural” sculptures that create a sensory exploration of memory.

Springfield Art Museum □

“Watercolor Now! 2008” (June 1) Aqueous media paintings by members of the Watercolor U.S.A. Honor Society.

Montana

Missoula Art Museum □

“The Boy Who Would be Czar: The Art of Prince Andrew Romanoff” (April 26) Paintings by San Francisco area-based artist, the grandnephew of Russia’s last czar. □ “Molly Murphy: Reservations Required” (May 24) Contemporary Native American art. □ Through May 31: “Following the Rhythms of Life: The Ceramic Art of David Shaner”; “Katy Stone: A Season Swirling (Unfurling)” Installation inspired by the Montana landscape.

New Jersey

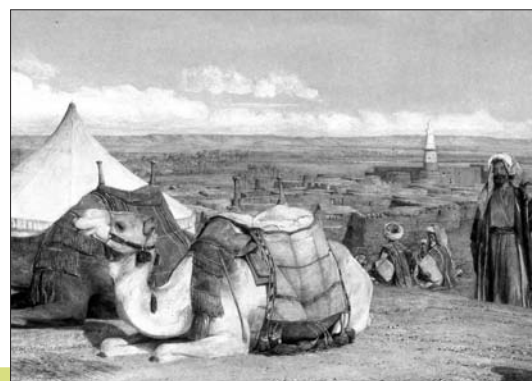
Monmouth Museum, Lincroft □

“Beyond: Visions of Planetary Landscapes: Photographs by Michael Benson” (May 4) Mosaic and collage techniques used to create views of the solar system primarily originating in NASA and European Space Agency missions.

New Mexico

University of New Mexico Art Museum, Albuquerque □

“For the Greater Good: New Deal Art in New Mexico, 1933-1943” (May 25) A major selection of artworks produced by New Mexico artists under the auspices of New Deal programs. □ “Chamber Music: An Installation by Steve Peters” (May 11) □ “Drawn Closer: Lasting Impressions” (May 25) □ Through May 9: “Joseph Mougel: Gestural Constructions”; “Robert Rainey: His*Story”



John Frederick Lewis, *Edu, Upper Egypt* (detail), 1860. Oil on panel. In “The Lure of the East,” Yale Center for British Art, CT

New York

Albany Institute of History & Art □ “Venetian Scenes by Walter Launt Palmer” (June 1) Late 19th-century paintings by American artist. □ Through May 25: “Horsing Around: 19th-Century Cast Iron Hitching Posts” Eagles, flags, dogs, horses, portraits, hands, and jockeys; “The Folk Spirit of Albany: Folk Art from the Collection of the Albany Institute of History & Art” Paintings, quilts, mourning pictures, textiles, and stoneware from the 18th century to the present; “Cast with Style: 19th-Century Cast Iron Stoves from the Albany Area.”

Hofstra University Museum, Hempstead □ “Stan Brodsky, the Figure: 1951-2006” (June 6) Mixed media and paintings with autobiographical echoes. □ “Bells, Baubles and Farce” (Apr. 27) Large-scale work by Long Island artist Wendy Csoka.

Herbert F. Johnson Museum of Art, Cornell University, Ithaca □ “Something Old/Something New: Gifts from Alumni” (July 27) Contemporary art, Asian art, and works on paper. □ Through June 15: “A New World: Pre-Columbian Art from the Carroll Collection” Ceramics, stone carvings, tools, and gold adornments; “Ramayana in the Arts of India and Southeast Asia” Paintings, textiles, puppets, and other works inspired by this favorite narrative in the arts of India, Indonesia, and Southeast Asia; “Exquisite Corpus: Interacting with the Fragmented Body” Student-curated exhibition concentrates on the segmented human form.

El Museo del Barrio, New York City □ “Arte≠Vida: Actions by Artists of the Americas, 1960-2000” (June 8) Photographs, video, texts, ephemera, props, and other works of art by Latino and Latin American artists.

Fashion Institute of Technology, New York City □ “Exoticism” (May 7) How designers have interpreted the “exotic” through garment construction and surface embellishment.

Grey Art Gallery, New York University, New York City □ “New York Cool: Painting and Sculpture from the NYU Art Collection” (July 19) Works created in the 1950s and early 1960s: Guston, Vicente, Elaine de Kooning, Avery, Frankenthaler, Pearlstein, Rauschenberg, and others.

International Center of Photography, New York City □ Through May 4: “Archive Fever: Uses of the Document in Contemporary Art” Photography and film as the quintessential archive media; “The Collections of Barbara Bloom” Improbable objects, made or found; a Playboy magazine in Braille; a chair upholstered with fabric bearing the artist's dental x-rays.

Jewish Museum, New York City □ “Warhol's Jews: Ten Portraits Reconsidered” (Aug. 3) Paintings of Bernhardt, Brandeis, Buber, Einstein, Freud, Gershwin, Kafka, the Marx

Brothers, Golda Meir, and Gertrude Stein, along with preparatory drawings. □ Through June 22: “Oil/Water—Mother/Daughter: Video and Photography by Mor Arkadir” Intersection between the artist's secular world and her mother's religious observance; “Pomegranate: A Video by Ori Gersht”

Metropolitan Museum of Art, New York City □ “Silversmiths to the Nation: Thomas Fletcher and Sidney Gardiner, 1808-1842” (May 4) Monumental vessels that celebrate naval and civic heroes as well as domestic and personal items made by the Philadelphia firm. □ “Lee Friedlander: A Ramble in Olmsted Parks” (May 11) Photographs of parks designed by Frederick Law Olmsted on the 150th anniversary of his design for New York's Central Park. □ “Jasper Johns: Gray” (May 4) The use of the color gray in more than 100 paintings, reliefs, drawings, prints, and sculptures. □ “Poussin and Nature” (May 11) Landscapes. □ “Gustave Courbet” (May 18) Retrospective. □ “Asian Lacquer: Masterpieces from the Florence and Herbert Irving Collection” (May 11) Large and small objects that date from the 14th to the 19th centuries. □ “Beauty and Learning: Korean Painted Screens” (June 1) Four screens from the late 19th to the early 20th century.

Museum of Arts & Design, New York City □ Through April 27: “Cheers! A MAD Collection of Goblets” Celebratory goblets in glass, metal, clay, fiber, wood, and mixed media; “Pricked: Extreme Embroidery” Embroidery techniques used by contemporary artists.

Museum of Modern Art, New York City □ “Color Chart” (May 12) Mid-20th-century artists' attitude toward manufactured color: Duchamp, Kelly, Richter, Warhol, and LeWitt. □ “Take Your Time: Olafur Eliasson” (June 30) Immersive environments, sculptures, and photographs recreate the extremes of landscape and atmosphere in the artist's native Scandinavia. □ “Multiplex: Directions in Art, 1970 to Now” (July 28) Painting, sculpture, prints, drawings, photography, and media works. □ “Design and the Elastic Mind” (May 12) Objects designed to marry scientific research with human limitations and aspirations.

Queen Sofia Spanish Institute, New York City □ “Gerardo Rueda: Sculpture Maquettes” (April 30)

Pelham Art Center □ “Glory of Landscapes: Then and Now” (June 21) Contemporary artists explore past and present relationships with the Hudson River Valley.

Loeb Art Center, Vassar College, Poughkeepsie □ “Out of Shape: Stylistic Distortions of the Human Form in Art from the Logan Collection” (June 8) Works on paper by contemporary artists.

George Eastman House, Rochester □ “Loss/Hope” Series of exhibitions: “Larry Towell: The World From My Front Porch” (June 29) Canadian photographer focuses on international issues of land use and control; “Black in America: Eli Reed” (June 29) Magnum photographer's encounters with Black Americans from all walks of life; “Conscience the Ultimate Weapon” (June 1) Recreation of 1968 slide-show presentation by civil rights and Vietnam-era photographer Fernandez showing the parallels between the turbulence then and now. □ “Facing the Other Half” (June 15) Three displays of photographs that incited social change: “Lewis Wickes Hine: Let Children Be Children” Crusades against child labor; “John Thomson: Street Life in London” 1878 publication sparking change in moral, sanitary, and working conditions; “(Women) Picturing the New Deal: The FSA Photographs of Dorothea Lange and Marion Post Wolcott” Farm Security Administration photographers documenting poverty and deprivation during the Great Depression.

North Carolina

Asheville Art Museum □ “Time is of the Essence: Contemporary Landscape Art” (June 22) Intersections between time and place in photography, video,



Willard Nash, *Untitled (Women's Tennis)*, 1934. Oil on canvas. In “For the Greater Good.” University of New Mexico Art Museum, NM

painting, printmaking, film, and sculpture.

Mint Museums, Charlotte □ At the **Mint Museum of Craft + Design:** “White Light: Glass Compositions by Daniel Clayman” (May 25).

Nasher Museum of Art, Duke University, Durham □ “Barkley L. Hendricks: Birth of the Cool” (July 13) First retrospective of American artist known for life-sized portraits of people of color from the urban Northeast.

Art Gallery, Guilford College, Greensboro □ “60 x 60: Small Prints from Purdue University Galleries” (May 4) Prints acquired from “Sixty Square Inches” competitions, national biennials of small-scale contemporary prints.

Ohio

Akron Art Museum □ “Family Album: The Karl and Bertl Arnstein Print Collection” (June 1) Dürer, Rembrandt, Picasso, Matisse, Cezanne and more. □ “A Shared Vision: The Fred and Laura Ruth Bidwell Photography Collection” (May 25) Landscapes, still lifes, portraits, and fabricated and conceptual images.

Taft Museum of Art, Cincinnati □ “From Winslow Homer to Edward Hopper” (May 11) Watercolors by Eakins, Hassam, Sargent, Prendergast, and Marin, among others.

Cleveland Museum of Art □ “Arms and Armor from Imperial Austria” (June 1) Objects from an armory established in Graz in the 16th century to help defend against Turkish expansion.

Dayton Art Institute □ “Limited Editions: 20th-Century Prints from the Ponderosa Collection” (April 27) Johns, Rauschenberg, Dine, Schnabel, Rothenberg, Salle, and others.

French Art Colony, Gallipolis □ “Interpretations from the Ohio River” (April 27) Works in charcoal, pen, and paint. □ “Luce Perspective” (April 30-May 25) Landscapes and portraiture by Ron Luce. □ “The Artist and the Camera” (June 1 -29) Photographs.

Oklahoma

Sherwin Miller Museum of Jewish Art, Tulsa □ “The Eye of the Collector: The Jewish Vision of Sigmund R. Balka” (Apr. 27) Works on paper: Shahn, Lipchitz, Raphael Soyer, Gross, Barnett, Motherwell, Rivers, and others.

Oregon

Museum of Contemporary Craft, Portland □ “Framing: The Art of Jewelry” (May 11) How jewelry is displayed in a museum setting. □ “Generations: Ken Shores” (July 23) Retrospective: works in clay.

Pennsylvania

Allentown Art Museum □ “National Geographic: The Art of Exploration” (May 25) Original illustrations for articles on the findings of explorers and archaeologists.

Westmoreland Museum of American Art, Greensburg “The Westmoreland Juried Biennial” (June 8) Regional artists. □ Through April 27: “Seeing the City: Sloan's New York” Paintings, drawings, prints, and photographs depicting the city's street life; “Dylan Vittone: Pittsburgh Project” B/W panoramic photos of diverse neighborhoods.

Institute of Contemporary Art, University of Pennsylvania, Philadelphia □ Through Aug. 3: “Trisha Donnelly” Photography, drawing, painting, sculpture, sound, and video. □ “Mike's World” Iconic videos and installations.

LaSalle University Art Museum, Philadelphia □ “The Buffoonish Bourgeois: Caricatures and Satire of the Upper Middle-Class Businessman in 19th-century France” (May 30) □ “LaSalle University Digital Art and Music Exhibition” (May 11)

Philadelphia Art Alliance □ Through May 18: “Gijs Bakker and Jewelry” Jewelry from the Stedelijk Museum in the Netherlands; “DEEP: New Paintings by Vincent Romaniello” Work inspired by images from space-craft and satellites.

Philadelphia Museum of Art □ “Frida Kahlo” (May 18) Portraits, allegorical paintings, and still lifes.

The Print Center, Philadelphia □ Through May 17: “The Road Not Taken: Orit Hofshi” Epicallly-scaled woodcuts of isolated figures in desolate landscapes by Israeli artist; “Etchings & Drypoints 2005-2008: Bill Scott” New series; “The Philadelphia Etchings: Janet Towbin” Repeating patterns.

Frick Art & Historical Center, Pittsburgh □ “Steel: Pittsburgh Drawings by Craig McPherson” (June 8) The themes: nature and industry.

Everhart Museum of Natural History, Science & Art, Scranton □ Through June 1: “Flocks & Feathers: Birds in Science, Culture, and Art” The museum’s collection of specimens from around the world, cultural objects that use feathers or depict birds, and contemporary art inspired by avian creatures; “Isaiah’s Corner: Birds of a Feather” For young visitors to touch, play, create, and learn about birds.

Palmer Museum of Art, Pennsylvania State University, University Park □ “Resonance from the Past: African Sculpture from the New Orleans Museum of Art” (May 11) Works from Central and West Africa: masks and figures, musical instruments, ceramics, fabric, and beadwork costumes. □ “G. Daniel Massad: Loading the Work” (May 25) Pastels.

South Carolina Gibbes Museum of Art, Charleston □ “Pleasant Journeys and Good Eats Along the Way: A Retrospective Exhibition of Paintings by John Baeder” (Apr. 27) Oils and watercolors document diners, taco trucks, and barbecue dives.

Columbia Museum of Art □ “Excavating Egypt: Great Discoveries from the Petrie Museum of Egyptian Archaeology, University College London” (June 8) A glimpse into the lives of both royal and average Egyptians through the finds of one of the pioneers of Egyptian archaeology, William Flinders Petrie.

Tennessee Knoxville Museum of Art □ “Michael Light: 100 SUNS” (June 1) Scanned and re-photographed images from the U.S. National Archives and the Los Alamos National Laboratory that depict nuclear tests. □ “Video Art/3 Visions” (May 4) One artist focuses on the effects of sound and editing, another on the physical effect of video footage projected onto three-dimensional forms, and a third on subtle imagery linked to childhood.

Frist Center for the Visual Arts, Nashville □ “Monet to Dali: Modern Masters from the Cleveland Museum of Art” (June 1) Include Cezanne, Degas, Gauguin, Matisse, Picasso, Renoir, Seurat, and Van Gogh. □ “Angelo Filomeno” (June 1) Embroidery and appliqué on shantung silk create shimmering images.

Vanderbilt University Fine Arts Gallery, Nashville □ “Views from the Collection III” (May 30) Late medieval and Renaissance sculpture, Old Master prints, 17th-century portraits, and 19th-century American and European painting.

Texas Art Museum of Southeast Texas, Beaumont □ Through July 13: “Works by Frank X. Tolbert; “Works by Sharon Kopriva” □ “Defining Moments: An Exhibition of Works by Bryan Collier” (April 27) Original artwork in watercolor and collage by children’s illustrator and fine artist.

Dallas Museum of Art □ “J.M.W. Turner” (May 18) Oils, works on paper, watercolors. □ “Julian Onderdonk: Bluebonnets and Beyond” (July 20) Texas landscape artist (1882-1922).

Utah Brigham Young University Museum of Art, Provo □ Minerva Teichert, Pageants in Paint” (May 26)



Salt Lake City Art Center □ “Gaylen Hansen: Three Decades of Paintings” (May 31) Animals, insects, trout, and a beleaguered frontiersman appear in paintings that evoke the exploits of fables and folk tales.

Virginia University of Virginia Art Museum, Charlottesville □ “Irwin Berman: Stools” (June 15) Things to sit on as artistic statements. □ “Speed” (July 13)

Speed and motion as represented in paintings, sculptures, and mobiles.

Danville Museum of Fine Arts & History □ “Maud Gatewood Legacy Exhibit” (May 11) Works chosen from Gatewood’s 2006 bequest to the museum. □ “Harry Aron” (May 2-June 29) Portraits by local tattoo-ist turned serious artist.

Chrysler Museum of Art, Norfolk □ “Rembrandt van Rijn: Master Printmaker” (May 15-Aug. 17) From the Museum of Fine Arts, Boston.

University of Richmond Museums, Richmond □ At the **Harnett Museum of Art**: “Four Seasons: A Print Series by Jennifer Bartlett” (July 13) Works made with as many as 79 colors of ink and screens □ “2008 Harnett Biennial of American Prints” (June 6) □ “George Whitman: Drawn to Nature” (June 6) Graphite drawings and etchings. □ At the **Robins Gallery of Design from Nature**: “The Sacred and the Sensuous: Hindu Art from the Collection” (June 29) Temple panels, carvings, textiles, and bronzes spanning several centuries. □ “Ceramic Portraits: Selections from the Georganna Yeager Johns Collection of Royal Doulton Character Jugs” (June 29) Figures from history, the military, royalty, and characters from literature. □ “Eating Wonderland: Recent Work by Sue Johnson” (June 15) Ceramic castings of dinnerware and popular foodstuffs.

Washington Henry Art Gallery, Seattle □ “Kader Attia: New Work” (May 25) First solo of installations and video works. □ “Josiah McElheny: The Last Scattering Surface” (July 13) Conceptual

art and the studio glass movement combined create installations and sculptures.

Seattle Art Museum □ “Roman Art from the Louvre” (May 11) Sculpture, sarcophagi, marble busts, and reliefs, bronze and terra cotta statuettes, jewelry, glass vessels, mosaics, frescoes, and silver pieces from Pompeii, 1st to 6th centuries.



Wisconsin Charles Allis Art Museum, Milwaukee □ “A Survey: Drawings & Paintings by John Wickenberg” (May 18) □ “Journey from the Secular to the Spiritual: Works by George McCormick Sr.” (July 27) Woodcarvings and metal sculptures.

Milwaukee Art Museum □ “Foto: Modernity in Central Europe, 1918-1945” (May 4) The between-war period in central Europe when photography emerged as a consummate expression of cultural

expectations.

Leigh Yawkey Woodson Art Museum, Wausau □ Through June 22: “Suburban Knights: The Warrior Mystique” Photographs that record members of a society devoted to re-creating medieval arts and activities. □ “Through the Looking Glass” Paintings, original prints, and objects on loan from Chicago collector; “The Age of Armor: From the Higgins Armory Museum” Pieces dating from the late Middle Ages to the Renaissance.

Wyoming Nicolaysen Art Museum, Casper □ “Jon and Ginnie Madsen” (June 22) □ “Trappings: Stories of Women, Power and Clothing” (July 27) □

MEMO

TO: Readers of museumVIEWS

FROM: The Editor

RE: A coming issue

How about some humor? museumVIEWS has taken a serious look into many aspects of the business of running and maintaining museums. Now we would like to delve into - and publish - another side of life in the arts - the funny side.

Funny things happen all the time that refresh our jobs and our lives. Tell us about them.

What have you done, seen, heard, experienced that made you chuckle and that would amuse your friends and colleagues?

Write us (or email: lsher@museumviews.org or lsher116@aol.com) a short note (or a long one) describing a funny incident, an encounter with a visitor, a misunderstanding, a mix-up, a gaff, a misstep, anything that struck your funny bone. Include your name and institution, or not. It's up to you. Just make us laugh!

Top: Maud Gatewood, *Moon Trees*. In “Maude Gatewood Legacy Exhibit,” Danville Museum, VA
Bottom: Kader Attia, *Ghost*, (detail) 2007. Aluminum foil. In “Kader Attia,” Henry Art Gallery, WA

increasingly boards of trustees are instinctively more comfortable, then it is essential to enlarge the pool of curators with the qualifications to be tomorrow's museum directors."

To begin to accomplish this, the first group of ten learned about endowment management, conflict resolution, executive searches, museum marketing, and much more. It was agreed by those who attended that candidates for top jobs in museums need the skills of an art historian as well as those of a chief executive, investment banker, motivational speaker, political infighter, and veteran diplomat.

Cumberland Valley Photographers Win Kudos

The 75th annual Cumberland Valley Photographic Salon, a juried competition featuring work by amateur and professional photographers from Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia, was held in January of this year. The exhibition of winning photographs took place at the **Washington County Museum of Fine Arts** (MD).

Capa Cache Recovered

After years of quiet negotiations between the **International Center of Photography** and descendants of a Mexican general who had served under Pancho Villa and brought "the Mexican suitcase" to Mexico City, legal title to the contents—thousands of negatives of pictures taken by Robert Capa during the Spanish Civil War—reverted to the International Center of Photography. Capa had fled to Europe after shooting the Spanish Civil War, and in 1939 he fled from Paris where he left behind in his dark-room three cardboard valises—"the Mexican suitcase"—filled with images of the war.

Until his death in Vietnam in 1954, he had believed that the work had been lost during the Nazi invasion of Paris. But by 1994, rumors were rife that the negatives had survived after a circuitous journey to Mexico. "This is really the holy grail of Capa work," said Brian Wallis, chief curator at the center.

Hopes are high that the negatives will settle the question that persists in the Capa legacy: was his famous war image, *The Falling Soldier*, staged or was it a real moment in the Spanish Civil War when a bullet strikes a militiaman sending him reeling backward to his death. The picture helped the Republican cause when it appeared in the French magazine *Vue*, but despite persuasive cases made in defense of the picture, doubts lingered on—Capa was an unabashed Communist partisan of the loyalist cause and, with his partner Gerda Taro, was known to photograph staged maneuvers.

Since the negative of the picture in question has never been found, the Mexican suitcase negatives could end the debate, especially if there is a series of before- and after-images.

Curatorial Fellowships Announced

The **Warhol Foundation** (NY) announced the creation of new grants for Curatorial Research Fellowships. The foundation will accept proposals from institutionally affiliated curators twice a year at its regular March 1st and

September 1st deadlines. The new program of grants is designed to respond to the dearth of time and resources available to curators developing in-depth exhibitions.

Grants of up to \$50,000 will support travel, archival research, convening of colleagues, interviews, and time to write, among other activities. Curators at any stage of their careers are eligible to apply. Research must be attached to a potential exhibition and curators must have the formal support of their institution's director. [See www.warholfoundation.org for the grant guidelines, or call 212-387-7555.]

Museums Raided in Southern California

The *New York Times* reported in January that Federal agents had raided a Los Angeles gallery and four museums in Southern California as part of a five-year investigation into the smuggling of looted antiquities from Thailand, Myanmar, China, and Native American sites. The institutions in question were the Los Angeles County Museum of Art (LACMA), the Pacific Asia Museum in Pasadena, the Bowers Museum in Santa Ana, the Mingei International Museum in San Diego, and the Silk Roads Gallery in Los Angeles.

The owners of the Silk Roads Gallery, Cari and Jonathan Markell and Robert Olson, at the center of the investigation, are said to have smuggled looted antiquities from Thailand, Myanmar, and China with the purpose of donating them to museums on behalf of clients who would take inflated tax deductions for the gifts.

Affidavits connected to the investigation describe meetings between an undercover agent and the Markells and representatives of some of the museums. In some cases, the affidavits suggest that curators appeared to be aware that the objects they were accepting as donations had been, in fact, looted or illegally imported.

Michael Govan, director of LACMA told reporters that the museum had some 60 objects donated by the Markells or other museum members. He also stated that the museum was fully cooperating with authorities. No objects were removed from the museum; instead investigators' intent was to review and copy computer records regarding donations by the Markells and/or their clients. But search warrants for some of the other institutions included artifacts to be seized.

Drawing Center to Serve as Advisor

The **Drawing Center** (NY) announced that it has been named consultant to the Middlesbrough Institute of Modern Art (MIMA) in the United Kingdom, which was awarded £1 million (about \$2,064,000) by the UK Art Fund to build a collection of drawings over the next five years.

The Art Fund is the UK's leading independent charitable organization dedicated to saving art. Its new initiative, Art Fund International, has committed £5 million to help museums and galleries in the UK develop their collections of international contemporary art. Of 29 museums throughout the UK that responded to the fund's call for entries, five were selected. The collaboration between MIMA and The Drawing Center was the sole instance where an organization outside the UK was involved in such a partnership.

MIMA, housed in a new building that opened in January 2007, is located 250 miles north of London. The collection currently includes over 1,500



Willi Ruge, *Arno Boettcher* (detail), 1927. In "Foto," Milwaukee Art Museum, WI

drawings. "This partnership is extremely important to The Drawing Center," said Brett Littman, executive director of The Drawing Center. "As an advisor to MIMA, we hope to develop a long-term collaboration that will serve to benefit both institutions. The Drawing Center will, in the future, have access to MIMA's exceptional collection, which we will have helped shape."

Recidivism Reduced by Art

The **Salt Lake Art Center** (UT), in partnership with the Salt Lake County Sheriff's office, announced that its Art and Creative Expression (ACE) program held at the county jails has yielded promising results. Recidivism is down among prisoners who have participated in the program.

The program is conducted in six-week sessions. During the first three weeks, men meet twice a week with instructors and create their artworks; in the second three weeks, the women meet. After the program, participants' work is hung in the Education Gallery at the Salt Lake Art Center.

Four sessions were conducted in 2007. Of participants who completed one session: within 3 months of release, 18% returned to jail; within 6 months of release, 20% returned. On the other hand, in the general prison population (those who did not participate in the ACE program), within 3 months of release, 29% returned; and within 6 months of release, 34% returned—an overall recidivism reduction of 11% and 14%.

Gioconda Smile Finally Confirmed

Early in 2005, and first reported in the press this January, Armin Schlechter, a specialist in medieval literature at Heidelberg University in Germany, discovered some interesting handwritten comments in the margins of a 1477 copy of Cicero's *Epistulae ad familiars*. The book was full of marginalia written by Agostino Vespucci, a distinguished man who counted among his friends Machiavelli, the Florentine humanists, and Leonardo da Vinci himself. One of Vespucci's notes, dated 1503, commented on the author's reference to the ancient Greek painter Apelles. Like Apelles, wrote Vespucci, Leonardo was "perfect at painting the head and the upper part of the breast, but the rest didn't interest him very much." He also wrote that Leonardo was working on three paintings at the time: the *Battle of Anghiari* (a lost fresco), a Virgin and Child, and a portrait of Lisa del Gioconda. This, realized Schlechter, was the first written reference to the Mona Lisa.

Continued on page 10

Although experts have for a long time suspected and assumed that Lisa Gherardini, wife of Florentine merchant Francesco Gioconda, was the subject of the portrait, Schlechter's discovery was the first contemporary eyewitness report of the painting, given by a close acquaintance of the artist. "There is no reason for any lingering doubts that this is another woman," commented Frank Zöllner, a Leipzig University art historian. "One could even say that books written about all this in the past few years were unnecessary."

Update: Randolph College De-Accession

From Randolph College President John Klein: "Lynchburg Circuit Court Judge Leyburn Mosby Jr. yesterday denied the college's motion to dismiss a case [presented by an alumnae group, Preserve Educational Choice, Inc. (PEC)] seeking a temporary injunction against the sale of four paintings, and he granted a temporary injunction against the sale subject to the plaintiff's posting a \$10 million bond...."

"The college will file an expedited appeal of the decision with the Virginia Supreme Court. Until the requirements for injunction are met and until we receive a final ruling from the Supreme Court, the college will continue plans for auction.

"The college will vigorously defend its position in court and believes the Virginia Supreme Court will find in favour of the college and the right of the board of Trustees to make the decisions that are in the best interests of the college as a whole...."

Said Anne Yastremski, executive director of PEC:

"Unfortunately, it is unlikely that the plaintiffs will be able to raise such a large sum of money in such a short time period.... The amount of the bond is extraordinary and excessive, and paying it is simply unrealistic." □



Rules of Physics *continued from page 1*

ically and, perhaps more dramatically. Thus, as analysts of what viewers will not notice in a painting—for example, that a shadow looks convincing even though its shape does not match the object that cast it—artists become research neuroscientists of sorts. And the simplified physics utilized by them are grounded in the physiology of the visual brain.

Shadows

Artists can use an unlikely color and/or the wrong shape for a shadow without disturbing the apparent light, space, or form of the depicted object. The brain, it seems, recognizes shadows using only a small subset of the criteria that comprise real shadows. Only one criterion remains absolutely necessary: that shadows must be darker than their surroundings.

Studies of lighting direction have supported artists' intuitive findings that inconsistent direction of lighting is not readily noticed.

NOTES ABOUT AN ARTIST

"If your photographs aren't good enough, you're not close enough."

Robert Capa was born Andrei Friedmann in Budapest in 1913. He left home at 18 and in Berlin, found a job as a darkroom apprentice with a picture agency. He took pictures on the side, some of Leon Trotsky.

When Hitler came to power, Andrei went to Paris with his Polish fiancée, Gerda Taro. There they struggled to establish themselves as freelance journalists. Slow to succeed, they decided to form an association of three people: Gerda as secretary and sales representative; Andrei, a darkroom hired hand; and an imaginary employer, a rich and famous American photographer named Robert Capa, visiting France at the time. Andrei took the pictures, Gerda sold them, and credit went to Capa, the imaginary employer.

Their ruse was soon uncovered by Editor Lucien Vogel of the Paris magazine *Vue*. Nevertheless, he sent them to Spain, and Robert Capa became an overnight success for his unforgettable picture of a dying Spanish soldier. Soon thereafter Gerda died on the battlefield, and Andrei, now Robert Capa, took his grief to China to record the war there.

After China, he covered the Spanish war until its conclusion in early 1939. Back in America three years later, with the breakout of World War II, he was assigned by *Collier's* magazine in 1942 to join the invasion of North Africa. While there he switched to the staff of *Life* magazine; left Africa and went to Sicily with the paratroopers to join their winter campaign of 1943-44. Soon after Anzio he left Italy for London and a wild intermission with friends such as Ernest Hemingway, Irwin Shaw, William Saroyan, John Steinbeck, and others.



Robert Capa, *Men of the 16th Infantry Regiment seek shelter from German machine-gun fire in shallow water behind "Czech hedgehog" beach obstacles, Easy Red sector, Omaha Beach.* Magnum Photos.

On June 6, 1944, an assault barge landed Capa on Omaha Beach. He shot four rolls of the landing as he stumbled ashore under heavy fire; all but eleven frames were ruined in *Life's* London darkroom. However, the surviving images were published around the world, slightly out of focus, and Capa maintained his reputation as the most daring of war photographers.

Capa covered the birth of Israel in 1949 with Irwin Shaw. And then, having enough of war, he participated, with his old friends Henry Cartier-Bresson, David ("Chim") Seymour, George Rodger, and William Vandivert in the birth of Magnum Photos, the first and only international cooperative agency of free-lance photographers. This was new for the itinerant war photographer, now flirting with the international business scene, selling the work of Magnum photographers all over the world.

Writing became a new challenge for him after collaborating with Steinbeck on a 1947 Russian story for the *Ladies' Home Journal*. A collection of Magnum images of international family life was the forerunner of the *Family of Man* collection. He now had four books to his credit: one on the Spanish Civil War, one on the London Blitz, one with Steinbeck on Russia, and one on World War II.

In 1954, while visiting Japan with a Magnum exhibition, *Life* called on him to cover the Indochina front. On May 25, camera in hand, he was killed covering the horrors of yet another war. □

Lines

Why do line drawings work, given that no lines delineate objects in the real world? What do lines represent to the brain? With instinctive reasoning, artists through millennia have known which key contours are perceived by the visual brain for a viewer to identify the essential structure of an object in a line drawing. Scientist can learn something about the brain from this ancient shorthand of line drawings.

Transparency

To draw or paint a transparent thing through which background patterns appear, artists have other shortcut devices. The transparent material in the foreground must cross the background surface pattern—the front rim of a glass crosses the background water line; the hem of a sheer garment crosses the outline of the legs that are visible both below and above the fabric.

"X-junctions" are critical cues for the successful depiction of transparency" (F. Metelli,

Sci. Am). And, in fact, most other properties of transparent material are immaterial to the artist. They are not noticed by the visual brain.

Filling in Gaps

Meaningful images from fragments of color or shape, hints at elements of figures or objects, are conjured up by sheer memory. Impressionism and Cubism in particular rely on this memory-based reconstruction to complete scenes from partial representations. Minimal suggestions of real forms evoke remembered images.

Flat vs. 3 Dimensions

If we really experienced the world as three dimensional, a flat picture would become distorted when we moved in front of it. But it does not, because it is flat. Were it folded, it would distort as we moved around it. Our ability to interpret images that are not three dimensional proves that we do not, in fact, experience the real world as truly three

Continued on page 11

exotic molecules are available in an ever-growing number of colored concoctions that often remain industrial secrets. From an analysis perspective, it's a nightmare.

Even if you know the recipe, there remains the issue of preservation—how to keep bright colors vibrant for centuries. Since 2002, the Getty Conservation Institute in Los Angeles has been working with the UK's Tate galleries, the University of Torino in Italy, and the National Gallery of Art in Washington to understand the unique problems that modern paints present for conservators.

Acrylic-based paints or primers, for example, are present in around a third of the Tate's collection of modern paintings—they were used by Andy Warhol and Roy Lichtenstein, among others. Meanwhile Op Art proponent Bridget Riley favored household emulsion, while Jackson Pollock preferred gloss enamel paint. Unfortunately, many of these are proprietary mixtures, and conservators have little information on how to identify them, how they might alter with age, or how they may be affected by conservation treatments or conditions in a gallery.

There is a delicate balance between the interests of curators wishing to show off a work and the conservators who wish to preserve it. What is certain is that light is bad news, almost always causing damage over the long term. Acrylic and enamel paints, for example, suffer when light breaks down their constituent polymers, creating a more brittle, cross-linked structure. This can lead to cracks like those that have appeared in the enamel paint used in Pollock's paintings.

The mixed-media nature of modern art is making conservation even more difficult. Paint and canvas have given way to new means of expression; everything from rubber and steel to the man-made fabrics on an unmade bed. Plastics cause particular concern since, like some paints, these materials are vulnerable to damage by light, which can turn them brittle. In addition plasticizers or solvents left over from the manufacturing process can migrate out and react with nearby material.

Victory Boogie Woogie

Mondrian's atypical painting incorporates a number of vulnerable materials. He used masking tape to stick colored cardboard shapes onto the canvas. The adhesive layer in the tape could fail, and some of the cardboard pieces could eventually break down releasing acid that could eat away at adjacent materials. He also used tapes made from cellulose-based polymers—many prone to degradation and discoloration, and many made with chemical softeners which could migrate out causing the tapes to become brittle.

Final analysis showed, however, that *Victory Boogie Woogie*, despite anxiety to the contrary, was in relatively good health. In addition, the mountains of data gathered during the exercise will serve as a paradigm for conservators, allowing them to compare the painting with similar tests taken 10 years, or even 100 years, down the road. The results comprise an intimate look at how any work of art, but particularly this work of art, ages. □

Defining Relationships

...A work of art always remains open for interpretation, drawing the spectator into the shape of the artist's visualization, but without being able to exert fixed control over the feelings it induces.... Scientists may wish to engage the reader or spectator in a wonderful journey of imaginative visualization, but in the final analysis they wish to communicate an interpretation that embodies testable content in an unambiguous way. But behind these diverging streams of intention runs a turbulent river of shared intuitions about the order and disorder of things.

—Martin Kemp, University of Oxford

In an article written for *Nature*, Art History Professor Kemp opined that shared intuitions about the natural world drive the pursuits of both artists and scientists. Yet, to generalize about the relationship between the two is impossible: science ranges from the observed to the invisible; art, from the figurative to the abstract.

Beyond a superficial observation of the influence of science on art, or art on science, are deeper realms of inquiry: issues of cognition, perception, intuition, mental and physical structures, the communicative and social action of images, and the role of the aesthetic as a shared instinct, all of which reach across the disciplines.

"Historically," says Kemp, "the most straightforward relationships have been iconographical and illustrational. The Renaissance revolution in naturalism allowed both the convincing illustration of scientific specimens and procedures, and the production of portraits of scientists in various media. No science was left untouched by the new modes of illustration, whether the descriptive science of anatomy or the three-dimensional geometries of cosmology." Portraits of scientists and the image of the scientist in action were produced wholesale. While portraits of professionals are still very much in vogue, artists now take a more creative approach to their subjects. "Mark Quinn's 'portrait' of Sir John Sulston, using a culture from Sulston's own DNA, is perhaps the most striking case in point."

Structure in nature, dynamic and static, mental and virtual, exists in both art and science. "Comparable instincts operate at all scales in the scrutiny of our natural and technological worlds, and the cosmos," Kemp explains. Take, for example, work by Nam June Paik, who reaches out into infinity through the rebounds of lasers on basic geometrical figures. "His modeling of light and space has clear affinities with physicists' and astronomers' visualizations of space/time. But the end product of Paik's installations is designed to induce a sense of awe through a suggestive extension of what can be rendered visible, rather than provide a model that is available to testing.

"In quieter realms, the traditional ordering of painted and sculpted spaces through optical geometries and Pythagorean harmonics, explored by Renaissance artists such as Piero della Francesca, continues to present new possibilities."

Scientists resort to artistic presentations in their publications, their explanations of complicated phenomena, and in fact, in formulating their hypotheses. Artists resort to the intricacies of physics, the natural, chemical, and mathematical worlds to inspire their work, be it realistic or abstract. □

dimensional. Flat images have dominated our visual experience; they are convenient and economical. The acceptance of flat images is common to all cultures and in other species. Even babies are able to interpret flat images of teddy bears or cars or dolls as a substitute for the real things.

Blurry vs. Clear

Recent neuroscience studies of the connection between vision and the centers of emotion have shown that subjects presented with blurry faces expressing

fear respond emotionally: the centers of emotion in the brain react strongly whereas the centers for face recognition respond weakly.

Conversely, areas responsible for conscious face recognition respond weakly to blurry images and strongly to clearly detailed images.

Impressionists, particularly, intuitively found this to be true and working in patchworks of color and shape, they succeeded in reaching our emotional centers.

Reflection

Science has demonstrated that people have little or no awareness of where reflections ought to be, or even what they should look like, even though they have been looking at mirrors their entire lives. Therefore, in a painting, almost any reflection, whether it is correct or not, becomes believable. Artists have been known to show a person looking at his/her reflection and the reflection on the same canvas when often this is geometrically impossible.

Artists have known for centuries that the pattern of reflection on a surface does not need to match the real scene around it to appear as a bona fide reflection. The reflection need only match the general properties of the scene, and curve in concert with the implied curvature of the shiny surface.

Neuroscience

"Paintings and drawings are a 40,000-year record of experiments in visual neuroscience, exploring how depth and structure can best be conveyed in an artificial medium. Artists are driven by a desire for impact and economy: thousands of years of trial and error have revealed effective techniques that bend the laws of physics without penalty. We can look at their work to find a naïve physics that uncovers deep and ancient insights in the workings of our brains. Discrepancies between the real world and the world depicted by artists reveal as much about the brain within us as the artist reveals about the world around us."

[Patrick Cavanagh is in the Vision Sciences Laboratory, Department of Psychology, Harvard University] □



Sue Johnson, *Jell-O Surprise (fawn)*, 2007. Slip-cast vitreous china. In "Eating Wonderland." University of Richmond Museums, VA



Dyad, Egypt, Late Dynasty 18,
1352-1292 B.C. Limestone and Pigment.
In "Excavating Egypt,"
Columbia Museum of Art, SC



Alex Katz, *Dark Glasses* (detail), 1989. Oil on canvas.
In "Face Forward," Vero Beach Museum of Art, FL

The Finishing Touch

[The following information was supplied with the announcement of The Finishing Touch: Understanding the Techniques of American Impressionist and Tonalist Painters, an exhibition organized by the Florence Griswold Museum (CT). The exhibition explored the controversy surrounding the varnishing practices of early 20th century artists. Lance Mayer and Gay Myers, independent painting conservators affiliated with the Lyman Allyn Art Museum (CT), were guest curators for the exhibition. The team has worked for museums across the country as well as for private collectors. Using works from the Florence Griswold Museum's collection, which they recently conserved, they explained the differing attitudes of Tonalist and Impressionist painters about the use of varnish to enhance and protect artwork—opinions key to understanding these rival artistic movements. This debate still concerns conservators and art historians, as the varnishing process not only affects the appearance of paintings but also alters them over time. Notably, many works were varnished against the wishes of their maker, presenting those responsible for their care today with difficult choices.]

To Varnish or Not to Varnish

Tonalist painters like Henry Ward Ranger, considered the founder of the Lyme Art Colony, and Louis Paul Dessar were greatly influenced by their admiration of the Old Masters. They used glazes and varnish to imitate the golden tone of those paintings, which was often caused by old varnish layers that had darkened. Paintings like Dessar's *The Wood Chopper* led Impressionists to jokingly label Tonalists the

"baked apple" or "brown gravy" school.

By the 1880s, some American painters began to take inspiration from the French Impressionists, who were then leading the European avant-garde. While Tonalists believed that the passage of time would improve their paintings, Impressionists feared that the discoloration of varnish over time might dim the brightness and clarity of their colors. To prevent this kind of change, American Impressionists such as Willard Metcalf, John Henry Twachtman, and Theodore Robinson avoided excess oil or varnish in their paints, and some followed the practice of Monet and Camille Pissarro in not varnishing their paintings after they were completed. The resulting paintings seemed either shockingly colorful or surprisingly matte and pastel-like to viewers unaccustomed to this new aesthetic.

"Some Americans embraced the matte aesthetic by squeezing their oil paint out onto blotters to absorb excess oil. Others painted on absorbent canvases, which were advertised as making paintings 'dull' or 'flat'...like so many of the modern French school," says Mayer.

Against Their Wishes

Despite many Impressionists' strong feelings against its use (Willard Metcalf even wrote "do

not varnish" on the backs of some of his canvases), varnish was often added to a work after it left their hands. Why? Ranger, among a few others, believed that a coating of varnish would protect a painting. On one occasion, he tried to convince a Boston collector to have all of his paintings by Monet coated with varnish, citing as a precedent the fact that the dealer Joseph Durand-Ruel had varnished



Stereograph from the Middle East. In "Balancing the Lenses,"
California Museum of Photography

paintings by Monet. Durand-Ruel's actions are now remembered as a notorious example of insensitivity to an artist's wishes. "For a century, American Impressionists' preferences about the appearance of their paintings have been overlooked.... Mayer and Myers have recovered vital information about how these painters wanted their works to be seen," said Amy Kurtz Lansing, Florence Griswold Museum curator. "Their study, which will be the subject of a forthcoming book, describes one of the most exciting directions in art conservation today."

"Conservators and curators have come to appreciate the degree to which subtle differences in the materials used by artists can have important effects on the way their paintings look," say the two author/conservators. "...studying artists' notebooks, diaries, letters, supply catalogues, and instructions manuals can lead to a much deeper understanding of how paintings were made." □