



**Benjamin Ball and Gaston Nogues** 

## **Rip Curl Canyon**



## FOREWORD

Browsing The New York Times one day in July 2005, I was drawn to a photograph that showed a bird's eye view of an enormous, golden rectangle of Mylar stretched between two urban buildings. It was Maximilian's Schell, a site-specific installation created by designers Benjamin Ball and Gaston Nogues for Materials & Applications, an architecture research center in Los Angeles. A few months later I sat with Ben and Gaston in M&A's shaded courtyard enjoying the swirling shadows of the work's amber-colored Mylar petals, and I invited them to do an installation for Rice Gallery. Later, after they reviewed plans of the Rice Gallery space Gaston wrote to me, "Needless to say, our brains are swimming with ideas." His words stayed with me because they revealed a fluidity of thinking that would characterize Ball-Nogues's process of design and experimentation and culminate in their spectacular installation, Rip Curl Canyon. During the record-hot summer of 2006 a daily stream of emails and digital images flowed from their un-air conditioned garage studio in Los Angeles into our over-chilled Houston office, constantly refreshing us with new ideas as they bubbled up.

Ball-Nogues were not only dreamers, but also careful planners. Their installation was so precisely engineered that its complex fabrication and construction went off without a hitch and allowed for participation of many eager volunteers. Students from the Rice University School of Architecture, and the University of Houston Gerald D. Hines College of Architecture, and others punched out thousands of die-cut cardboard segments, collated likeshaped pieces, assembled the plywood armature, and screwed the cardboard pieces into place on the armature. For their vital roles in organizing groups of volunteers and other aspects of the project, I would especially like to thank Rice architecture students Justus Pang and Sarah Ziegler. Ben, Gaston, and Rice Gallery simply could not have done it without them. Thanks, too, to University of Houston architecture professor Donna Kacmar for bringing her class to assist in the construction. I am deeply grateful to Deborah Brochstein and Raymond Brochstein of Brochsteins, Inc., Houston, for their donation of labor and equipment for the precision cutting of each piece of plywood needed for Rip Curl Canyon's armature.

Comments in our guest book told us that *Rip Curl Canyon* had expanded many visitors' ideas of what art and architecture can be. I would like to thank the Houston Architecture Foundation for its generous support of this exhibition publication which documents and projects this insight into the future, and for encouraging a spirit of exploration between disciplines.

Rice Gallery and Ball-Nogues were led to "Look westward" by an invitation to collaborate with The Museum of Fine Arts, Houston, in conjunction with its exhibition *The Modern West: American Landscapes, 1890 -1950*. I am grateful to exhibition curator, Emily Neff, for her understanding of art history as being made in the present, and for promoting *Rip Curl Canyon* as a parallel to her landmark exhibition.

Rip Curl Canyon was so structurally sound that it withstood easily the near 13,000 visitors of all ages who enthusiastically climbed to its mountain peaks and slid down its cardboard slopes. People lingered in the hushed (Seven tons of cardboard make excellent soundproofing.) cavern formed by the underside of the piece and wound their way through its mine shaft-like tunnels that Ben and Gaston outfitted with lanterns and benches. It was more fun than most people ever imagine having in a museum.

Most of all, I thank Ben and Gaston for being great to work with, and for creating a work of art as thrilling as any new frontier could ever be.

Kimberly Davenport Director

## RIP CURL CANYON

Benjamin Ball's and Gaston Nogues's cardboard landscape — part California coast, part Rocky Mountain, part Mojave Desert — evoked a mythical place in the American West where land and water collide. From the highest point at the rear of the Rice Gallery space, the installation's steep, canyon-like formations sloped down and gained momentum before breaking apart to form ribbons of curling waves. Like rip currents — narrow, fast-moving belts of water — the segments twisted and surged toward the gallery's front glass wall.

Ball and Nogues met as students at Southern California Institute of Architecture (SCI-Arc) in the early 1990s. Although Ben and Gaston trained as architects, they do not focus their efforts on the bread and butter of the profession — houses and buildings. Instead, they are part of a new class of young architects who apply architectural concepts to different types of projects, such as events or installations. To achieve their innovative results, Ball-Nogues work with unusual materials, develop new digital tools, and apply architectural techniques in unorthodox ways.

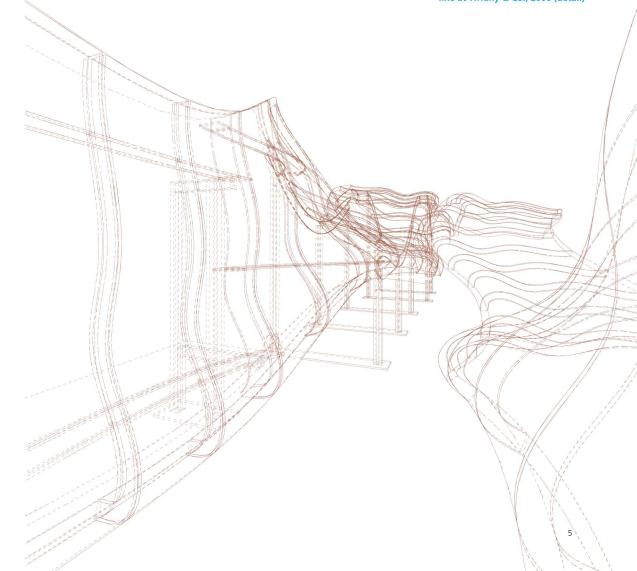
Ball-Nogues share an enthusiasm for process as it relates to the built object, letting the properties and the limitations of the chosen material guide the structure's ultimate form. They develop techniques to extend the boundaries of the material's physical potential. This process-based development guided their first project, Maximilian's Schell, a site-specific installation created for the courtyard of Materials and Applications (M&A), a research center for landscape and architecture in Los Angeles. Conceived as a tribute to German architect and engineer Frei Otto whose models of the surface of soap film in the 1950s and 1960s pioneered tensile construction techniques, Maximilian's Schell was a unique tensile matrix comprised of 504 triangular petals cut from reinforced Mylar and labeled with a computer-controlled machine, then hand-fastened together with clear rivets. The resulting tornado-shaped cone was suspended from the two buildings that flank the M&A courtyard, a quiet, semi-enclosed space where visitors could sit and enjoy the sparkling Mylar's beautiful shadows and UV protection. The installation won Ball-Nogues the 2006 ID Magazine Annual Design Review award for Best Environment.



Maximilian's Schell, 2005

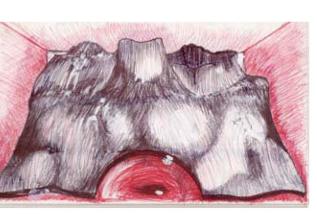


Launch party for Frank Gehry jewelry line at Tiffany & Co., 2006 (detail)



Not long after the completion of *Maximilian's Schell* in 2005, architect Frank Gehry asked Ball-Nogues to create a fantasy environment for the launch party of the jewelry line he had created for Tiffany & Co. In part, as a reference to Gehry's early experiments with it, and in part as a reference to its low cost, versatility, and structural potential, Ball-Nogues decided to use corrugated cardboard. After months of work, they developed a process of cutting and stacking sheets of cardboard to create an elegant party setting that included walls, lounge furniture, and a bar.

To refine their digital modeling tools, as well as to push the limits of corrugated cardboard even further, Ball-Nogues chose it as the primary medium for their site-specific installation at Rice Gallery. Lacking any defined purpose other than to transform the space, Ball-Nogues let the cardboard's inherent properties guide the installation's form, launching into an intense, seven-month design process where they rendered their ideas on the computer, built models and large-scale mock-ups. Emails, phone calls, and sketches flew back and forth as Ben and Gaston's initial ideas for large-scale gestures to fill the gallery space were refined. Their first sketch was of a rapidly ascending, volcano-like form with rounded peaks and conical extrusions that nearly touched the gallery's ceiling. Right away they realized that the volcano's extreme verticals would be impossible to construct easily out of cardboard segments that had a maximum length of only 8 feet.





Supervolcano sketch

Grant Wood, Young Corn, 1931







Student volunteers punching out cardboard shapes

Next, a set of digital photographs showed a mock-up they had built of a plywood armature supporting a less extreme abstract form whose surface resembled rolling hills and plateaus, one that might be seen in the American West. This new topography was inspired, in part, by an invitation that Rice Gallery had received from Emily Neff, Curator of American Painting and Sculpture at The Museum of Fine Arts, Houston to collaborate with the MFAH by presenting an installation that would add a contemporary perspective to The Modern West: Landscapes 1890-1950. Neff's exhibition explored the role the American West played in the development of American modernism by focusing on western landscape paintings and photographs done by American artists between 1890-1950, and included iconic works by artists such as Frederic Remington, Georgia O'Keeffe, Thomas Hart Benton, and Jackson Pollock. Rice Gallery director Kimberly Davenport discussed the idea with Ben and Gaston and sent them images of works that were to be in the exhibition. The designers were interested in the idea immediately and in an email to Kimberly, Ben wrote that the sense of movement in their new form was, "analogous to tectonic plate shifts happening across a Grant Wood landscape."

To create even more dynamic gestures Ball-Nogues broke the monolithic form they had designed into five ribbons twisting down at the back of the gallery to the front. The interaction of the ribbons mimicked the push and pull of seismic shifts in the earth. In the designers' computer models, when two ribbons touched, the curving motion of one rippled through the other. Where the ribbons were torn apart, they curved independently. These points of separation created a spatial effect, exposing the strata of the cardboard construction. Dramatic dips and jagged peaks became more defined, calling to mind sand dunes, ski slopes, canyons, gullies, and breaking waves — inadvertently referencing imagery in *The Modern West* exhibition, as well as Ben's experiences of the Rocky Mountain landscape where he grew up.

This final design became the basis for the installation *Rip Curl Canyon*, a monumental eight-ton landscape made of 4000 sheets of die-cut cardboard mounted on a precision-cut, curved plywood frame. The frame rested on 2 x 4 supports, which held the entire structure an average of six feet off the ground.

A custom-made die was used to cut 3' x 8' sheets of cardboard into three shapes: the "hook" with one hooked end; the "doublehook" bent at both ends, and the "s-curve." The pieces were punched out of the cardboard, collated by shape, and attached to the armature to form five "ribbons" that ran from the back to the front of the gallery. From left to right, the first, second, and fifth ribbons were comprised of "hook" shapes only; the third ribbon was entirely "double-hooks," and the fourth was "s-curves." The different shape of each "hook," or cardboard segment, resulted in a different kind of topography for each ribbon. Ribbons that used the same type of "hook," for instance the first, second, and fifth ribbons, differed from each other based on the characteristics of the underlying armature.

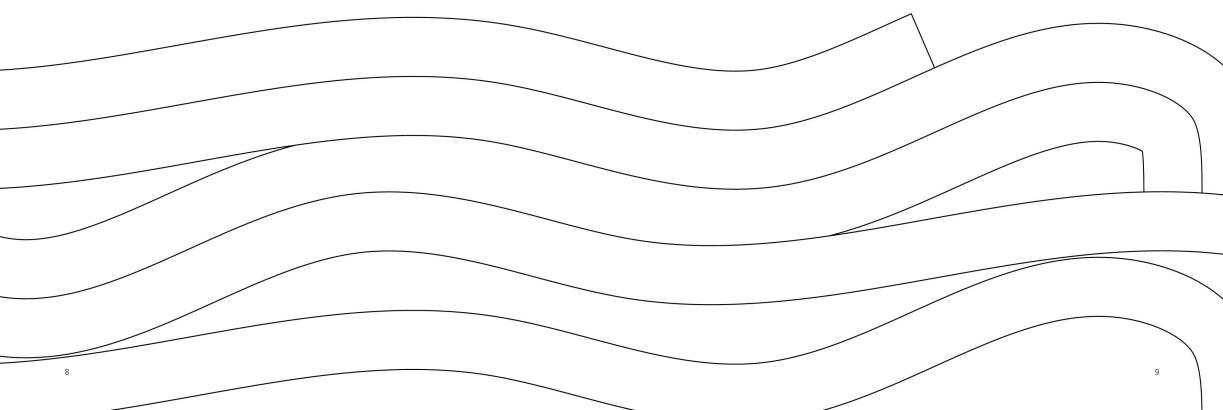
The underside of this shell of tightly stacked segments and curving armature formed a mineshaft-like space full of small tunnels and crevices where the armature and corresponding segments arched or descended. Intending for this underneath space to be just as usable as the climbable, cardboard exterior, Ball and Nogues placed lanterns and benches between the columns of 2 x 4 supports.

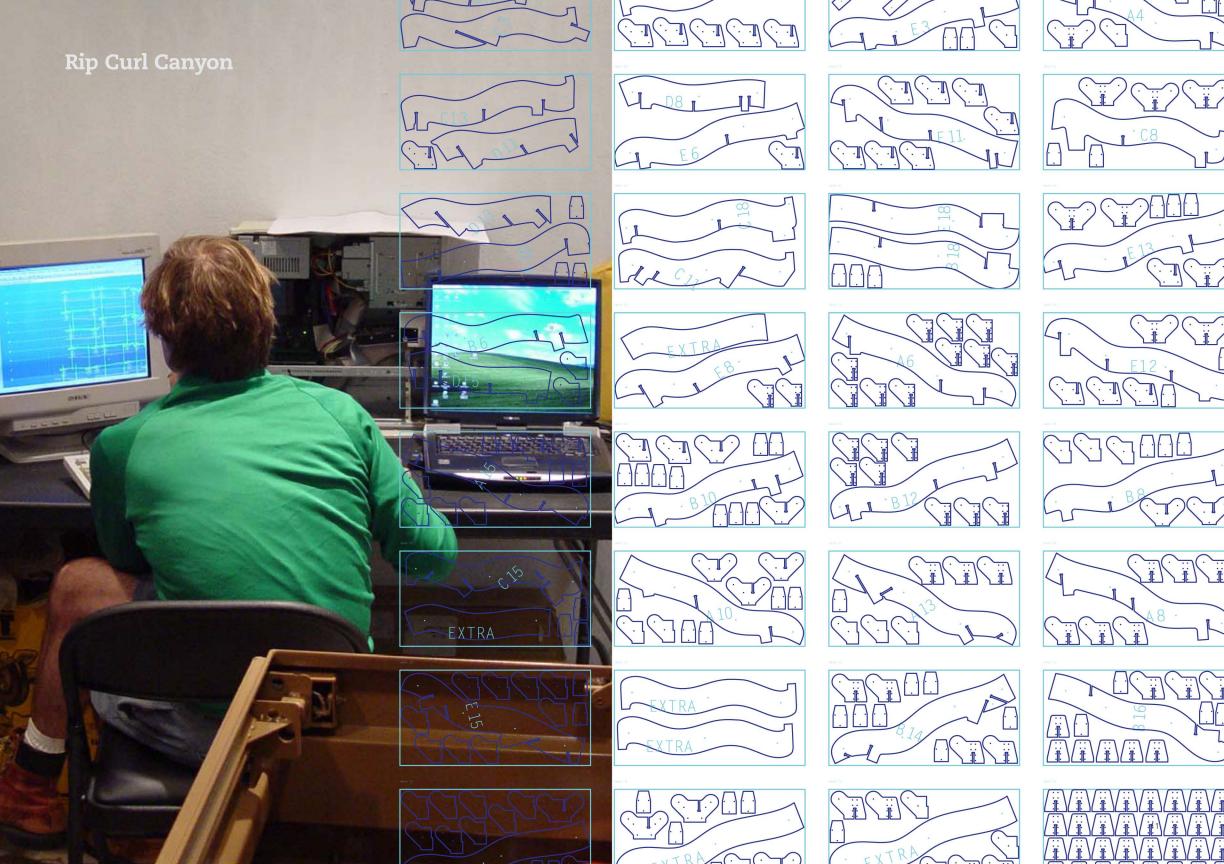
Rip Curl Canyon was the culmination of seven months of intensive study, modeling, and revision, with much of the work taking place in an un-air-conditioned garage. The process was, Ball admits, "grueling," yet Ball and Nogues enjoyed the immediacy of this way of working, and found satisfaction in their open-ended approach. They didn't begin their installation at Rice Gallery with a fixed result in mind. Guided by imagery of landscape in the American West, they put their trust in the process and the material to guide the form. The result was compelling.



RIGHT:
Custom die used to cut cardboard

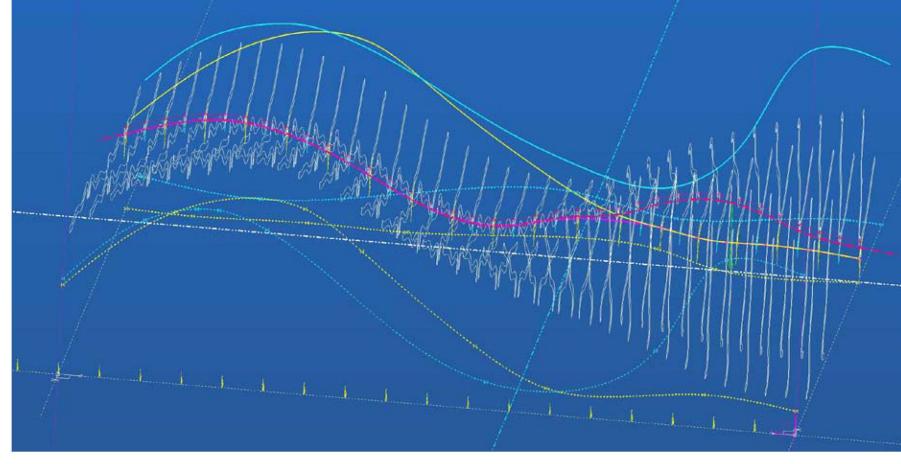
BELOW: Template for custom-made die





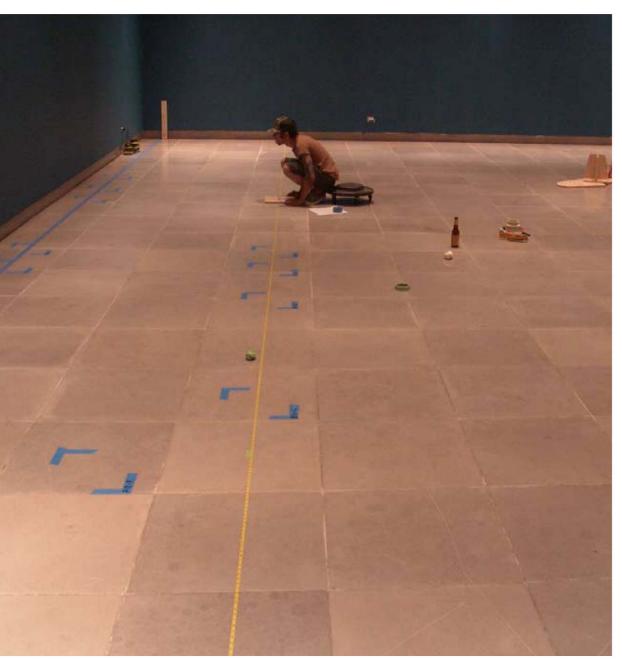


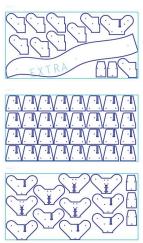


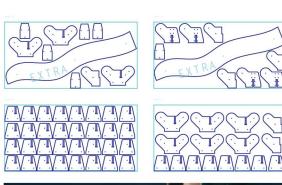


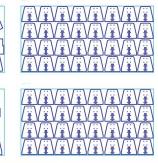










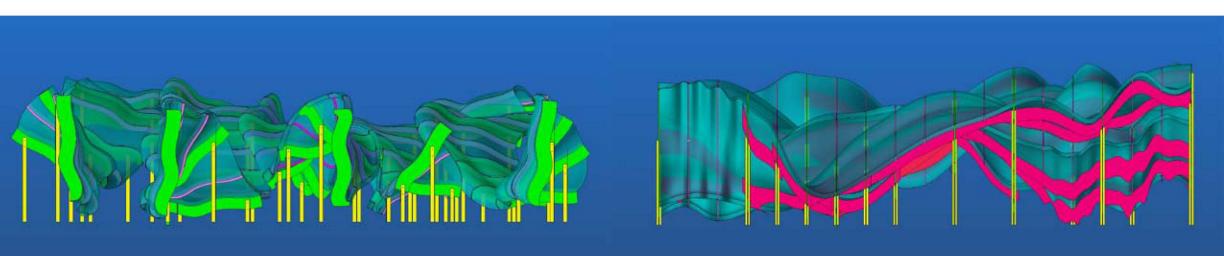










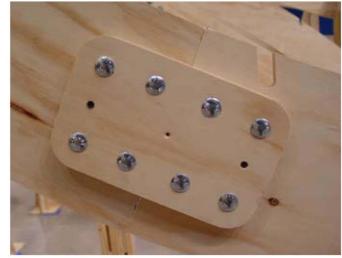






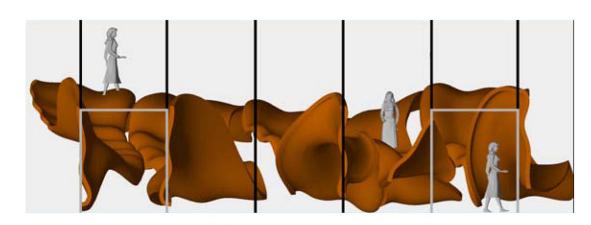






















































Benjamin Ball and Gaston Nogues, *Rip Curl Canyon* Commission, Rice University Art Gallery 21 September – 29 October 2006

Rice University Art Gallery is located in Sewall Hall on the campus of Rice University, 6100 Main Street, Houston, Texas 77005, and on the web at ricegallery.org.

Rip Curl Canyon was presented in collaboration with The Museum of Fine Arts, Houston exhibition, The Modern West: American Landscapes, 1890 – 1950, on view at the MFAH, 29 October 2006 – 28 January 2007.

Brochsteins Inc., Houston, and the Durfee Foundation, Santa Monica, California provided support for this exhibition. Stokes Hardware and Wagner Hardware, Houston provided in-kind support. Special funding was provided by the Dean, School of Humanities, and the President's Office, Rice University, for collaborative projects with The Museum of Fine Arts, Houston.

Rice Gallery exhibitions and programs receive major support from Rice Gallery Patrons and Members, The Brown Foundation, Inc., and the Kilgore Endowment. Exhibition catalogues are funded in part by the Robert J. Card, M.D. and Karol Kreymer Catalogue Endowment. The gallery receives partial operating support from the City of Houston. KUHF-FM and Saint Arnold Brewing Company provide in-kind support.

The designers and Rice Gallery would like to thank the many volunteers: Christopher Ball, Nancy Ball, Sandra Barrientos, Deborah Brochstein, Scott Carter, Gideon Danilowitz, Bruce Danzigger, Ned Dodington, Candy Eliserio, Kassaundra Escalera, Jing Gu, Peter Ho, Tara Hobbs, Monica Jeremias, Donna Kacmar, Jennifer Lopez, James and Kelly Lumb, Jonathan Mitchell, Karin Nelson, Charon Nogues, Mario Nogues, Thomas Obed, Justus Pang, Jyoti Patel, David Preciado, Dennis Sheldon, Andrew Sinclair, Xiomara Solano, Kim Sutton, Chalisse Wilson, Liang Wu, Jennifer Young, Adolfo Zavala, and Sarah Zeigler.

Rice Gallery thanks grounds superintendent Ron Smith and his remarkable crew: Charles Coleman, Larry Felan, Kelly Frazier, Michael Polk, and Baldwin Swayzer who maneuvered ten tons of cardboard and wood into Sewall Hall. Thanks also to James King and Jason Rowe who removed at least one ton of cardboard scrap from the loading dock.

Photographs, renderings, and models by Ball-Nogues
Copyright © 2006 Ball-Nogues
Pages 5 (top right, bottom), 6 (left), 7 (top left), 8-9, 11, 12 (bottom right), 13, 14, 15, 16 (bottom), 17 (top right, bottom), 19 (top), 20-21, 22, 23, 24 (top), 25 (left)

Photographs by Nash Baker
Copyright © 2006 Nash Baker Photography:
Front and back cover, inside front and back cover, and pages 2-3, 26-27, 28-29, 30-31, 32-33, 34-35, 36-37, 39, 40-41, 42-43, 44-45

Photograph by Oliver Hess Copyright © 2005 Oliver Hess Page 5 (top left)

Photographs by Rice Gallery Staff Copyright © 2006 Rice Gallery: Pages 7 (top right), 10, 12 (top left), 16, 17 (top left), 18, 19 (bottom), 24, 25 (right), 38

Grant Wood, Young Corn, 1931. Oil on Masonite panel, 24 x 29 1/2 inches Collection of the Cedar Rapids Community School District, on loan to the Cedar Rapids Museum of Art Page 6 (right)

Rice University Art Gallery Staff Kimberly Davenport, Director Jaye Anderton, Manager Joshua Fischer, Curatorial Assistant David Krueger, Preparator Katherine Kuster, Outreach Coordinator

Design: Antonio Manega, Gazer Design Group Printing: Masterpiece Litho

Copyright © 2007 Rice University Art Gallery, Houston, Texas

ISBN: 1-932281-28-2



