

# Research Reports

CULTURAL HISTORY

## Lunch boxes offer a nostalgic look at the past for both adults and children

By Janice Kaplan  
Special to Research Reports

Come Labor Day, when summer fades into fall, schoolchildren across the country will be getting haircuts, buying new shoes and engaging in an age-old tradition: choosing new lunch boxes. Will this year's top seller depict the summer's hottest motion-picture star or the musical group dominating the top-40

charts? Can any modern design even come close in popularity to the images that decorated the metal lunch boxes sold between 1950 and 1980, an era considered the "golden age" of metal boxes? Two new exhibitions will take a nostalgic look at metal lunch boxes and reveal why these important artifacts of American popular culture resonate both with chil-

dren and adults. "Lunch Box Memories," a traveling exhibition organized by the Smithsonian's National Museum of American History, Behring Center and the Smithsonian Institution Traveling Exhibition Service, will begin a national tour in November.



Super heroes, such as the Bionic Woman, were popular images on metal lunch boxes.

A separate display of lunch boxes from the Smithsonian collection, organized by the National Museum of American History, will be on view in the museum's cafeteria in the near future.

**Childhood joy turns to research**

The exhibitions' lead curator, David Shayt, a museum specialist in the National Museum of American History's Cultural History Division, first became interested

in the metal containers in 1989. That was the year fellow Curator Larry Bird organized an exhibition on American television that included two dozen examples of classic metal lunch boxes decorated with images from popular television shows.

Recalling the joy that came from his own childhood lunch box that was emblazoned with submarines, Shayt, at 49, began exploring the history of the metal lunch box.

Along with Shayt, Charlie McGovern, a curator at the National Museum of American History, and Marguette Folley-Cooper, a project director at the Smithsonian Institution Traveling Exhibition Service, are co-curators of the traveling exhibition.

Shayt discovered in the Smithsonian's collection examples of lunch containers from earlier times—the wire-handled buckets and pails carried by coal miners and factory workers during the 19th century, the cast-off tobacco tins used by schoolchildren around the turn of the century and a rare première model unveiled at the 1939 World's Fair in New York. He considered these as precursors to the more recent models.

**A different view**

But the focus of Shayt's investigation was the suitcase-shaped, side-opening varieties of his youth with their depictions not only of favorite television programs but also of important themes of postwar American culture, such as the space race, the Cold War and changing gender roles.

"These images have a unique ability to transport us across time, to re-introduce us to our past and to the challenges and dreams of a nation," Shayt says.

TV cowboy Hopalong Cassidy led the way. In 1950, Nashville-based Aladdin Industries introduced the "Hoppy" box. Aladdin's major competitor, American Thermos, entered the market a couple years later with a Roy Rogers design.

What followed was a veritable explosion of full-color boxes and matching thermos bottles. Manufacturers introduced new designs each fall, "the way auto manufacturers revealed their new car models each year," Shayt says. About 450 different designs were produced from 1950 to 1985.

**Lunch boxes galore**

Shayt was struck by the variety. The boxes honored the entertainment icons of the day—from Lassie to the Six Million Dollar Man. They also tracked the TV shows that baby boomers grew up on—from *Lost in Space* to *Laugh-In*. The boxes depicted sports heroes, such as the Harlem Globetrotters and Pele, and superheroes, including Batman and the Bionic Woman.

Music sensations were well-represented—the Beatles and the Bee Gees—as were hit movies, such as "Star Wars" and "Indiana Jones and the Temple of Doom." Consumers also were attracted to images of characters that broke new ground, such as TV's first African American lead actress, Diahann Carroll, star of the hit TV series "Julia."

But the most popular box of all time was a container in the shape of a bus that was inhabited by beloved Disney characters. That design returned to store shelves every fall for about 10 years.

Shayt, however, was interested in more than just the decorations. He also saw the development of the metal lunch container as an example of "steel's penetration into everyday life, especially after World War II, when the American steel industry was looking for new markets to use its capacity."

But while the steel industry was thinking outside the "box," another story was

*'Lunch boxes,' continued on Page 6*

**Museum studies** ■ Stephen Weil, a Smithsonian senior scholar emeritus, is sitting in the café in the Smithsonian's Arts and Industries Building talking about his new book, *Making Museums Matter*. The book not only documents the revolutionary changes taking place in museums but also traces the current debate about the relevance of museums back to 1917. That's when pioneering American museologist John Cotton Dana argued that the future of museums lay not in amassing more objects but in providing a "full and rich utility" to its community.

If museums are to survive, Weil says, they must provide experiences that result in changes, in positive differences in knowledge, attitude, or values in the quality of individual or communal lives. In Weil's words: "If our museums are not being operated with the ultimate goal of improving the quality of people's lives, on what [other] basis might we possibly ask for public support? Certainly not on the grounds that we need museums in order that museum professionals might have an opportunity to develop their skills and advance their careers, or so that those of us who enjoy museum work will have a place in which to do it."

The Distinguished Service Award from the American Association of Museums hanging in Weil's office attests to his own commitment to museum work, the phase of his career that began in 1967 at the Whitney Museum and continued when he was recruited in 1974 for the number-two spot at the Smithsonian's about-to-open Hirshhorn Museum and Sculpture Garden. Weil retired in 1995, moving his office next door



Stephen Weil

to the Arts and Industries Building, where he is housed in the Smithsonian Center for Education and Museum Studies with a title worthy of an elder statesman: scholar emeritus. That office is where many of the insightful and frequently witty essays in *Making Museums Matter* were composed.

"The more I'm in museums, the more I'm fascinated by the huge variety of things they can do," Weil says. He has watched with great interest the shift in museums

from focusing on objects to focusing on processes, of "being inward to being outward, of being fascinated with antiquarian and sometimes precious objects to asking questions about how those objects can be used in service to the community."

In contemplating the future, Weil writes that museums are beginning to "melt at the edges," a reference to the innovative partnerships taking place between museums and schools, and museums and libraries. For instance, a branch of the Rochester, N.Y., public library, located in that city's Strong Museum, allows visitors to borrow books related to museum exhibits.

He concludes the book with a series of serious questions for forward-thinking museum professionals: "To what extent has your museum articulated a distinct obligation to future generations? To what extent is that obligation explicitly reflected in its day-to-day operations? To what extent is it implicit?"

Weil says he enjoys writing more than anything else in the world. Making fun of the sometimes laborious task of putting thought to paper, he chirps, "Look, I got a page done. But what a page!"

Weil also is the author of three other collections of essays, including *A Cabinet of Curiosities: Inquiries Into Museums and Their Prospects*.

*Making Museums Matter* was published by Smithsonian Institution Press and sells for \$40 (hardback) and \$18.95 (paperback). It can be ordered by calling 1 (800) 782-4612.



The Smithsonian's National Museum of Natural History staff who helped with the EMu project examine mollusk shells from the Invertebrate Zoology collection. Data on these specimens are now available via EMu. From left are Data Management Technician Ducphong Nguyen, Computer Specialist Jim VanMeter, Kristian Fauchald, Anna Weitzman and Data Administrator Linda Ward. (Photo by James DiLoreto)

### INFORMATION TECHNOLOGY

## Natural history database offers access to users throughout the world

By Colleen Hershberger  
Smithsonian Office of Public Affairs

A young woman in South Africa contacts the Smithsonian's National Museum of Natural History and requests records of all rock, bug and plant specimens collected in her township, as well as any archaeological sites that may be there. She is studying the interaction of geology, climate, humans, plants and animals in the area.

While this is not an unusual request made of a museum with the largest collection in the world, it is one that has been impossible to fulfill.

A massive project is now under way to fold the museum's nearly 30 database systems into a new electronic Multimedia Catalogue database system using a product called Electronic Museum from KE Software. The new system, called EMu, serves as a central repository for all collections and related research data in the museum.

### Gathering together

Since the late 1960s, museum staff have been capturing text information and, more recently, images in electronic form. A wide array of databases were devised over the years—from custom-developed mainframes and off-the-shelf systems to ones scientists developed themselves to meet individual research needs. Many of the systems were difficult to use or inconvenient to access. Some databases were even "dead," or no longer associated with any current software.

This project engulfs all these different databases with their various legacies and

brings them all into one standard, fully integrated system with an easy-to-use Web interface, at [www.mnh.si.edu/mcs](http://www.mnh.si.edu/mcs).

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Smithsonian Institution

## Research Reports

No. 109 Summer 2002

Published quarterly by the Smithsonian Office of Public Affairs, Smithsonian Institution Building, Room 354, MRC 033, P.O. Box 37012, Washington, D.C. 20013-7012, for Smithsonian Contributing Members, scholars, educators, museum personnel, libraries, journalists and others. To request this publication in an accessible format, call (202) 357-2627, ext. 124 (voice) or (202) 357-1729 (TTY).

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# Silver services for warships are symbolic reflections of rise of U.S. Navy

By Michael Lipske  
Special to Research Reports

This isn't your grandmother's old punch bowl, not with those engravings of Birmingham, Ala., steel mills or the stirring scene from Gen. Custer's Last Stand. And grandfather never kept his cigars in a sterling silver humidor modeled after an adobe building in old Santa Fe, N.M., on which even the miniature chilis strung on an outside wall are crafted from silver.

These and hundreds of other gloriously extravagant silver pieces represent a little-known strand of U.S. military history—the presentation of one-of-a-kind silver table services to Navy warships.



In his office at the Renwick Gallery, Kenneth Trapp carefully reviews pages of slides of silver services from U.S. Navy warships. (Photo by Jo Ann Webb)

Usually paid for by public subscription, the custom silver services have been commissioned for scores of battleships, cruisers, submarines and other Navy vessels since 1889. The punch bowls, coffee and tea services, goblets, water pitchers, wine coolers, fruit baskets, bread baskets, meat platters, candelabras and other objects were used for formal occasions aboard ship, such as visits by foreign dignitaries.

The fact that the services were meant to be used ceremonially, however, puts them in a class apart from usual examples of presentation silver, according to Kenneth Trapp, curator-in-charge at the Renwick Gallery of the Smithsonian American Art Museum.

Something else distinguishes the Navy silver from, say, a trophy given to the owner of a winning racehorse or the key to the city presented to a military hero. "These were objects given to an inanimate object by thousands or millions of citizens," says Trapp, who is chief investigator for "Silver on the High Seas," an ongoing Renwick study of U.S. Navy presentation silver, as well as a new exhibition slated for fall 2005.

## Historical beginnings

The American practice of presenting silver services to warships parallels the rise of the modern Navy, Trapp says. In decline in the years after the Civil War, the U.S. fleet entered an era of revitalization in the 1880s. Congress authorized a succession of new steel ships—cruisers, such as the Chicago and the Boston, and battleships, including the Indiana, the Massachusetts and the Oregon.

Naming those ships after states and cities or after famous battles, as with the Alamo, was a shrewd military maneuver to whip up civic pride in the fleet. Presenting the new ships with silver services paid for by public subscription also gave Americans a sense of ownership. "It was a way for citizens to buy into the U.S. Navy," Trapp says.

## Researching a tradition

Trapp recalls seeing the massive, elaborate punch bowl created for the USS Cincinnati on display in a public library when he was an industrial design major at the University of Cincinnati. He came across more pieces of Navy silver years later when, as a curator of decorative arts at the Oakland Museum of California, he was preparing an exhibit on California's arts and crafts movement.

But only recently has Trapp begun pulling together the full story behind all those sterling silver tureens and compotiers. His is the first formal study of U.S. Navy presentation silver services.

In the Renwick's basement library, a large wall map of the United States dotted with pins designating the origins of services helps Trapp visualize the scope of the tradition. Red pins designate services given to ships named after a state; yellow pins are for services that went to ships named for cities. Blue and pink pins stuck in the map represent complete services or single pieces presented to ships by an individual or an organization.

However, most of the silver services were gifts from the wider public, paid for with fund-raising drives. A piece for the Indiana is inscribed: "Presented by the Schoolchildren of the State of Indiana."

"We don't know how this tradition came about," Trapp says. "We don't have the document that states how it all began."

He believes that the first silver service commissioned for a modern Navy ship was designed for the cruiser Chicago in 1889. And he knows that the silver on the Maine went down with the ship at the start of the Spanish-American War, but that the service was quickly recovered.

A silver service commissioned for the Idaho was stolen while on public view. West Virginia never got to present a silver service to its namesake ship. "Someone there embezzled the money," he says.

## State representations

Surviving services are rich advertisements for the wealth of states. The Arizona's service is made of silver and copper from the Arizona mines. The Nevada's silver came from the Comstock Lode. The California's punch bowl is adorned with gold bears.

Silver service for the nuclear submarine Long Beach is adorned with representations of an atom. The punch bowl for the Montana is engraved with scenes from the state's history, including Custer's Last Stand. Wyoming, the first state to grant women the right to vote, put portraits of a pioneer woman and of Sacagawea, the Indian woman who guided Lewis and Clark, on the punch bowl for the USS Wyoming. Orange blossoms and alligators

embellish the punch bowl for the Florida. These days, the silver service commissioned for the Florida is on display at the governor's mansion in Tallahassee. The Nebraska's silver service is at the state museum in Lincoln.

## Silver 'mining'

"I'm getting ready to make a trip to see the services in Nebraska and the Dakotas," Trapp says. He will examine and photograph the pieces and gather what historical information he can.



This 1945 water kettle made by the Gorham Manufacturing Co. was on the USS Dayton.

Seeing other examples of Navy silver won't be easy. While some services are still on ships, others are at the Pentagon or in Navy supply depots, mayors' offices, libraries and other places. Some silver has migrated to other ships. For example, the Louisiana silver service is now on the aircraft carrier Theodore Roosevelt.

Trapp hopes to answer some of his questions about the origin of the tradition of presenting silver to ships by mining Navy archives and old records of the National Archives' Bureau of Navigation.

He also plans to search paper troves belonging to silver manufacturers, such as Tiffany and Gorham, as well as periodicals and other sources.

How the services have been used, how much they represented a public relations effort to build support for fleet modernization and how American citizens felt about the silver services at the time they were commissioned are topics to be addressed in a book on the presentation of silver that Trapp expects to see published and in an upcoming Renwick Gallery exhibition.

"We're hopeful that people will come in and be happy at seeing their state or city represented," Trapp says. The curator expects gallery visitors to be moved not only by the beauty of precious objects but also by the stories the silver will tell about national pride and Navy history.

"This will be the very first study of this tradition," he says. "It's really a phenomenal find in the history of American decorative arts."



This silver punch bowl and plateau were presented to the USS Nevada in 1916. (Photo by Scott Klette, courtesy of the Nevada State Museum, Carson City, Nev.)

# A curator's research credits work and life of an under-recognized artist

By Kristen Hileman  
Hirshhorn Museum and Sculpture Garden

**O**lga Viso's investigation into the life and art of Ana Mendieta (1948-1985) has taken the Smithsonian's Hirshhorn Museum and Sculpture Garden curator of contemporary art from the open stretches of Iowa's farmlands to the lush vegetation of Cuba and the Mesoamerican ruins of the valley of Oaxaca, Mexico.

Her interest in the artist goes back to the early 1990s when, as a curator at the Norton Museum of Art in West Palm Beach, Fla., she met several Cuban-born artists of Mendieta's generation who were attracting international attention, as well as the collectors who were supporting their efforts.

Now, for the Hirshhorn Museum, Viso is organizing the most comprehensive exhibition to date to honor this Cuban-born artist. It is scheduled for a Washington, D.C., premiere in 2004.

Emerging as an artist in the early 1970s—first in Iowa and then in New York City—Mendieta “had a brief yet significant career,” Viso says, “that subsequently influenced several generations of artists who also have worked with their bodies and explored themes associated with gender and identity.”

“Her performance-based works in the natural landscape,” Viso adds, “which the artist described as ‘earth/body sculptures,’ were based on the silhouette of her body.”

“Constructing her ‘siluetas’ out of branches, leaves, flowers and other earthen materials,” Viso continues, “Mendieta conceived ephemeral actions that remain for us in the form of slides, photographs and film. There also are numerous drawings and more ‘permanent sculptures’ made toward the end of her career.”

## ‘Giving life’ to an artist

Viso recently was awarded a prestigious Curatorial Research Fellowship from The Getty Grant Program, Los Angeles, to turn her full attention this summer to transforming the vast amount of original research she has collected since mid-2000 into a comprehensive catalog manuscript.

“We are extremely fortunate that Ana kept everything,” says Viso, who, with the cooperation of Mendieta's family and estate, acquaintances and colleagues, has been granted unprecedented access to 10,000 documentary slides and photographs, years of correspondence, personal records and libraries, and other

documents related to Mendieta's evolution as an artist.

Nevertheless, Viso says, “the artist's exhibition history and bibliography have never been fully researched, and no complete life and career chronology has ever been published.”

The definitive monograph on Mendieta, to be published for the exhibition and distributed internationally, will address this oversight. Compiled with the aid of part-time research assistant Laura Roulet, the catalog will include an expanded timeline of Mendieta's life and work, which juxtaposes breakthroughs with the larger art world and global events. It also will include essays by Viso; Julia Herzberg, an independent art historian; Chrissie Iles, the Whitney Museum of American Art's curator of film and media; and Guy Brett, a British art critic and scholar.

In addition, Viso plans to donate her own files and transcripts of interviews to the Smithsonian's Archives of American Art and is working to facilitate the donation of the artist's papers as well.

## Searching for answers

As an explanation for Mendieta's underrepresentation in the art historical lexicon, Viso points to the fact that, until recently, many scholars have interpreted Mendieta's



Ana Mendieta is shown here in a Zapotec tomb in Oaxaca, Mexico, creating a performance-based artwork.



Olga Viso sits in a Zapotec tomb in Oaxaca, Mexico, where Ana Mendieta made several earth/body works, such as the one below.

work from “rather limited” contexts, either concentrating on her feminist orientation or emphasizing her identity as an exiled Cuban.

On the latter point, Viso says, “While Mendieta desired to recuperate her lost homeland and often referenced Cuban, as well as Mexican, sources in her art, her influences and, indeed, her significance were vastly broader.”

Mendieta's mysterious and tragic demise is another factor. Accounts of her life and death have tended to focus more on the sensational aspects. The artist's fatal fall at age 36 from the window of her sculptor-husband Carl Andre's New York apartment created a public scandal, as did Andre's ensuing murder trial, which ended in his acquittal.

Viso seeks to look beyond these events and examine the work in the context of its time, as well as its relevance today.

## Retracing the artist's ‘steps’

Supported by a Smithsonian Center for Latino Initiatives planning grant, Viso has physically retraced key phases of the artist's evolution, including her student years in the Intermedia Program at the University of Iowa, which was an innovative cross-disciplinary approach to art-making to which Mendieta was introduced as a student in the 1970s.

Viso also looked at Mendieta's annual explorations of pre-Hispanic ruins around Oaxaca through the 1970s, her arrival in New York City in 1978 and her final year in Rome at the American Academy.

In addition, Viso traveled frequently to Miami and New York to conduct interviews and view examples of Mendieta's art, which has been collected broadly in these cities, as well as in other places in North America and in South America.

“My research process has been comparable to piecing together a jigsaw puzzle,” Viso says. In her

travels, she has spoken with many of Mendieta's associates, including relatives, friends, collectors, curators, artists and an early mentor in Iowa named Hans Breder. Some 100 interviews will have been conducted by the end of the project, adding a human dimension to the text-based record.

During a trip to Cuba in the spring, Viso, whose Cuban heritage allowed her to navigate language and cultural barriers, had the thrill of discovering residues of Mendieta's rock carvings along overgrown embankments near Varadero Beach and Jaruco Park. Recalling ancient goddess imagery, Mendieta made these works—some of which were presumed lost or destroyed—in 1981.

Viso also met members of an artists' collective that have created earthen silhouette forms reminiscent of Mendieta sculptures in order to conjure up the artist's presence in their working environment. She suggests that “this ritual act is a touching testament to Mendieta's relevance for artists working in Cuba today.”

By the end of the summer, Viso intends to conclude her information gathering and writing and focus on the exhibition. It will travel to New York's Whitney Museum of American Art and two other venues in the United States, which have not been confirmed. Financial support from the Judith Rothschild Foundation and Craig Robins and Ivelin Robins will make the traveling exhibition possible.

## Facing challenges

Because many of Mendieta's artworks were nonpermanent or site-specific, Viso is faced with the task of re-creating their full impact within the museum. “We will use video, film and slide projections to convey the importance of sequentiality in many of Mendieta's performances and time-based actions,” she says.

However, the use of photographic materials raises the challenge of deciphering whether or not the documentation of Mendieta's activities constitute independent artworks. The artist's own slide labels and notations provide key clues, as do interviews with her contemporaries.

## Exhibition plans

To further illuminate the importance of process to Mendieta, Viso is planning an exhibition gallery devoted to documentary materials—brochures, photos, sketchbooks and miscellaneous items by Mendieta and her peers related to the artist's experience in the Intermedia Program.

“For most visitors,” Viso says, “the [exhibition] will provide the context for Mendieta's work, as well as an important introduction to a highly ephemeral and performative mode of working in the 1970s.”

“One of the problems with scholarship on Mendieta,” Viso continues, “is that she has repeatedly been seen as an artist working in isolation, curiously removed from the context of her time and the generation of the 1970s, of which she was a crucial part.”

The exhibition also will present more traditional object-based work, including a drawing and body-scaled sculpture fash-

*‘Mendieta,’ continued on Page 5*

# Anthropologist studies Smithsonian's work with FBI forensic investigations

By Michael Lipske  
Special to Research Reports

**T**ourists snap them up by the dozens from souvenir trucks parked just outside of the Smithsonian's National Museum of Natural History. But if anyone has a right to wear one of those baseball caps emblazoned with the letters FBI, it is Anthropology Curator Douglas Ubelaker.

On more than 700 occasions since 1977, Ubelaker has, figuratively, doffed his research scientist's cap and donned an FBI hat. He is the latest in a line of Smithsonian physical anthropologists who, as experts at analyzing human skeletal remains, have been asked by the FBI to help solve forensic puzzles.

Not too long ago, Ubelaker undertook to investigate the investigations themselves, by studying the types of cases that the FBI had brought to the museum over a span of more than 30 years. *An Analysis of Forensic Anthropology Cases Submitted to the Smithsonian Institution by the Federal Bureau of Investigation From 1962 to 1994* (No. 45 in the Smithsonian Contributions to Anthropology series) was co-written by Ubelaker and Gretchen Grisbaum, a former intern in the museum's Anthropology Department.

"The study showed how our work with the FBI has continued, yet the nature of the cases has changed," Ubelaker says. "It is simply because there are so many good people in the field now."

In fact, the tiny handful of experts who once could apply lessons learned from studying ancient human remains to modern cases of murder or mysterious death has evolved into a national network of forensic scientists. That growth has led to a more focused forensic role for Smithsonian physical anthropologists.

## Changing trends

"In the early days, we used to see whole skeletons," Ubelaker says. Now, packages from the FBI are apt to be smaller, and the museum increasingly is asked to perform specialized analyses that complement work by other forensic scientists. A skull will come in accompanied by a request for a facial reconstruction. Or Ubelaker will be given a sliver of bone from a weathered

crime scene and asked to rule whether it is human or animal.

The roots of forensic anthropology harken back to the Smithsonian's earlier days. Ales Hrdlicka, first head of the National Museum of Natural History's former Division of Physical Anthropology, was a founding father of physical anthropology in the United States. In addition to building the department's extensive collection of human remains and directing anthropological field studies, he found time to consult on FBI forensic cases during the 1930s.

Hrdlicka's successor as curator of physical anthropology, Dale Stewart, also was a leader in developing the field of forensic anthropology and continued the tradition of FBI consulting. When Stewart was named director of the museum in 1962, responsibility for the FBI cases passed to Lawrence Angel. He took on more than 500 cases for the FBI and other police agencies.

Ubelaker and Grisbaum's analysis focuses on 565 cases from the files of Angel and of Ubelaker, who took over the role of FBI consultant in 1977.

Data from each case recorded for the study included when and how skeletal remains were discovered and in what context they were found—such as near water, buried underground or found inside a car, mine shaft or mailbox. Age at death, sex, ancestry and estimated time since death also were gleaned from case notes, along with factors such as type of trauma.

"High-velocity trauma," also known as a gunshot wound, was the most common. The study noted whether a positive identification had been made in a case and whether the bones brought by the FBI turned out to be modern or archaeological.

## Surprising revelations

Grisbaum and Ubelaker's study revealed patterns in the museum's forensic cases, some expected, others not. The study found that human remains were much more likely to be discovered in fall and spring, especially November or May—months when hunters are afield or people are returning to the outdoors after winter.

and the types of leaves that act as a paper substitute in a series of drawings. Michael Mason, an exhibit developer at the Smithsonian's National Museum of Natural History, also has provided insight into some of the Afro-Cuban ritualistic aspects of Mendieta's art.

Viso is close to realizing a longstanding desire to bring full recognition to this often mythologized figure. Now, after several years of intensive research, she settles in for a summer of reflection, consolidation and writing.

The authors found that skeletal remains from certain age groups were more likely to show evidence of trauma. Young adults, ages 19 to 34, accounted for 46.5 percent of all high-velocity trauma and 46.7 percent of sharp-force trauma—knife wounds. Middle-aged individuals, ages 35 to 60, accounted for 42.9 percent of blunt-force trauma and 32.6 percent of high-velocity trauma.

The study revealed a major difference between Smithsonian cases and national crime statistics. Nationally, males have out-

A decline in consultations in the 1980s may be explained by the many forensic anthropologists that had become available nationally. By the end of the study period, the caseload was again rising, a change the authors say may be due to a spike in crime or even increasing attention on television to forensic sciences.

On average, "I do about a case a week" for the FBI, Ubelaker says. The forensic work "grows on you," he adds. "The cases become complex, and they often open up research doors."



Douglas Ubelaker, shown here in his office in the Smithsonian's National Museum of Natural History, works with the FBI to solve crimes. (Photo by James DiLoreto)

numbered females as homicide victims by three to one. However, in the FBI-Smithsonian cases, the demographic gap has decreased over time. By the end of the study period, in the early 1990s, the Smithsonian's female and male forensic cases were roughly equal in number.

Consultations between the FBI and the Smithsonian peaked during the 1970s and declined in the 1980s. The higher number of cases in the 1970s coincided with forensic anthropology's increased public visibility. In 1972, the American Academy of Forensic Sciences instituted a physical anthropology section, a move accompanied by an increase in publications in forensic anthropology.

## Dual results

Questions that arise from looking at bones brought to the museum by the FBI can lead to answers that are applicable to Ubelaker's "real" work—studying the skeletal biology of ancient populations in the United States and Latin America.

There also is the obvious reward of knowing that one's expertise may help right a wrong or settle a family's worries about the fate of a vanished loved one.

Ultimately, "they are not our cases," Ubelaker says of the Smithsonian's bone-detective work. "We are a very small part" of a much broader crime-solving effort by police detectives, forensic pathologists and other local crime solvers.

*'Mendieta,' continued from Page 4*

ioned from dried mud, both of which are in the Hirshhorn collection. The extreme fragility of many of the works made from burned tree trunks, bark, leaves and other organic matter has necessitated that close consultation be held with the museum's conservation lab and that extra attention be paid in securing loans.

Smithsonian scientists have helped Viso identify the form of limestone employed for some of Mendieta's Cuban carvings

taking place inside the lunch box. The dimensions of the standard size lunch boxes provided guidance for the food manufacturers that began marketing the pre-packaged foods today's schoolchildren and parents take for granted: cheese and crackers, fruit cups, chips and Ho Hos, for instance.



In the 19th century, workers often carried their lunches in wire-handled buckets and pails.

"These standardized foods only strengthened the market for the lunch box," Shayt says.

**Building a collection**

At the same time the curator was exploring the many stories behind the metal lunch box, Shayt also was building the Smithsonian's collection. He turned to some of the country's best known "boxers" or "paleon-

tologists," terms used to describe men and women infatuated with the classic lunch boxes. Two of the collectors he spoke with were Allen Woodall and Sean Brickell, co-authors of *The Illustrated Encyclopedia of Metal Lunch Boxes*. Both men made generous donations and loans to the National Museum of American History.

Closer to home, Shayt met with Joyce Darrell in her fitness club in Prince Frederick, Md., which is decorated with about 100 boxes she has collected over the past 15 years. Darrell says she began collecting the boxes at the suggestion of a friend as a way to strike a balance in a life that was dominated by running a business.

Eight of her boxes are now part of the Smithsonian collection, including the Hee Haw lunch box she carried in elementary school. That box holds special memories for Darrell; it was the last gift given to her by her mother before she died.

In addition to talking with collectors, Shayt visited the archives at Aladdin headquarters in Nashville, Tenn., where he had access to documents relating to the sales and marketing of the products, including old display advertisements, production counts of annual sales and newspaper clippings that tracked Americans' responses to lunch boxes over time.

The records attest to the lunch box's overwhelming popularity until its demise



Metal lunch boxes featured popular icons of the day, such as the astronaut on this box.

in 1985. That was the year parents complained that children were reportedly using the hard boxes as weapons, and at least one state legislature moved to have the boxes banned. Given the nature of these complaints, it is fitting that the last metal lunch box to be produced featured the quintessential tough guy, Rambo.

Today, the metal lunch box has been replaced by models made from vinyl or other synthetic materials. However, lunch boxes made from thin sheet metal and decorated with both retro and modern designs are now being marketed to nostalgic baby boomers.

Neither has found its way into the hands of Shayt. He carries his lunch to work in a plain brown paper bag.

"Databases have become so much more powerful," explains Anna Weitzman, the National Museum of Natural History's informatics manager and head of the EMu project. "We're able to use the technology of the World Wide Web, and we can add data that wasn't possible before, such as digital images and videos of live specimens. Before, it was simply unrealistic to take on this kind of project."

The first database to be integrated into EMu came from the museum's Invertebrate Zoology Section. Its entire, previously databased collection of some 786,000 records representing about 6.75 million specimens has been brought on board and is now available to the public.

The records of the Mineral Sciences Department are currently being integrated into the database, and site visitors can already preview some of the department's impressive digital images.

Next to be added to the database are the electronic records of the Botany and Entomology sections, as well as the Paleobiology Department.

"We're getting the foundation in place, now we have to build on it," Weitzman says. On her wish list of resources to be added is the 90 percent of the museum's nearly 125 million specimens that have not yet been electronically databased.

In addition, she wants to input researchers' observation records, which "will become increasingly critical," she says. "In the future, scientists may only be allowed to catch a specimen, take photos, draw a blood sample, write observations and release the animal."

"As much information as the Smithsonian has published in its more than 150

years of history," Weitzman adds, "most of it is essentially unavailable." The integrated database, she explains, allows the museum to gather up all the literature and collections information it has and then present it to the world. "We'll be able to say, 'Here, this is what we've been doing all this time,'" she adds.

**Seeing relationships**

Having these databases in one system will leverage powerful cross-referencing capabilities, allowing researchers to see relationships in ways that were not possible before. For instance, one could look up information on volcanoes and retrieve all the related Mineral Sciences collections of rocks, as well as the research of the museum's Global Volcanism Program.

The impact of volcanoes on people could be found in Anthropology's records. Fossilized biological specimens collected in volcanic areas and recent biological specimens from areas being recolonized after an eruption also could be associated. Researchers' field notes, which often refer to specimens scientists didn't collect, also could be cross-referenced.

**Accessing data**

Researchers at the National Museum of Natural History will have special access to the system to upload and revise their data, making it instantly available. In the past, only collections staff had access to many of the databases.

Staff at the museum expect that the increased contact among specialists will generate new scientific collaborations in the United States and around the world.

"The availability of the data online will be of tremendous value to scientists working in developing countries," says Kristian

Fauchald, head of the museum's Invertebrate Zoology Section. "Scientists in biodiversity rich and resource poor countries often give up on important studies because they do not have access to the literature and the specimens."

In addition to scientists and researchers, decision makers, government agencies and students of all ages also will benefit from EMu.

"Kids want real information about the world around them," Weitzman says. "Giving them entree to these resources is important. Students will be able to get data from the Smithsonian's national collections that tell them what lives around their home or what lived there in the past...the possibilities are endless."

**A planet at risk**

Considering the current worldwide ecological crises, Weitzman says, the ability of the database to "provide the basic backbone of biodiversity information to help the

citizens make good choices for sustainable development is in many ways the most relevant benefit [of EMu] right now.

"Collections also are key to understanding global change," she adds. "From examining collections, both fossil and recent, we get the clearest picture of ecological and organismic responses to short- and long-term changes in the environment."

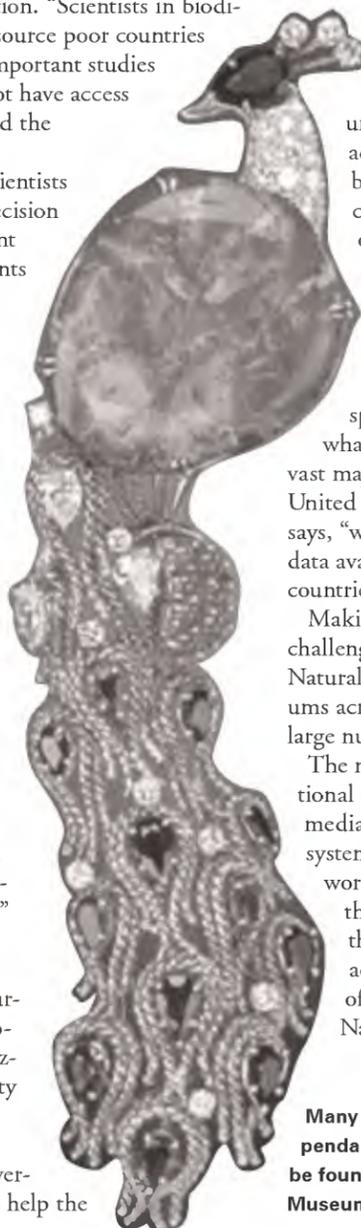
**International collaborations**

International biodiversity initiatives specify that countries determine what resources they have. "With the vast majority of that information in the United States and Europe," Weitzman says, "we have an obligation to make the data available, as well as to assist those countries in learning how to access it."

Making these data available isn't just a challenge for the National Museum of Natural History, it's a challenge for museums across the globe, especially those with large numbers of specimens.

The museum is working with international initiatives to make sure its Multimedia Catalogue will operate with other systems. Weitzman says that there is a worldwide effort for standardization so that the biodiversity collections of the world may one day be jointly accessible. Still, no one museum will offer more specimen data than the National Museum of Natural History.

Many images, including this opal peacock pendant, along with associated data, can be found in the Smithsonian's National Museum of Natural History EMu database.



## Research Highlights

**Commission report.** Developing and installing an engaging introductory exhibition that captures the “full sweep of American history” and serves as a physical guide to the rest of the Smithsonian’s National Museum of American History, Behring Center was one of the main recommendations in a report of the museum’s Blue Ribbon Commission. The report was released during a May 7 press conference. The 23-member commission was charged by the Smithsonian Board of Regents last year to advise on the “most timely and relevant themes and methods of presentation for the museum in the 21st century.” At their May 6 meeting, the Board of Regents expressed total support for and endorsed the specific recommendations of the commission, as well as the vision and direction embodied in their report. The complete report is available on the Web at [americanhistory.si.edu](http://americanhistory.si.edu).

**Science Commission meeting.** With two of the top leadership positions in Smithsonian science about to be vacant following the May 31 departure of Under Secretary for Science Dennis O’Connor, who also served as acting director of the Smithsonian’s National Museum of Natural History, the Smithsonian Science Commission recommended to Smithsonian Secretary Lawrence M. Small and the Board of Regents in an April 17 meeting that work begin immediately to fill these two positions permanently and, in the interim, on an acting basis. Science Commission head Jeremy Sabloff said that the commission will be recommending no major changes to the present organizational structure of science at the Smithsonian; it also is still examining the Smithsonian Center for Materials Research and Education and the Smithsonian’s National Zoological Park Conservation and Research Center.

**Interim directors named.** Smithsonian Astrophysical Observatory Director Irwin Shapiro was named Interim Under Secretary for Science, effective June 1. In addition, Paleobiologist Douglas Erwin was appointed Interim Director of the Smithsonian’s National Museum of Natural History, effective June 10. Shapiro will continue to serve as Director of the Astrophysical Observatory in Cambridge, Mass., a position he has held since 1983. Erwin has been serving the Natural History Museum as chairman and curator in the Department of Paleobiology. He also is a member of the Smithsonian Science Commission and the external faculty of the Santa Fe Institute.

**Animal reproduction.** Jo Gayle Howard, theriogenologist, or animal reproduction specialist, at the Smithsonian’s National Zoological Park, and Katey Pelican, a veterinarian and Ph.D. graduate student, have developed a new technique to control a cheetah’s reproductive cycle in order to improve the chances of a successful artificial insemination. First, the cheetah is given a Norplant progesterone implant to shut down her reproductive cycle. The

implant is then removed, and she is given two hormone injections to induce estrus and ovulation. She is anesthetized for the artificial insemination procedure. The technique was recently used on Jomu, one of the National Zoo’s female cheetahs. So far, scientists say, everything looks promising. However, they won’t know whether the cheetah is pregnant for several weeks.

**Volcanoes.** One of the goals of modern volcanology is to better understand how degassing occurs beneath volcanoes and how the original volatile contents of magma, or molten rock, are related to eruptive behavior. James Luhr, curator in the Smithsonian’s National Museum of Natural History Department of Mineral Sciences, recently analyzed decades-old volcanic cinder samples. This analysis provided a glimpse into the complex interplay among the volcanic processes of degassing, crystallization and crustal assimilation during the rise of magma through Earth’s crust just prior to eruption. Results of his research were published in the scientific journal *Contributions to Mineral Petrology*, Vol. 142.

**Money.** The history and use of money in propaganda and as symbols of national independence are the focus of a research project in the National Numismatic Collection at the Smithsonian’s National Museum of American History, Behring Center. Working in conjunction with the International Monetary Fund, Curator Richard Doty, Collections Manager Douglas Mudd and Museum Specialist James Hughes are organizing an upcoming exhibition that will include major innovations in coinage and paper money design, as well as production over the last 26 centuries. The show also will include the symbols of sovereignty used on coins, from ancient times to the present.

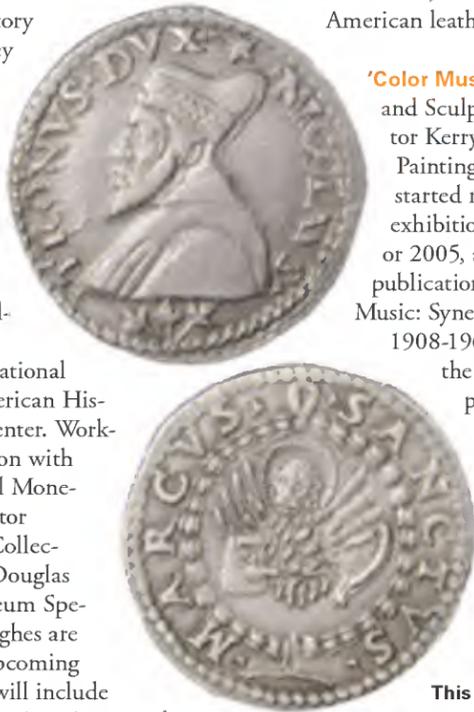
**Bird migration.** Understanding migration patterns has important implications for the conservation of songbirds and other migratory species. Until recently, tracking the migrations of different populations of a particular mammal or bird over its entire range and calculating whether those populations intermixed has proved to be an intractable problem. A new study by scientists in the Smithsonian’s National Museum of Natural History Department of Systematic Biology and the Laboratory of Analytical Biology exemplifies a solution. The study, “Linking Breeding and Wintering Ranges of a Migratory Songbird Using Stable Isotopes,” was published in the Feb. 8 issue of *Science* magazine and also was discussed in that same issue in a special article titled “Incredible Journeys.”



This pair of white, elbow-length gloves once worn by actress Marilyn Monroe was recently acquired by the Smithsonian’s National Museum of American History, Behring Center. (Photo by Harold Dorwin)

**Marilyn Monroe.** A recently acquired pair of white, elbow-length gloves worn by Hollywood legend Marilyn Monroe (1926-1962) is the focus of a research project under way at the Smithsonian’s National Museum of American History, Behring Center by Museum Specialist David Shayt. He hopes to determine what Monroe’s use of gloves tells us about the rise and fall of fashionable glove-wearing among women, and what it tells us about the glove industry in general. The star-power of this particular pair of gloves, Shayt says, may help to illuminate the larger story of the rise and fall of Gloversville, N.Y., longtime home of the American leather glove industry.

**‘Color Music.’** Hirshhorn Museum and Sculpture Garden Chief Curator Kerry Brougher and Curator of Painting Judith Zilczer have started research on a major loan exhibition, scheduled for late 2004 or 2005, and a companion scholarly publication devoted to “Color Music: Synesthesia in Modern Art, 1908-1968.” The project will chart the influence of synesthesia, a process in which one type of stimulus produces a secondary, subjective sensation, such as when a particular color evokes a specific sound. The researchers are exploring the interchangeability of sensory



This lira, shown front (top) and back, from Venice, Italy, was struck in 1471. The Doge, Nicolo Tron, insisted on placing his own portrait on the coin, thereby incurring the wrath of the citizenry.

perceptions and musical analogies on the development of abstract and multimedia visual art from the early to mid-20th century. Expanding upon the work of earlier scholars, “Color Music” takes a cross-disciplinary approach in revealing overlooked connections among artists, artistic movements and developments in music, psychology and popular culture.

## Series Publications

The following publications on research in various fields were issued during the period March 1 through May 31, 2002, by Smithsonian Institution Press in the regular Smithsonian series. Diane Tyler is man-

aging editor. Requests for series publications should be addressed to Smithsonian Institution Press, Series Division, Victor Building, Suite 4300, MRC 953, P.O. Box 37012, Washington, D.C. 20013-7012.

### Smithsonian Contributions to Zoology

• 617 *A Phylogenetic Study of the Tribe Dryxini Zetwornicki (Diptera: Ephydriidae)*, by Wayne N. Mathis and Tadeusz Zetwornicki. 110 pages, 154 figures, 2 tables.

## Books & Recordings

**Fossils: The Key to the Past**, by Richard Fortey (Smithsonian Institution Press and the Natural History Museum, London, 2002, \$55 cloth; \$27.50 paper). This thorough introduction to the world of paleontology has been completely revised and updated, reflecting changes in the ways that fossils are viewed and interpreted.

**Jerome C. Hunsaker and the Rise of American Aeronautics**, by William F. Trimble and Stephen E. Weil (Smithsonian Institution Press, 2002, \$39.95). A detailed account of Hunsaker’s influential career, which parallels the rise of aviation in America.

**Remaking the World: Myth, Mining and Ritual Change Among the Duna of Papua New Guinea**, by Pamela J. Stewart and Andrew Strathern (Smithsonian Institution Press, 2002, \$45). How the Duna have remade their rituals and associated myths in response to the outside influences of government, Christianity and large-scale economic development.

**Airlines and the Air Mail: The Post Office and the Birth of Commercial Aviation**, by F. Robert van der Linden (University Press of Kentucky, 2002, \$35). The author persuasively argues that the progressive Republican policies of President Herbert Hoover actually fostered the growth of American commercial aviation. To order, write to the University Press of Kentucky, Attention: Order Department, P.O. Box 11578, Lexington, Ky. 40576-1578, or call 1 (800) 839-6855.

**Beyond Earth: Mapping the Universe**, edited by David DeVorkin (Smithsonian Institution Press and National Geographic Books, 2002, \$40). A volume of essays by renowned authors and scholars provides personal insights and professional observations on the art and science of cosmological thinking.

**Ammonites**, by Neale Monks and Philip Palmer (Smithsonian Institution Press and the Natural History Museum, London, 2002, \$50 cloth; \$24.95 paper). A detailed picture of a once diverse and widespread group of animals.

**Radar Remote Sensing of Planetary Surfaces**, by Bruce A. Campbell (Cambridge University Press, 2002, \$100). The author

*Books, continued on Page 8*

## Raccoons: A Natural History

By Samuel I. Zeveloff (Published by Smithsonian Institution Press, 2002, \$35 cloth; \$17.95 paper)

Raccoons have long held our fascination, admiration and even our disdain, the author writes in *Raccoons: A Natural History*. "Perhaps no other animal has been associated with the history of the United States as has this one."

These animals, says Samuel Zeveloff, the author and a professor of zoology at Weber State University in Ogden, Utah, captured his attention from early childhood. Thus, the book is an extension of that keen interest. "I was fascinated by this animal initially as a small child having a coonskin cap at the time of the Walt Disney TV series about Davy Crockett, the 19th-century frontiersman."

Intrigued by these nocturnal creatures for years, Zeveloff turned his scholarly attention to raccoons while in graduate school. He did field and laboratory studies of raccoon population ecology for his master's thesis at North Carolina State University. His doctoral work focused on patterns of variation in different ecological attributes of mammalian communities throughout North America.

And more recently, he organized a symposium at an International Theriological Congress on the evolution of the raccoon family. In the future, he plans to focus his research efforts in the area of raccoon ancestry.

The early fossil record of the rather small raccoon family, the Procyonidae, is not especially well-understood, Zeveloff says. There remains uncertainty about whether their earliest members descended from the *Ursidae* (bears) or the *Mustelidae* (weasels and their relatives). "This is an area of inquiry I hope to delve into using molecular genetics tools," he adds.

Zeveloff spent approximately five years working on *Raccoons: A Natural History*. The book begins with the history of the raccoon's name and then addresses its origins, describing how it evolved into its present form. Other chapters examine its physical characteristics, social behavior, habitats, food habits, reproduction, management and conservation, among other topics. There also is an in-depth discussion of the role that the raccoon has with humans.

"I am fascinated by many aspects of the raccoon's natural history," Zeveloff says, "but one aspect of their lives that is intriguing is the plasticity of their mating systems. Though essentially polygynous—a male mates with at least two females—the specific number of males and females in a mating 'unit' in a particular area appears to be rather variable. This arrangement depends on such factors as the local ecology and their population density."

According to the book, raccoons normally mate from January through March, and pregnancies last for approximately 65 days. Prior to giving birth, the female



A recently published book by Smithsonian Institution Press on raccoons gives a fascinating overview of the natural history of these creatures.

remains in the den, becoming more aggressive toward other raccoons. As her cubs are born, the mother frees them from their embryonic membranes and licks them dry. She then eats the membranes and the placenta.

Zeveloff also incorporates some of the misconceptions about the raccoon. For example, he says, "One of the most misunderstood conceptions about raccoons is that they regularly wash their food before eating it. Indeed, the second half of their scientific name *Procyon lotor* means 'washer.' Raccoons may occasionally wash their food if it is gritty or muddy. But they may just be dipping their extremely dexterous

hands into water to soften their skin. This should enhance their sensitivity to the food objects they might be handling at the time. Some have even suggested that raccoons wiggle their fingers in water simply because it feels good! Thus, I would like to lay the 'food-washing' misconception to rest."

The book, Zeveloff says, strives to reveal just how unusual raccoons are and the vital association humans have with them. "I hope that by broadening the reader's understanding of raccoons, it also will increase his or her appreciation for all organisms," he adds.  
—Jo Ann Webb

'Books,' continued from Page 7

provides a thorough grounding in the practical applications of the use of radar for remote sensing of natural surfaces. To order copies, write to Cambridge University Press, Customer Service Department, 110 Midland Ave., Port Chester, N.Y. 10573, or call 1 (800) 872-7423.

**Charles Lindbergh and the Spirit of St. Louis**, by Dominick A. Pisano and F. Robert van der Linden (Harry N. Abrams Inc., 2002, \$22.95). The story of Lindbergh's astonishing solo, nonstop, transatlantic flight. Copies are at local bookstores or may be ordered through Time Warner Trade Publishing, 1 (800) 759-0190.

**Ustad Mohammad Omar: Virtuoso From Afghanistan** (Smithsonian Folkways Recordings, 2002, \$15 CD). A documentation of the only public performance in America by Afghanistan's finest "rabab" player and the first full-length album of his to be released in this country.

**Belly Dance! The Best of George Abdo and His Flames of Araby Orchestra** (Smithsonian Folkways Recordings, 2002, \$15 CD). Abdo and his orchestra combine Syrian, Lebanese, Egyptian, Armenian, Greek and Turkish musical traditions to create a uniquely American belly dance sound.

**The Silk Road: A Musical Caravan** (Smithsonian Folkways Recordings, 2002, \$20 CD). This two-compact disc set is a panoramic sweep of the vast and rich musical territory that an adventurous traveler might uncover.

**Classic Bluegrass From Smithsonian Folkways** (Smithsonian Folkways Recordings, 2002, \$12 CD). Recordings that date back to 1956, when Smithsonian Folkways Recordings released the first-ever full-length bluegrass album.

**Deeper Polka** (Smithsonian Folkways Recordings, 2002, \$15 CD). The music of great polka bands from seven states, covering urban Pittsburgh to rural Nebraska.

Books published by Smithsonian Institution Press can be ordered from P.O. Box 960, Herndon, Va. 20172-0960. To order by phone or for more information, call 1 (800) 782-4612. There is a \$3.50 postage and handling fee for the first book ordered and \$1 for each additional book.

Smithsonian Folkways Recordings can be ordered from Smithsonian Folkways Mail Order, Victor Building, Suite 4100, MRC 953, P.O. Box 37012, Washington, D.C. 20013-7012. To order by phone or for more information, call (202) 275-1143 or 1 (800) 410-9815. There is a \$5.50 fee for shipping and handling of the first 15 recordings ordered; call for other shipping prices.

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