

Discourse
from the end of the line

August 2014

TABLE OF CONTENTS

ON THE COVER:
An intricate, digitally-
printed paper kite by
Stephen Hoskins. See
more of Hoskins' unique
kites that combine art and
technology on page 33.

AUGUST 2014

From the Editors	3
Correspondence	5
Contributors	6
Babu Khan, Kitemaster, R.I.P. AJAY PRAKASH	7
The Magic of 4,000 Kite-Like Objects ALI FUJINO	14
Kite Books You Might Have Missed SCOTT SKINNER	22
Power Kiting: the Adventure JOE HADZICKI	27
Kite Piece STEPHEN HOSKINS	33
Words About the 30th International Kitefliers' Meeting, Fanoe, Denmark SCOTT SKINNER	43

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FROM THE EDITORS

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"Browse" > "Articles").

I hopped on an airplane the other day and pulled out my "travel book," *On Paper*, and the guy next to me (my age) exclaimed, "A BOOK!" Indeed, as we speed into the digital age, actually carrying a book has become passé and feeling like a dinosaur has become more acceptable. But *On Paper* is one of a number of relatively new books that I think belong in anyone's kite library. My contribution to this issue of *Discourse* is to point out a few books that I've come across and ask readers what they might have read recently to add to the list.

Drachen Foundation board member Joe Hadzicki weighs in on tips for the novice kite traction enthusiast. Joe has experienced every part of the kite traction scene and brings his unique perspective to the reader. Joe's heavy-duty Rev models, the Blast and Super Blast, are exceptional traction kites that are often overlooked until you see their exceptional upwind capabilities. Fellow board member Ali Fujino relates her visit to Jacob Hashimoto's "Gas Giant" installation at Los Angeles' Museum of Contemporary Art. Hashimoto's work is on a scale few of us can imagine and his kite-like objects create fascinating environments unlike any other.

Artist Stephen Hoskins was brought to my attention by the fabulous printers at Saltgrass Printmakers in Salt Lake City, UT. His work, based upon a variety of printing techniques, has gone to new frontiers as he uses 3D printing for fittings and laser cutting for sails, among other leading edge techniques. His high-tech approach has not adversely affected

the artistry and beauty of his creations; they are unique, thoughtful, and inspiring.

Finally, an old friend of Drachen, Ajay Prakash, presents a personal remembrance of Indian kite master Babu Khan. I often think that the art of an Indian kite is that it is fashioned by two simple sticks and a bold-but-simple paper sail – both made perfectly so flight performance is optimal. With Babu Khan's kites, however, the additional mastery of sail decoration takes his kites to a very special place in today's world kite scene.

In a world where a marvelous "Toothless" kite flies under the Tower Bridge in London (www.youtube.com/watch?v=VMPc0i7cVw), and a "High" kite is marketed for \$400 for its flier to express his or her pro-marijuana stance (www.vimeo.com/92769210), I hope this issue of *Discourse* is one that convinces you all of the special nature of our passion.

Scott Skinner
Board President
Drachen Foundation

CORRESPONDENCE

Thanks for publishing the article about the Boston Kite Festival. It is always exciting to see past events highlighted. However, I fear Clara has been “out of the loop.” The Boston Kite Festival was still a great Franklin Park event in the 1990s though the venue was smaller than the golf course site of the 1970s and 1980s. The city stopped hosting the event in the 2000s after experimenting with moving it to Millennium Park in West Roxbury.

The Boston Kite Festival at Franklin Park was revived 4 years ago by a combined group of the Franklin Park Coalition, Discover Roxbury, Boston Bikes, and Boston Parks & Rec: www.franklinparkcoalition.org/event/kite-festival. Kites Over New England (www.kone.org) participates along with the Blue Hill Observatory Science Center (www.bluehill.org). There are kitemaking workshops prior to the event and thousands of kites fly on the Playstead Field.

I hope Clara can join in on Saturday May 17, 2014 and celebrate the sky spectacular which she started 45 years ago.

DON MCCASLAND, PRESIDENT, KITES OVER NEW ENGLAND; PROGRAM DIRECTOR, BLUE HILL OBSERVATORY SCIENCE CENTER

I am so pleased to hear that the Kite Festival has been revived!

CLARA WAINWRIGHT, ORGANIZER OF THE FIRST GREAT BOSTON KITE FESTIVAL IN 1969

Beautiful beautiful issue of *Discourse* – you guys never cease to amaze me.

WHITNEY RICHARDSON
USA

Another great collection of articles.

GARY HINZE
USA

I am very happy with the publication of my article in *Discourse* and I would like to thank the whole team and Scott Skinner for his kind introduction, especially because new friends and builders have written to me after reading it, opening new horizons on kite building.

PROF. MARIA ELENA GARCÍA AUTINO
ARGENTINA

CONTRIBUTORS

ALI FUJINO
Seattle, Washington

From work at the Smithsonian to her present status as Director of Advancement for the Alaska Wilderness League, Fujino continues her 20 years with the Drachen Foundation by serving on Drachen's Board of Directors.



Leland Sutton

JOE HADZICKI
San Diego, California

An engineer, inventor, and entrepreneur, Hadzicki is one of three brothers who started Revolution Enterprises, the first to make a completely controllable four-line kite. The Rev has been the standard for the kite industry for twenty years.



Tyler Hadzicki

STEPHEN HOSKINS
Bristol, England

Prof. Hoskins is Hewlett Packard Chair and Director of the Centre for Fine Print Research at the University of the West of England. Royal College of Art-trained, he has published 3 books, holds 3 patents, and has exhibited prints internationally.



Carinna Parraman

AJAY PRAKASH
Mumbai, India

Travel agent Prakash has led numerous desert kite tours throughout India. Traveling during the kite season leading up to Makar Sankranti, a national holiday, his guests have witnessed the kite frenzy which occurs.



Courtesy Ajay Prakash

SCOTT SKINNER
Monument, Colorado

A former Air Force instructor pilot, Drachen's board president has flown and designed kites for three decades. Today, Skinner is known as a world class, visionary kite artist.



Cat Gabrel

BABU KHAN, KITEMASTER, R.I.P.

Ajay Prakash



Courtesy Ajay Prakash

Kitemaker Babu Khan in the dunes of Jaisalmer, India.

In a country where millions of kites are churned out every year to live out their brief, ephemeral lives doing battle in the skies before being reduced to a scrap of tissue paper and two thin strips of bamboo, the kitemakers themselves are almost always totally anonymous. Babu Khan was the exception. A kite made by Babu was a treasure, for Babu Khan was a kitemaster – one of the finest kitemakers in India.

I was introduced to Babu Bhai, as he was affectionately called by everyone, by my childhood friend Masrur Ali Sayed. Mas and I grew up together in Jaipur and often spent Makar Sankranti flying from the same rooftop, competing amongst ourselves to see who could cut down more kites. Masrur always won.

Back then we were just like all the other kite-crazy kids. We bought our kites and *manjha* from the little kite shop down the street which was basically a cycle repair shop but, like a lot of little neighborhood shops, would also stock kites during the kite season. In choosing our kites we were more concerned with the colors and the design/pattern than where the kites originated. Sure, we checked the flex of the bow and the spine but often the kites wouldn't fly right – some turned limp and sluggish, some kept veering to one side. We'd take them down and try our own remedies to fix them. The limp ones were strengthened by another strip of bamboo added to the spine, the ones that wouldn't fly straight got a wad of chewing

continued on page 12

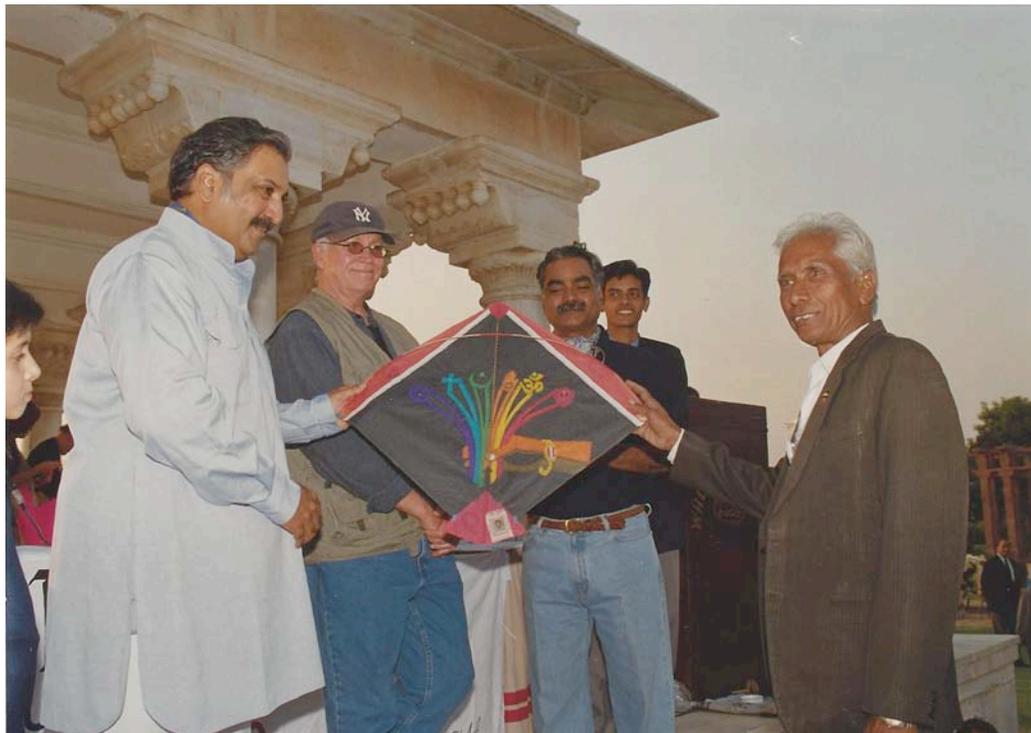


Pablo Bartholomew



Courtesy Ajay Prakash

TOP: Babu Khan at the Taj Mahal with a matching kite.
BOTTOM: Babu Khan and his artful, colorful kites.



Courtesy Ajay Prakash

TOP: Author Ajay Prakash looks on as Babu Khan makes a fighter kite. BOTTOM: Babu Khan presents a kite to the Maharaja of Jodhpur as Tal Streeter looks on.



Courtesy Ajay Prakash

TOP: Babu Khan at a kite workshop with children in Mumbai. BOTTOM: *Tukkals* and other kites by Babu Khan.



Courtesy Ajay Prakash

TOP: Two of Babu Khan's intricate Ganesha kites. BOTTOM LEFT: A Madina kite. Bottom RIGHT: A Shiva kite.

gum or a bunch of string knotted on the bow on the side opposite to which they veered, and if that didn't work we'd just try to get them up somehow and into a tangle so that they'd be cut and become somebody else's problem!

We graduated from high school, moved out of Jaipur, and eventually reconnected in Mumbai. We still tried to meet up on Sankranti and would otherwise, too, fly together sometimes. And one day Mas showed me this red kite with a bold black Maltese Cross and asked me to try it out. It was a beautiful kite, but more than that, it was a *clean* kite. The sail was taut, the bow and spine were smooth and supple, the pasting was immaculate, all the edges were neat, but what intrigued me was the little sticker at the bottom – a slightly fuzzy picture of a man's face and below it the name "Babu Khan." I asked Mas where he'd got it from. He said he'd got it made by a kitemaker from Jaipur and told me, "Go ahead. Fly it."

The minute I launched the kite, I felt a thrill. She seemed eager to fly. No flipping, flopping, no aborted takeoffs or crashes. In seconds she ascended in a smooth arc and just stood still in the sky, her sail rippling gently. I let out line and she rose higher. I pinched the line between thumb and forefinger and she stood still again. Turning the kite was a cinch. She responded to the slightest touch and I put her through a series of dives, loops, turns, delighting in the ease of control. I'd discovered a Babu Khan kite, and I was a convert. Now I wanted to meet the kitemaker.

I really got to know Babu when I invited him to the 1st Desert Kite Festival that we organized at Jodhpur in 1997 at the fabulous Umaid Bhawan Palace under the patronage of Mr. Gaj Singh II, the Maharaja of Jodhpur. Our friendship grew over the

years and Babu Bhai became an inseparable part of each one of the Festivals and kite events we did for the next seven years thereafter – at Jodhpur, Jaipur, Agra, Lucknow, Mumbai, and Goa.

Gentle, soft spoken, and reticent, Babu was never very big on words and preferred to let his kites do the talking. And he made some beautiful kites! Apart from the regular fighters, which are the best I've ever flown, Babu made some amazingly intricate appliqué kites in paper – striking geometric patterns or detailed representations of gods and goddesses (and we have plenty in India!) adorned the beautiful sails. Babu would work on these kites late at night when everyone in his home was asleep and he wouldn't be disturbed. Each kite would take days to make and no one was allowed to see a work in progress; he'd lock it away in a steel box, away from prying eyes until it was finished.

Once he let me sit and watch while he was working on a Ganesha kite. [Ganesha is a widely worshipped Hindu deity.] He'd made an extremely detailed drawing of the final picture and I saw him construct one of Ganesha's eyes. He cut out the shape of the eye in the main sail, then he cut a slightly larger shape in white paper to make the cornea, then he glued a black pupil on to the cornea and he finally pasted the composite on the reverse of the original cut, making a very realistic eye. And he would do this for every little detail! The end result was that one side looked like a fine painting while the reverse was a patchwork of paper on paper. I still have some of Babu's picture kites and I used to fly one occasionally, but they're too precious now that he's gone and there's no one like him to make me another.

Among all the trips we've made together, one stands out simply because there were just five or six of us on this trip to Jaisalmer

– a historic town in the middle of the Thar Desert which was on the old trade route to Central Asia and which is known for its golden sandstone fort, one of the oldest inhabited forts in the world – where we had gone to do a two-day kite festival for the Rajasthan Tourism Department. What made this trip special was the fact that two of the finest kite people I've ever known were on this trip: Tal Streeter and Babu Khan. After the Festival was over and the crowds had all gone away, Babu, Tal, and I had a magical fly on the dunes, with the sun setting on one side and the moon rising from the other. It was marvelous to fly in the complete silence of the desert. That's an evening I will remember for a long time and I'm sure Tal and Babu have also carried the memory into the sky with them.

Fly high and fly in peace my dear friends. I miss you. ♦

THE MAGIC OF 4,000 KITE-LIKE OBJECTS

Ali Fujino



George Peters

Jacob Hashimoto's "Gas Giant" installation at The Museum of Contemporary Art, Los Angeles. The pieces had subtle kinetic movement from air currents of the museum space.

There has always been a Hashimoto in my life. My first pull of air was in the arms of a Hashimoto, the famed Dr. Edward Hashimoto of University of Utah, who brought me and my entire Utah family into the world. Since then, I can track Hashimotos (artists, kitemakers, writers, scientists) popping up through my long list of life experiences – this list ends with the most recent, Jacob Hashimoto.

I can easily remember my first encounter with this Hashimoto. It wasn't with the person, but a piece of his work that was installed in the ceiling of the Tacoma Art Museum Café. Not to be missed as one waited for their meal, I was entertained by the subtle movement of many small, square, individually-hung objects filling the entire ceiling. The effect was amazing, and even after my meal and visit to the museum, that was the single item that I walked away remembering.

It was Seattle kite artist Greg Kono who gave me a little intel on the piece and artist: "Oh man, you saw Jacob Hashimoto's piece."

Now I had his name. This was in 2003. The research began. I checked the Internet and found various articles and mention of his past and recent works.

Those little kite-like objects were a central theme to his art. He had not just made thousands of them to do single pieces, but over his years he was comfortable experimenting and creating tens of thousands of them. The collage effect was monumental. He was not afraid of size. The pieces grew in configuration and overall presentation. His name was showing up in many places, not just Tacoma, but in New York and Italy to name a few.

I would see mention in various respectable art publications and clip them to carefully

study them and share with others. Scott Skinner, Greg, and I became an unofficial Jacob Hashimoto fan club. We loved his visions and energy. But none of us had seen a real piece since Tacoma, in the 2000s.

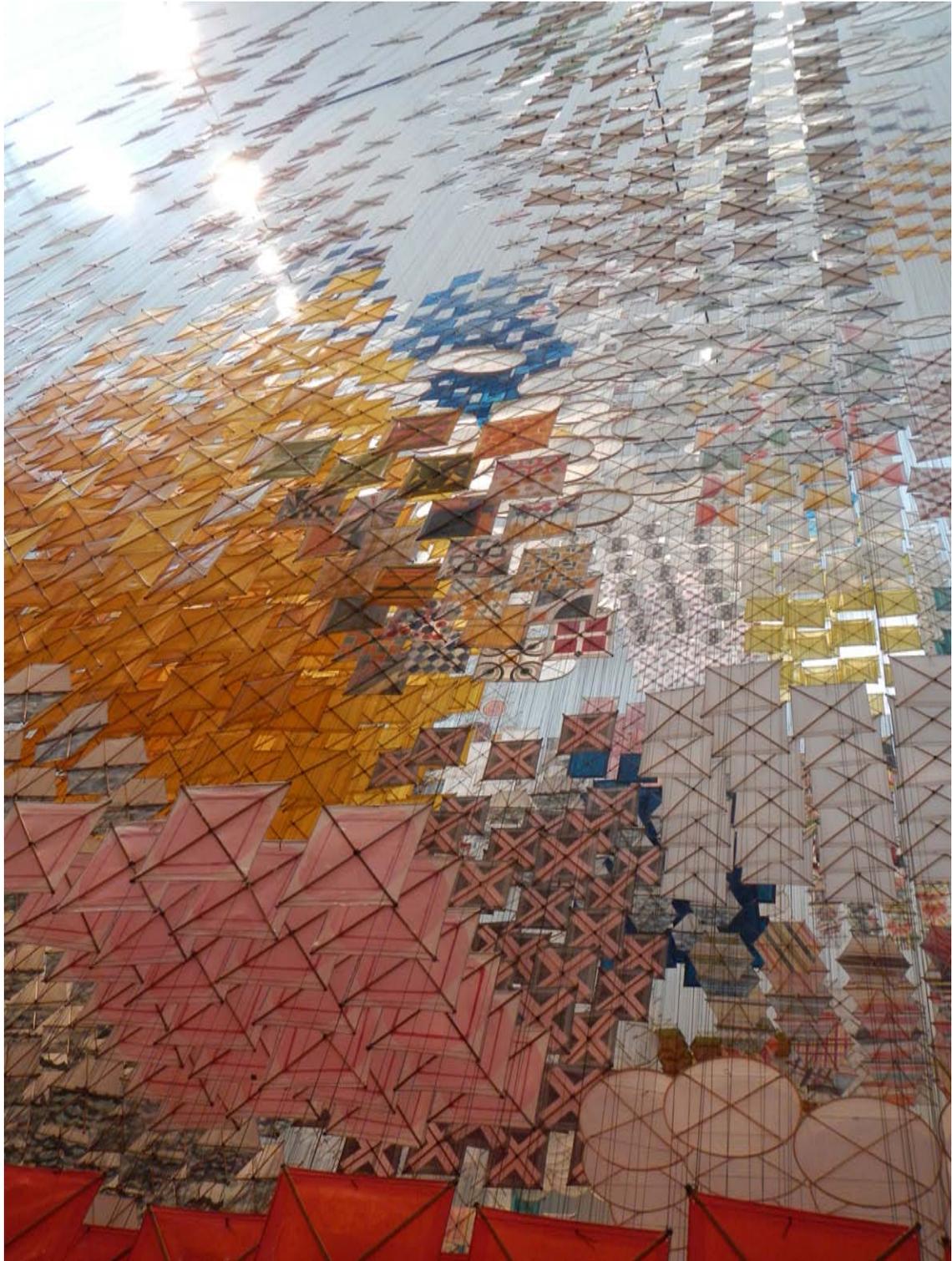
We were due.

My most recent encounter with Jacob's work was less than three months ago, at MOCA Pacific Design Center in Los Angeles. A few select old guard kitemakers and fliers have come to a kite gathering each year in Santa Monica, California. This core group are mainly artists, their media that of kites. We always have time to wander about the city, and one of us will suggest an artful activity for the day. This year it was unanimous: we would go see Jacob Hashimoto's "Gas Giant," a superabundant atmosphere!

I wondered how did these kites become Jacob's medium in the first place? Was he not a kitemaker and flier? I read that he studied painting and printmaking in college. During the summers he was a studio assistant to the Japanese artist Keiko Hara (www.keikohara.com). She worked with Japanese woodblock printing, which required much knowledge about paper. In Jacob's work, he learned the same appreciation.

In his last year at the Chicago Art Institute, Jacob had trouble figuring out what to create. It was his father who suggested that, being in his studio, he would find something there. It could be anything, "Model airplanes or building kites..." The kites resonated with him, as he remembered watching his father build them when he was small – tiny kites that would fly out of his office window – and books that were around the house about kites. (His grandfather built kites too.) That year in

continued on page 18



George Peters

The forty foot ceiling suspended with a dizzying array of kite-like forms.



George Peters



Ali Fujino



Ali Fujino

TOP: Colorful patterned pieces are mixed into the white cloud array. BOTTOM TWO: The lower gallery featured black and white kite forms installed from the ceiling space.

Chicago, he started to build kites and take them to the park to fly. There was that magical moment. He wasn't very good at making them, but he kept at it. He realized that year he needed to be making some paintings for the end of semester critiques. So he strung pieces of wire diagonally across the studio and hooked the kites on them with paper clips, to clear the wall for his paintings. He realized, "I could do everything I want to do with painting, but with these kites..." There was the "aha" moment.

The installation at MOCA Pacific was one of the many variations of Jacob's kite-like models, thousands of small kite shapes of various color, shape, and hanging lines. In each of his installations, he takes a core set of kite shapes and arranges them in configurations of space, light, and shapes. Starting in 1996, he built the first of his kite shapes and staged a small installation in his attic apartment in northwest Chicago. This installation was built over the course of a year and consisted of 1,000 handmade rectangular kites with a little cloud print on them. Later, these 1,000 pieces were installed in the back gallery of Ann Nathan Gallery in Chicago to photograph and de-install before the gallery opened for business.

She suggested it be left up for a few days to see how people reacted. It was seen by the chief curator of the Museum of Contemporary Art Chicago, and presently a larger version of the project was created with 10,000 elements.

From Chicago, a portion of the show went to Los Angeles, and later an installation of pieces was sent to Verona, Italy for the first show at Studio la Citta. Much later, another portion was sent back to Los Angeles. Known for painting, Jacob now had to move to a new media. Making multiples pointed

him to printmaking. The kite-based figures allowed him to shift the picture plane from the wall to the architecture of the gallery or installation space.

I want to note that Jacob's work did not start and stop with kite-like objects. The central part of his discoveries was architectural space and objects in that space, how they could change and how he could influence what was happening in a defined space. But be it known much of his fascination with the kite is that of youthful play and a Japanese-American heritage. Combining this with architectural spaces, he found a platform to work.

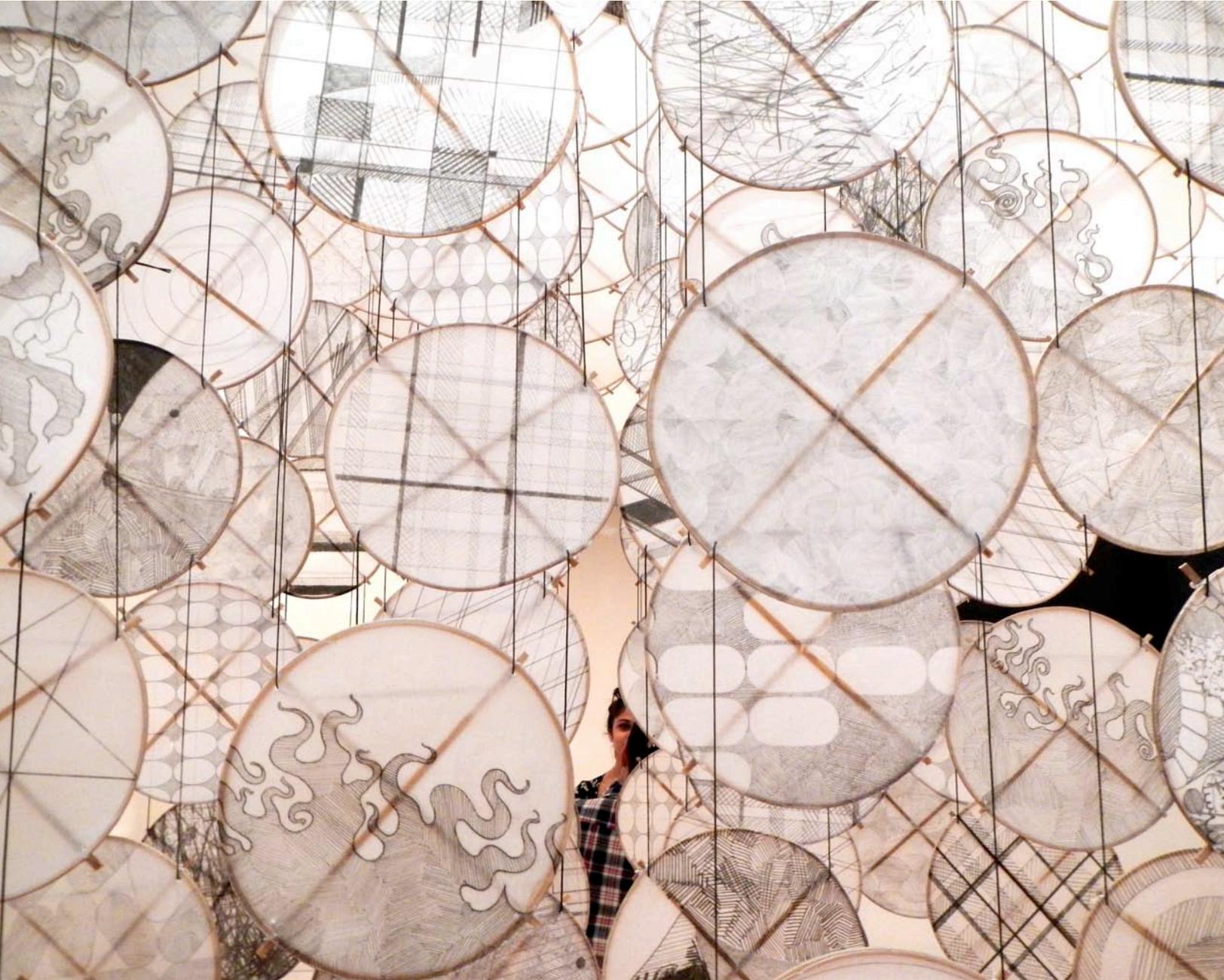
L.A.'s installation is a perfect example of his direction. This two-story space was gloriously filled with thousands of those kite-like objects. Recognizable were Chinese Beijing swallows, Japanese *dakos*, *rokkakus*, traditional American Eddy's, hexagons, squares, diamonds, rounds, and ovals.

Some are stark white and others majestically multicolored with ornate designs. They repeat in color and printed patterns, giving him more than "shapes" to design. Sometimes the designs are hand painted, laminated paper, or printed multiples. Jacob is not afraid of color and complexity, some of the pattern work is extremely complicated, using several colors and several painted/printed shapes.

I was told the installation took four people about three full days. Most of the objects are hung individually, having their own line which goes from the kite shape to the ceiling. If you have 10,000 kite objects, there could easily be 10,000 hanging lines.

In an article in a very avant garde magazine, *Elephant* (Frame Publishers, #11/Summer

continued on page 21



George Peters

Close up of circular kite shapes with drawing patterns.



George Peters

Paper, bamboo, and string kite forms suspended from the ceiling create a cloud effect overhead.

2012, pages 148-153), I read more about Jacob's process of making thousands of kite-like objects. He makes many of the items in his Brooklyn studio. The ovals and circles are heat-formed out of frames purchased from a company in Weifang, China. Circular shapes take Jacob and his crew about 15 minutes each, hexagon shapes maybe three minutes. Extensive testing of the frames was done to see what would happen to the frames over a long period of time in ultraviolet or sun light. These kite-like objects would be subject to light in his installations, warping and fading over time. Although well designed and engineered, there is really no way to preserve the original forms of any of the pieces.

The paper work is all done by Jacob and his crew in the studio. In this way, he controls the design work and the high caliber of craftsmanship for each item.

As a person who spent 20 plus years studying and documenting tethered flight (that which flies), I laugh at myself as I finish this article on Jacob and his kites. They are kite-like, and although they do not fly outdoors, who is to say they don't fly? These kites move. It is an absolute delight to experience his installations and watch them move – in their own flight, a natural kineticism that is very poetic. It isn't contrived at all. It's flight. ♦

"GAS GIANT" VIDEOS

<http://youtu.be/3SSys9OPU1U>

<http://youtu.be/wOQP81ozHW4>

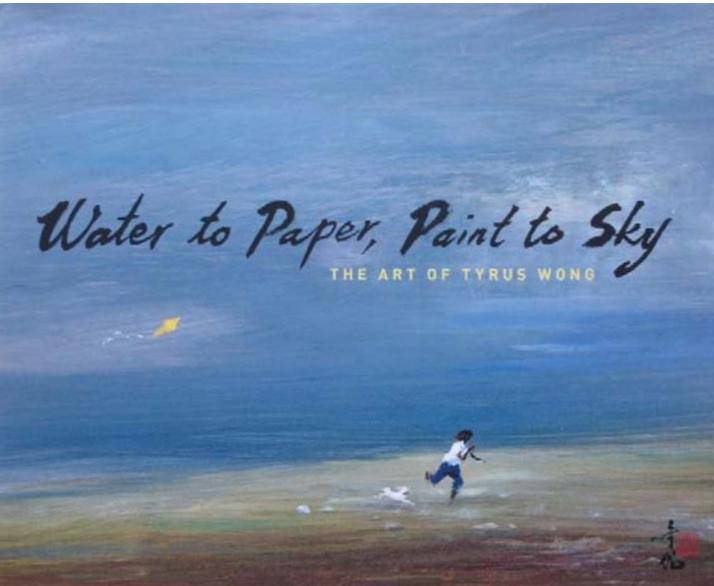
JACOB'S BIO

Jacob Hashimoto
www.jacobhashimoto.com

- Born in Greeley, Colorado, 1973
- Lives in New York City
- Carleton College (Northfield, MN), 1993
- BFA, School of the Art Institute of Chicago (Chicago, IL), 1996
- Has exhibited throughout the world

KITE BOOKS YOU MIGHT HAVE MISSED

Scott Skinner



All the books in this article can be found on Amazon.com or at your favorite local bookstore.

In the past few years, there have been some fine books that you should consider adding to your kite library. Two are from the world of fine art: one features the life and work of Tyrus Wong; the other, the contemporary work of Jacob Hashimoto. If you are at all interested in paper and bamboo kites, *On Paper* will tell you everything you ever wanted to know about paper. For those of you interested in the history of flight, *Falling Upwards* is a wonderful, romantic look at the history of ballooning and balloonists, while *Birdmen* explores the rocky relationship between the Wright Brothers and their early competitors, especially Glenn Curtiss. Finally, there are two books that tangentially relate to the history and use of kites: *Frozen in Time* describes in accurate detail the use of a Gibson Girl kite system in an arctic survival situation in WWII; *Thunderstruck* is a real-life murder mystery in which Marconi, his kites, and wireless telegraphy play out in an unbelievable true story.

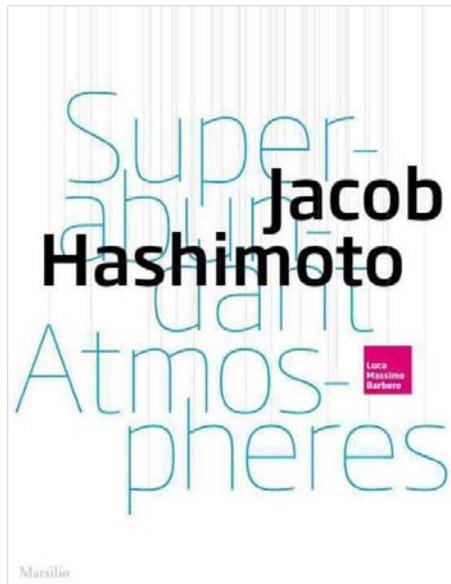
Water to Paper, Paint to Sky: The Art of Tyrus Wong

Michael Labrie

Published by The Walt Disney Family Museum,
San Francisco

Certainly, just the chapter “Flying Kites” is enough inspiration for most kitemakers and fliers. The diversity of kites, their beauty and functionality – inspirational! But the remainder of the book brings Tyrus’ life work into focus, from Bambi to art after Disney, to toys and kites. Tyrus Wong’s life is an amazing

American success story. Author Michal Labrie says the book offers “an opportunity to encounter this humble charming artist, who, to this day, is unaware of the scope of his talent.”



Superabundant Atmospheres, Jacob Hashimoto

Luca Massimo Barbero

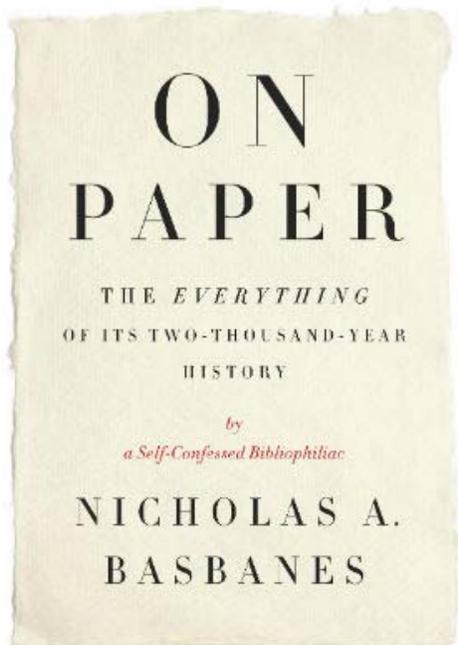
Published by Marsilio Editori, Venice

The amazing sculptural work of Jacob Hashimoto, much of it featuring hundreds of kite-like elements, is humbling to say the least. To admire his vision is understandable, but to imagine the hours, days, and weeks of doing the simple, repetitive actions common to all kitemakers is to realize his work's grandeur.

On Paper, The Everything of Its Two-Thousand-Year History

Nicholas A. Basbanes,

Published by Alfred A. Knopf, New York

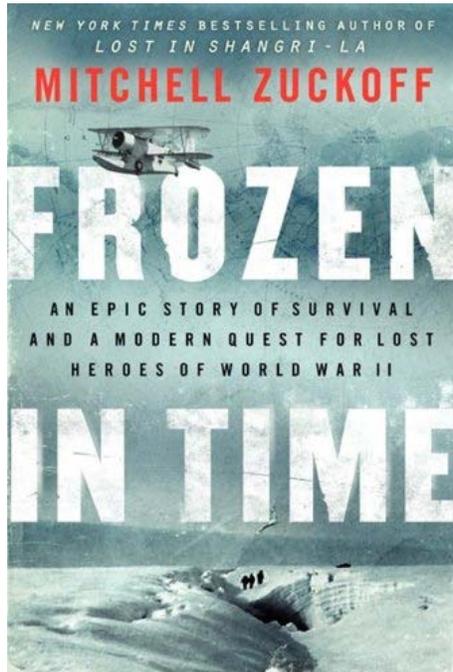


You won't believe me, but I'm telling the truth. When I opened this book the first time, it was to page 33 and the schematic drawing of the Japanese paper balloon bomb of World War II.

“Seven manufacturing centers were set up around Tokyo to assemble what was code-named the FU-Go Weapon...with handmade paper selected for the skin of the thirty-two-foot-diameter balloons, six hundred individual sheets required for each one, all glued together in a lamination that made no allowance for gas leakage. ... The strength of the paper was dependent chiefly upon the fiber which had to be uniform, yet it was necessary to have it be very light. ... Kozo was the obvious choice. For close to two years, hundreds of papermakers were enlisted to the task, and with 13,500 workshops operating in Japan when the war broke out, there were plenty to choose

from.”

I didn't need anything else to convince me that this would be an awesome read, and I'm carrying it today!



Frozen in Time: An Epic Story of Survival and a Modern Quest for Lost Heroes of World War II

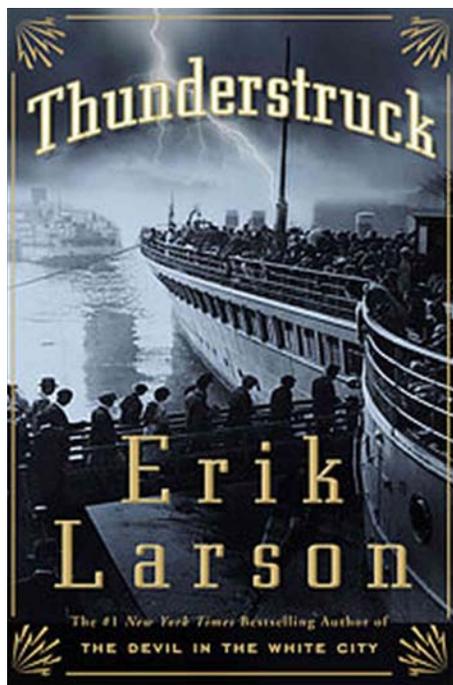
Michael Zuckoff

Published by Harper Perennial, New York

Zuckoff writes a wonderful story of contemporary treasure hunters and the World War II events that motivated their modern adventure to find lost airplanes and bring lost airmen home. This is an exciting read by any standards, but for kite aficionados it provides an accurate description of the use of a Gibson Girl transmitter and kite in an arctic survival situation.

“One problem was that a Gibson Girl spoke but didn't listen; the radio was a transmitter but not a receiver. Still, a lost man with a Gibson girl between his legs had a fighting chance at survival.”

Read this book. But for an interesting evening, find “Island in the Sky” starring John Wayne, it's a post-WWII movie that follows an aircrew lost in the arctic and features moments using the Gibson Girl.

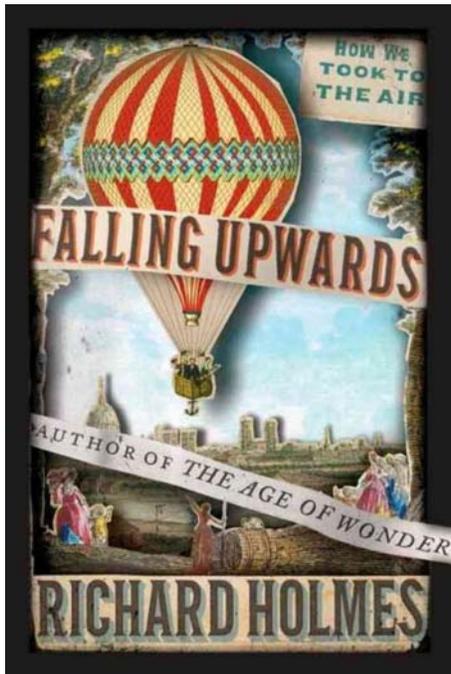


Thunderstruck

Erik Larson

Published by Broadway Books, New York

This is a book that's almost eight years old, and I might have mentioned it in an earlier edition of *Discourse*, but it's worth mentioning again. Larson is a wonderful author and in his earlier *Isaac's Storm*, he touched on many of the personalities in the U.S. Weather Service who were instrumental in the usage of kites for

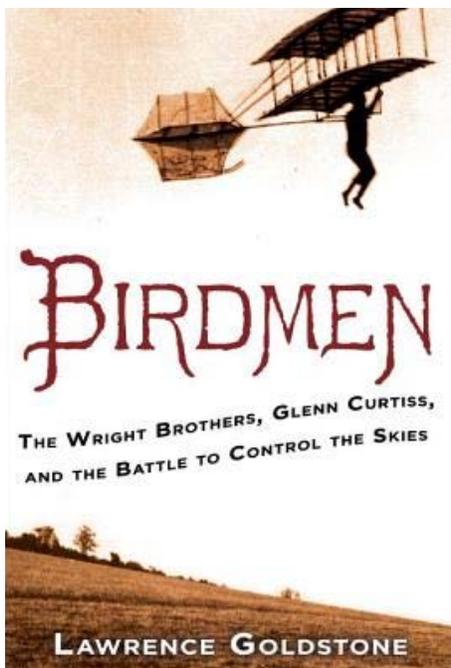


weather research. In *Thunderstruck*, he goes into great detail about Gugliermo Marconi and his development of the wireless. But he also tells the true story of a murderer and the detective who tracked him down – using Marconi’s invention as his most invaluable tool. One of the best reads of the last decade, for sure!

Falling Upwards: How We Took to the Air
Richard Holmes
Published by Pantheon Books, New York

I was reluctant to pick this book up, and was a happy recipient of it at Christmastime when Ali sent me the hard copy. Virtually nothing to do with kites, but a must read for fans of the birth of flight. Holmes captures the romance and spirit of adventure of early balloonists and clearly tells the story of many of the early pioneers. It was in Holmes’ book that I learned that my English son-in-law’s hometown of Wolverhampton played a serious role in the history of scientific ballooning and was home to ballooning’s highest ascent, over 29,000 feet and possibly as high as 37,000 feet. The mark was set in 1862. Just like environmental factors playing a huge role in kite development, so was Wolverhampton the right environment for these early balloon experiments. It was central in England, so flight to any coast was maximized, and the Stafford Road Gas Works was a willing partner in supplying coal gas for balloon inflation.

Birdmen: The Wright Brothers, Glenn Curtiss, and the Battle to Control the Skies
Lawrence Goldstone
Published by Ballantine Books, New York



I need to reread Seth Shulman’s *Unlocking the Sky*, an informative biography of Glenn Curtiss, to see if Augustus Herring finds as notable a place there as he does in this chronicle of the bitter fight between the

Wright Brothers and Glenn Curtiss. Herring's role in the battle is bigger than I had thought, and I had completely forgotten that it was he who went into business with Curtiss and had far too much influence in Curtiss' business. He comes across as a too-well-respected charlatan and deadbeat. *Birdmen* takes a close look at many of the early pilots who flew for both companies, as well as many of their European rivals – all in front of the backdrop of the Wright-Curtiss legal battles. Anyone interested in early manned flight will enjoy this ride-along with the pioneers. ♦

POWER KITING: THE ADVENTURE

Joe Hadzicki



Jose Sainz

Just one form of power kiting, a kite buggier flies above the desert, attached to a kite that pulls him into the air.

As we look at all the facets of kiting from single line to four line, from flying with your grandkids on the beach to 800-man mega team flying, from fighter kites with glass-studded string to the art of aerial photography, nothing brings more excitement and adventure than power kiting.

In over 20 years of kiting, I have tried out virtually all forms of power kiting, including kite flying from the back of a paraglider.

Most people enter the sport of power kiting with either kiting experience or some kind of board experience, for example snowboarding, wake boarding, or mountain boarding. My strengths lie on the kite

control side of the sport, which you will see influenced my approach to power kiting.

In the next few paragraphs I'd like to share a couple of my personal experiences in power kiting, along with the path that I took when I got started.

Power kiting is extreme fun, but as with anything that includes nature and its awesome power, there is an element of risk and danger. My advice is to spend an afternoon taking a lesson from a professional to see if it's right for you.

It's easier to talk about the details of power kiting with specific examples. So let's take a closer look at kiteboarding and, in

particular, kite surfing.

I use kiteboarding and kite surfing interchangeably in this article, although kiteboarding is a much more inclusive term. Kite surfing has a lot in common with all the different board sports. In other words, if you have personal experience with skateboarding, snowboarding, wind surfing, wakeboarding, etc., you have the basic board skills necessary to kiteboard. But board skills aren't the only skill set you need. Equally important are the kite skills. Unlike wake boarding and water skiing, where the boat and driver are in charge of power, direction, and speed, kite surfing requires you to do it all. Wind surfing is probably the best all-around comparison to kiteboarding since you are controlling the power of the wind with your sail while riding a board. Sailing or wind surfing experience can be a great help in understanding the basic principles of kiteboarding, but in some ways it can hinder. What I've noticed is a tendency for people to focus on what they know. So if you know wind surfing or wake boarding, you tend to focus on the board. With kiteboarding, controlling the kite is as important as controlling the board.

One of the main differences between wind surfing and kite surfing is when you fall while wind surfing, the sail falls with you, thus shutting down the power. With kite surfing, and power kiting in general, the normal condition is that the kite continues to fly and generate power even though you are no longer on the board. In many cases, especially when first learning, you could end up face first under water while the kite powers up and drags you through the water like a submarine.

My first experience with power kiting began with a trip out to the El Mirage dry lakebed in Nevada with my old friend Corey Jensen.

He set me up with a two-line foil, about one square meter in size, and a three wheeled "kite buggy" that you steer with your feet. Then he said something along the lines of, "Go for it."

After 20 minutes of flying around in very light winds with no chance of being pulled anywhere, I told Corey I needed a bigger kite. He gave me a funny look and thought about it for a minute and then handed me a four-meter foil. I was thinking to myself, "This probably isn't big enough either," and right then a gust of wind kicked up a little sand just past the sagebrush, and I thought to myself, "This kite is probably too big..."

Within moments, I was racing down the lakebed at 30 MPH with no idea what to do. I knew if I kept running downwind, I would overrun the kite and get the wheels all tangled in the lines, but every time I started to turn upwind, the kite became more powerful and accelerated me faster and faster. This is one of the basic laws of sailing. It's called apparent wind. As you begin to turn upwind, your speed is added to the wind speed. This "apparent wind" that the kite experiences increases the power significantly.

It was starting to get a little scary with no obvious solution. Running out of options, I figured I'd take a page from Fred Flintstone. I yanked my boots off the foot pegs and slammed them on the lakebed hoping to drag myself to a stop, but before my boots could have any effect, the front wheel snapped left and then right, flipping the buggy over. Before I even realized what was going on, I was rocketing down the lakebed on my back with the buggy riding on top of me! This takes us back to one of the key problems of power kiting: after you've been thrown off your mode of transportation, the kite is often still powered up and raring to

continued on page 31



Dmitry Kraskovsky

If you would like to take the next step in power kiting, the safest, most convenient way is through kite surfing. Kite surfing is mainstream enough that there are many locations that offer lessons for beginners as well as experienced kite boarders.



Jose Sainz

Kite surfing has the advantage of a relatively soft landing compared to buggying, but buggying requires less power and less balancing skill. The kite buggy is probably the easiest vehicle to power; the problem is you need a lot of space, specialized equipment, and someone to show you the ropes.

go!

My second story of power kiting took place in San Diego with my old friend Dave Britain. He had a new quiver of quadrafoils that he wanted to try out. As I headed across the bay on my directional board (basically a small surfboard), I hit a boat wake and hit the water face first. Since my boot bindings didn't release, I was slowly being dragged under water while being stretched, as the kite pulled me forward and the board acted as a water brake holding me back, which caused the kite to pull harder!

As my head resurfaced, I saw the kite turning, diving, and gaining power. At this point, I had to make a quick decision: crash the kite and end the abuse, or fight to regain control. I hate the tedium of water-relaunching a kite, especially foils that quickly take on water, so I decided to fight on. I redirected the kite back up overhead, and a few minutes later I was back up on the board, cutting across the waves.

The moral to the story: nature is very powerful and unpredictable, so show some respect.

Everyone has their own learning curve and experiences to draw from. The following account outlines my personal approach to power kiting.

I learned the basics of power kiting by taking a kite I was very experienced with, the Revolution 1.5, and coupled it with a skateboard. I went down to the beach and found a small space in a parking lot to experiment. This had several advantages. First, the kite was small, just over one square meter, making it easier to control. I used a very small kite because a skateboard on hard pavement has very little resistance. Also the Rev 1.5 is designed for control, not power. This allowed me to focus precisely

on technique without worrying about being over-powered.

Using the precision control, I hovered the kite overhead, then dipped it down ten feet into the power window and straight back up. This gave me a small, measured pull and then a release of tension. I used this small pull to move me ten feet, then rolled to a stop. Then I would use the same technique to pull me in the opposite direction back to my starting point. This, in a way, would separate the kite control and the board control since I would dip the kite into the power window for just a second. After this, the kite would hover overhead while I focused on steering and controlling the board.

I did this over and over, focusing on balance, kite position, and board position and direction. As I got the hang of it, I would go longer distances with more sustained power. As your skill level increases, you develop new skills such as sensing kite position, direction, and speed without constantly watching the kite. The direction the board travels is also critical. As I rode across the parking lot, I would ride along a curved path, 45 degrees downwind to start, perpendicular to the wind at mid-path, and 45 degrees upwind as I slowed to a stop. Then I would follow the same path in reverse to return to the starting point.

IF YOU'RE JUST GETTING STARTED, WHAT IS THE BEST APPROACH?

There are advantages and disadvantages to the different types of power kiting. For example, kite surfing has the advantage of a relatively soft landing compared to buggying, but buggying requires less power and less balancing skill. The easiest form of power kiting is to grab a powerful kite on a windy day and get dragged down the beach, hopefully on your feet.

The kite buggy is probably the easiest vehicle to power kite with since it has very little rolling resistance, and balance is not a problem since you are sitting very low on a three-wheeled base. The problem is you need a lot of space, specialized equipment (the buggy), and someone to show you the ropes.

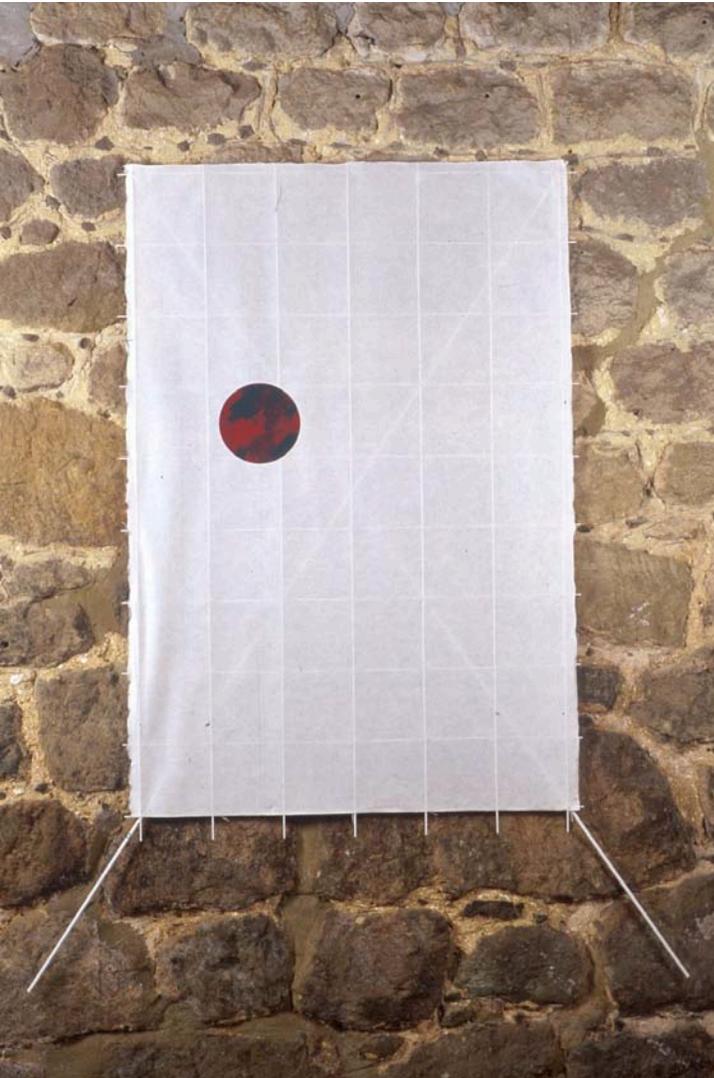
If you would like to take the next step in power kiting, the safest and most convenient way is through kite surfing. Kite surfing is mainstream enough that there are many locations that offer lessons for the beginner as well as the experienced kite boarder. Just Google "kite boarding lessons" near your location.

IF YOU'RE JUST STARTING OUT, WHAT'S THE BEST GEAR FOR YOU?

The Internet is an incredible resource. I suggest you spend a half hour checking out gear and reviews on the Internet before taking your first lesson. This will give you an idea of what's available. Then after your lesson, your instructor will have a good idea of your skill level and your goals, allowing him or her to guide you toward the best gear for you. The best that can happen is you will open up a whole new world of fun and adventure, and the worst that can happen is an excellent beach adventure to tell your friends about. ♦

KITE PIECE

Stephen Hoskins



Stephen Hoskins

White Edo: Screenprinted handmade Japanese paper, glass fiber rod, and Dacron thread.

My kite prints are as much about the craft of making as they are a gentle delight in challenging the notions of what constitutes a print and where the perceived borders between the fine and applied arts end and begin. In the U.K. there are still very distinct borders between that which is perceived as art and that which is then deemed craft. A denial of craft skills seems to me as an educator a sad consequence of current trends. Fortunately this view is changing and I find great enjoyment in making craft works that are shown in an art context.

I first came to kites in the mid-1970s with what would now be termed a gap year between my undergraduate art degree and moving on to a master's program in fine art printmaking at the Royal College of Art in London. At the time I had no studio facilities but had recently discovered David Pelham's *Book of Kites* published by Penguin Books, which offered over 50 scale plans of kites from around the world. Inspired by Pelham's book, I started making kites as a substitute for making art. The first kite I made was a large Malay about two meters (six feet, six inches) across, which was made from red and black nylon (a cheap lining material for coats and dresses, which was relatively air opaque), with wooden dowel spars. Once bowed, it was a beautifully behaved, tailless kite and still one of the best I have ever made for its flying characteristics.

Subsequently I made a series of deltas and colorful *rokkakus* whilst learning the basics of kitemaking and flying, then really branched

out to make a Lecornu's Box from ripstop nylon with glass fiber spars, which I never managed to fly. Whilst ripstop was a great material for the manufacture of kites, I feel very little empathy for it as a material in its own right, and it certainly has none of the inherent qualities of a beautiful sheet of handmade paper. In addition, it is one of the most difficult materials I know to print on. Glass fiber rod however was a revelation. It was immensely strong, came in a host of different diameters, and was able to bend into compound curves without snapping. Also unlike bamboo, it did not need to be spliced with a knife, thus avoiding the dangerous potential of further visits to hospital when the knife slipped. Once sleeved inside an aluminum rod, the aluminum could be drilled and a split ring passed through, thus making more resilient compound joints.

By this point I had moved to London, and Tal Streeter's book on the *Art of the Japanese Kite* became a huge inspiration leading to a combination of kites and art as part of my master's degree. I attempted making a glass kite by blowing very thin glass and then gluing the pieces together (an impossible task at the end of the '70s, but technically quite possible now). I did however manage to make a 1.1 meter (four foot, nine inches) Edo kite from a thin aluminum sheet, known at the time as the "flying razor blade." I then gave up making kites for nearly 20 years. However I did slowly build a small collection of other people's kites. Unfortunately I have no documentation of my formative years of kitemaking apart from my memories.

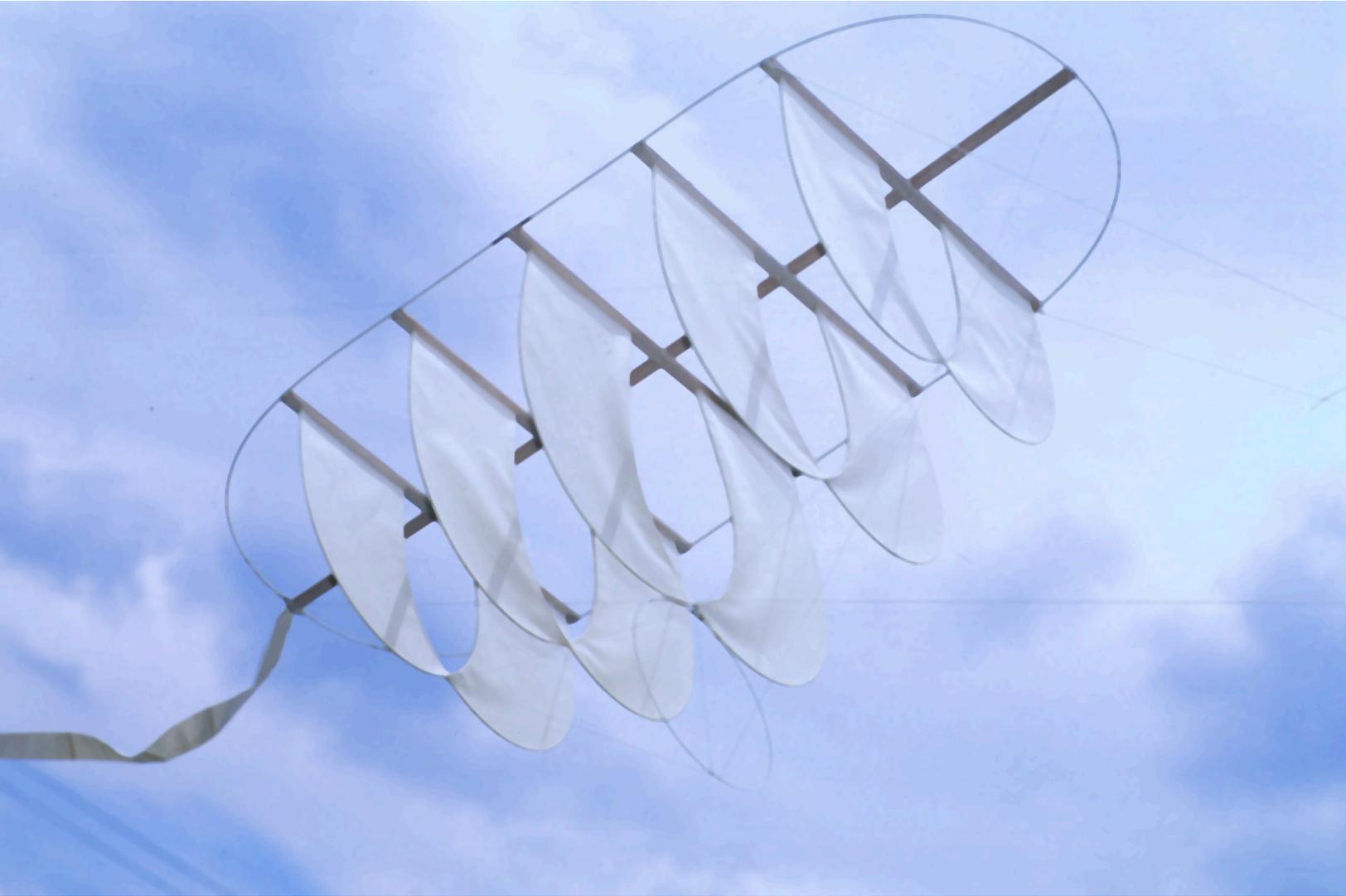
Having taught for many years in U.K. art schools, I did not return to kitemaking until I gained an academic research post at the University of the West of England in Bristol, where I now run a large arts research department. An invitation to take part in an

exhibition at the Victoria and Albert Museum, where we were required to make a piece of work in response to handling silverware from the collection, inspired a new direction. I returned to my earlier roots and made a kite based on an 18th Century toast rack, made from glass fiber rod, wood, and Japanese handmade paper. The flying toast rack allowed the ability to drop 20 years of self-imposed restraints and create work which existed for pleasure as well as presenting some very challenging problems. One was health and safety regulations at the museum: the kite might have fallen on someone's head, even though it only weighed less than 16 ounces.

Having started making kites again, the toast rack was followed by a one-man show in 1999 of three-dimensional prints (or works) with a very short deadline, thus creating the impetus for a new body of work. The result was an exhibition of prints that fly and kites that were printed. Paying homage to traditional kite manufacture from Japan, Thailand, Nepal, and India, these works were only possible due to a marriage of late 20th Century technology and the unsurpassed quality of a delicate sheet of handmade paper.

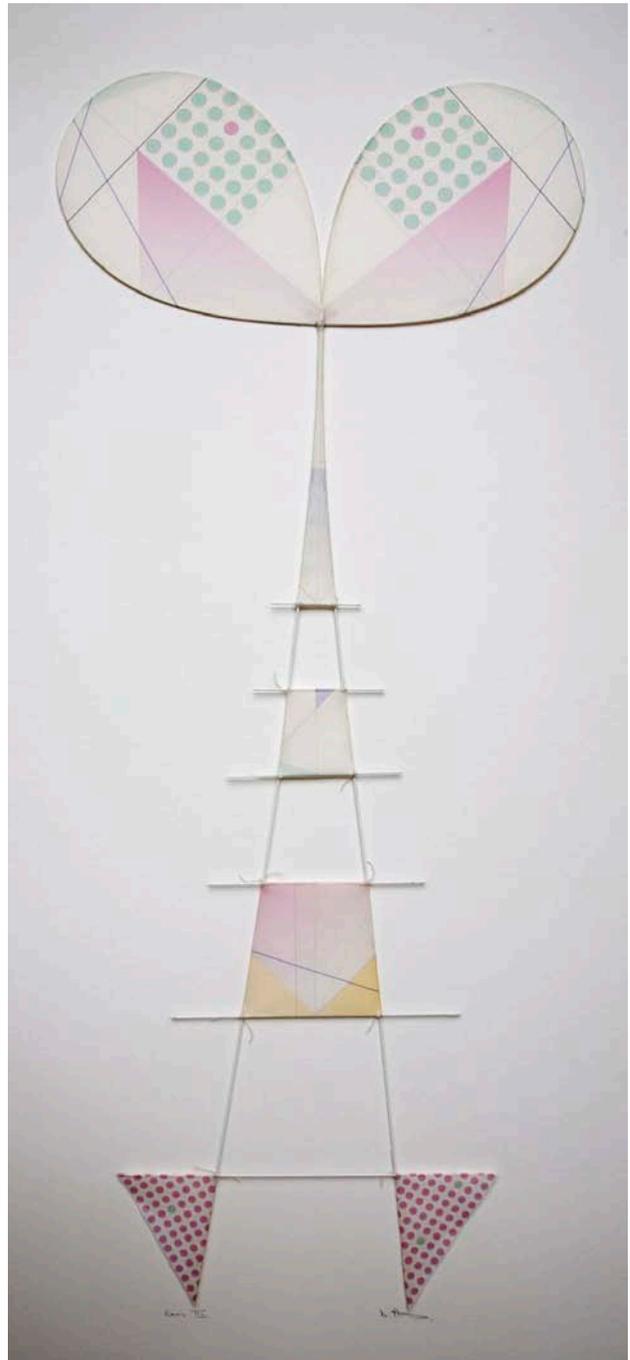
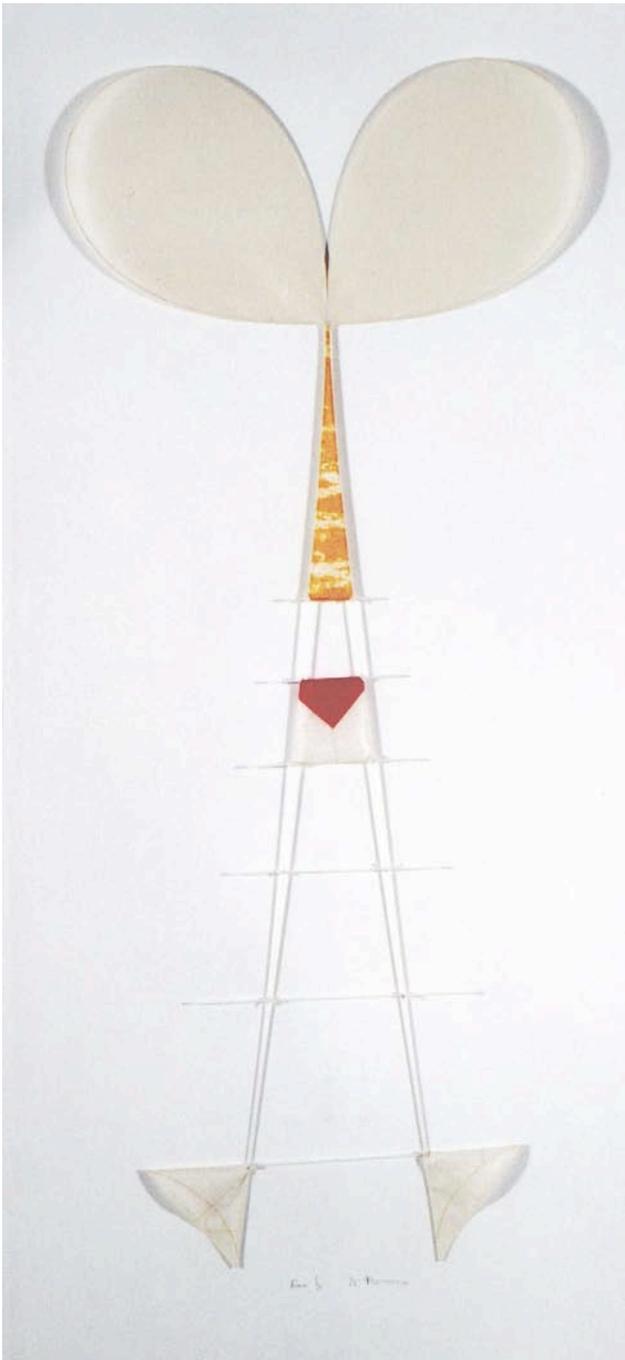
Within the work, the imagery was screenprinted onto handmade paper from Japan, Nepal, and Thailand. Only delicate handmade sheets such as these, are capable of being formed around the compound glass fiber shapes used in the frameworks. This is due to the fact that in a sheet of handmade paper, the fibers lie in random directions, unlike a machine-made sheet where, due to the speed of manufacture, the fibers all lie in one direction. The glass fiber rods are tied and glued together using traditional knots. For many years I have used a braided Dacron line that is waxed and holds a knot really tightly. Here again I like the fact that I

continued on page 37



Stephen Hoskins

Toast Rack: Japanese handmade paper, glass fiber rod, wood, and Dacron thread.



Stephen Hoskins

LEFT: *Ears 1*: Screenprinted handmade Japanese and Thai paper, glass fiber rod, and Dacron thread.
RIGHT: *Digital Ears*: Inkjet printed Japanese paper, glass fiber rod, and Dacron thread.

am mixing a traditional process with a product of current technology.

Following from the freedom I gained from making the flying toast rack, I first made a series of kites known as “Ears 1, 11, and 111.” Here I wanted to make a self-supporting kite, where one was not sure where the body of the kite was separate from the tail, or whether it even mattered if there was a distinction. The coverings were drawn from a stock of previously printed Japanese and Nepalese handmade papers, *gifu shoji* and Khadi mulberry.

Once a framework is tied together and covered with handmade paper under tension, as can be seen in the Hamamatsu series of kites, it is surprising just how strong handmade tissue actually is, due to the multiple directions of the fibers. It will not only easily shape itself to the compound curvature of the frame when dampened, but is much stronger than a machine-made sheet due to its multi-directional stability. I have had kites where the glass fiber rod is under so much tension that after several years it will suddenly give way and collapse for no apparent reason other than perhaps a change of humidity in the atmosphere changing the tension in the paper covering.

This body of work has sustained various strands of my personal art practice ever since and has run in parallel with developments in new technology that have been adopted by my research center. In 2001 I won a commission to create a series of large kites as a public artwork, which was situated in the offices of a large U.K. bank. I made four kites based upon the Hamamatsu construction that were over two meters (six feet, six inches square) with a tapering carbon fiber central spar that extended for over four meters (13 feet). These kites were too large to easily screenprint, so for the first time I used a wide format inkjet printer that

printed 60 inches wide, and very lightweight (35 gsm) Japanese paper from the roll *sekishu shi*. Inkjet printers at this time were not designed to print on such an absorbent and lightweight paper stock. It was like trying to print onto toilet tissue. The problems were overcome by writing a specialist profile to control the printer’s settings and combining this with printing the color at 20% of its full strength. In order to bend the grassfire rod to the desired shape, special jigs had to be constructed to hold the spars in place whilst they were being tied and covered with the tissue covering. These kites were some of the first where I created asymmetric holes in the fabric covering, so that it was obvious they would not fly.

The use of inkjet printing onto handmade Japanese paper spread into a whole series of kites using shapes that I had been using for a number of years. These kites gave me an opportunity to test the potential for digital printing on a number of unusual paper surfaces. In the end I settled upon a sheet of handmade *gifu shoji* as the paper of preference that gave me a very elegant inkjet-printed result. The imagery used was frequently based on mathematical proportion and Euclidian geometry. The aim was to marry the traditional techniques and technological materials where the precise imagery acted as a foil and counterpart to both. The tactile surface created by printing digital ink upon traditional paper broke away from the distinctive nature of the digital image. Though conceived as prints, it has always been a prerequisite that all the pieces called kite prints in the exhibition and those I have made since are capable of being flown. About half the works were based on traditional shapes with the other half conceived only on the basis that they must have some symmetry and balance in order to fly. The dynamic necessary to make a kite fly inherently creates a different

approach to its manufacture. This imposed discipline has a direct relation to the logical order of the geometry and drawings used in the surface decoration. I have always divided the work very deliberately into pieces that are framed (prints?) and pieces that are just hung (kites?). Some of the framed pieces have strings and bridles; most of the unframed work does not. This is a deliberate decision primarily based on the fact that it makes clear that the works are art pieces intended for showing in a gallery context, with the subtext on my part that by not adding bridles to the unframed works, it removes the temptation for me to fly them, thus reducing the possibility for me to break them. I might add I make other kites than the ones in this article for flying, primarily for family and grandchildren.

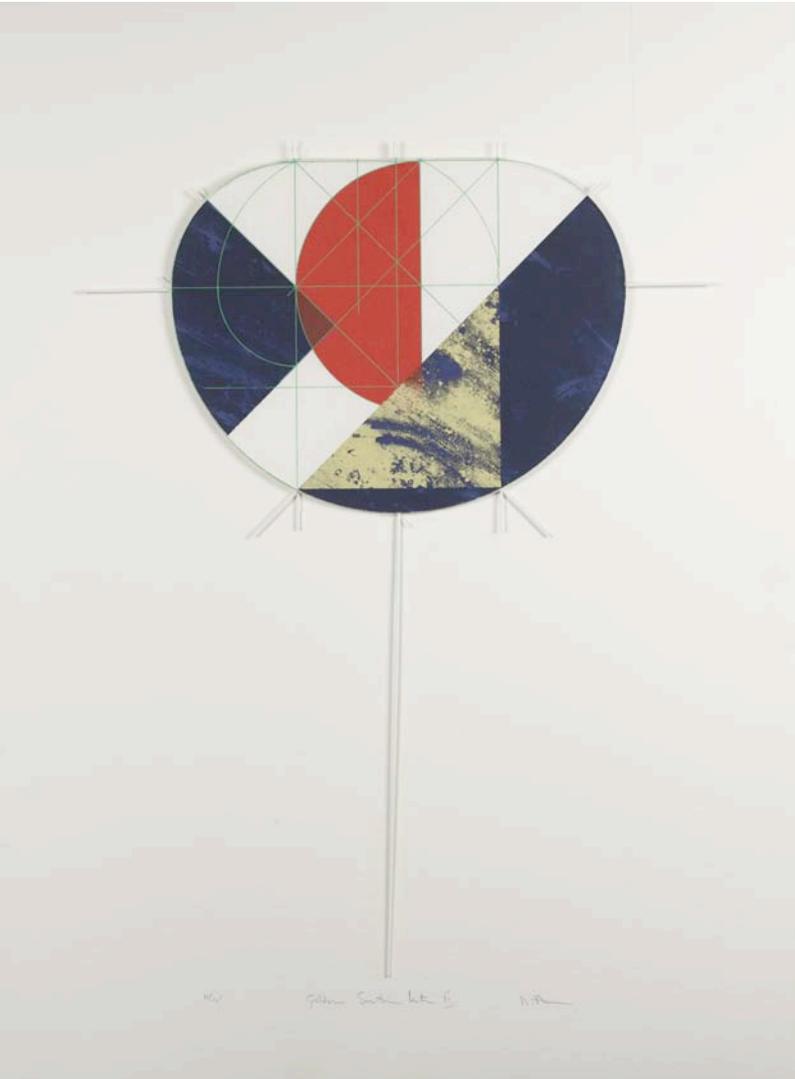
Having trained as a fine art printmaker, my true love is the physical act of making. In addition, I have an abhorrence of badly made work. I use the term "the craft of making" deliberately. To me, the act of making work is often more satisfying than showing work. I enjoy trying to make an economical structure that has elegance and hopefully a beauty.

In 2007 I introduced laser cutting for paper, wood and plastics into my research center. I first started laser cutting kite shapes as original prints, initially in a series of miniature prints which are no larger than three inches by four inches (7.5 x 10 centimeters), then into an original print that was a laser cut paper based entirely on an Edo kite with a rabbit and wave design. This was created for an invited Australian artists exchange portfolio entitled "False Gods." This work was followed by a series of kites with laser cut parts as smaller versions of the large Hamamatsu kites I had made in earlier years. I then discovered the delights of laser cut balsa wood, taking me straight back to my childhood, where I had spent

my years from 13 to 17 making diesel engined model airplanes. (My inspiration came from an uncle who had won the national championship control line speed record in 1951 with a model airplane that he then proceeded to do stunts with.) The delight and difference in cutting balsa wood with a laser is the sheer accuracy and speed that is possible with this technique. In my teens it would take at least a day to cut the ribs one at a time with a knife and probably at least another day to assemble a wing. Now I can laser cut a whole wing in 20 minutes and assemble it with super glue in less than an hour. Everything just slots together with no trimming or adjustment necessary (if you have drawn the file correctly).

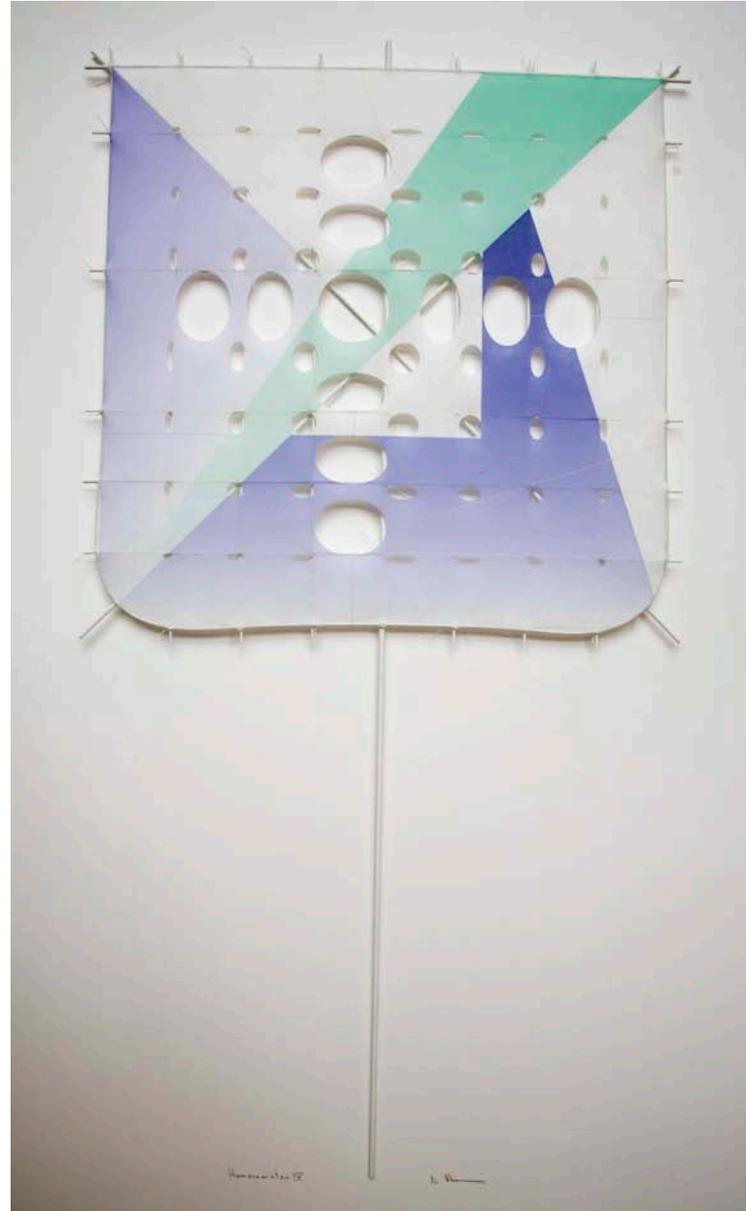
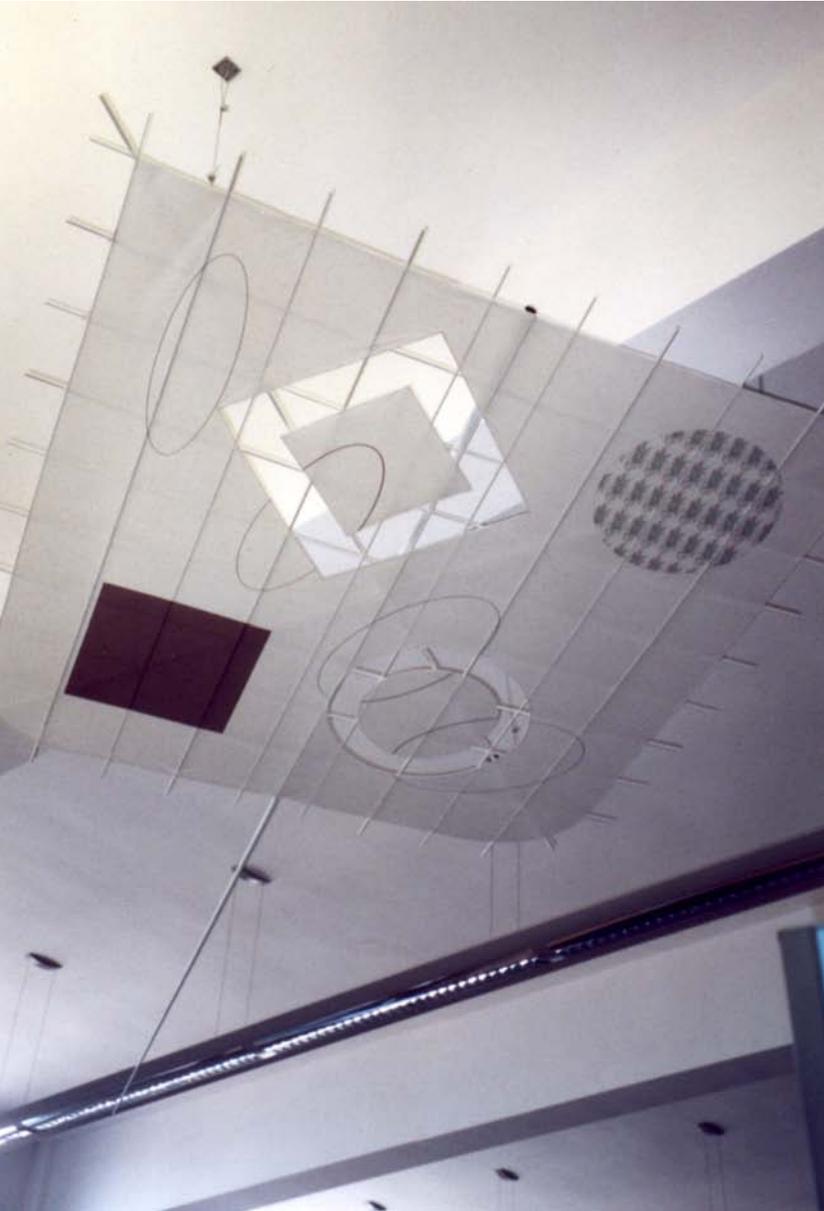
Therefore I now combine laser cut balsa wood with inkjet printed images onto handmade Japanese paper and carbon fiber rod to make combined kite and airplane structures. I have tried to make the coverings as delicate as possible and I can now inkjet print an incredibly light 13 gsm tissue by mounting it onto a backing sheet and printing it through a Roland solvent printer that we have in the lab. The imagery I use on these lightweight coatings is deliberately decorative and not what you would associate with model airplanes. The current rose imagery is generic and totally constructed in Adobe Illustrator to resemble a traditional chintz pattern. The airfoil sections cut in balsa wood are generic compilations from a series of model airplane plans. My current collection of artworks, shown in the images on page 41, are in the stage of what in the past I have called "works on the way to somewhere else." In essence they are the early pieces in a series where I am working through an idea. I intend to push the potential of laser cut balsa wood much further and combine it either with CNC milled spars or use

continued on page 42



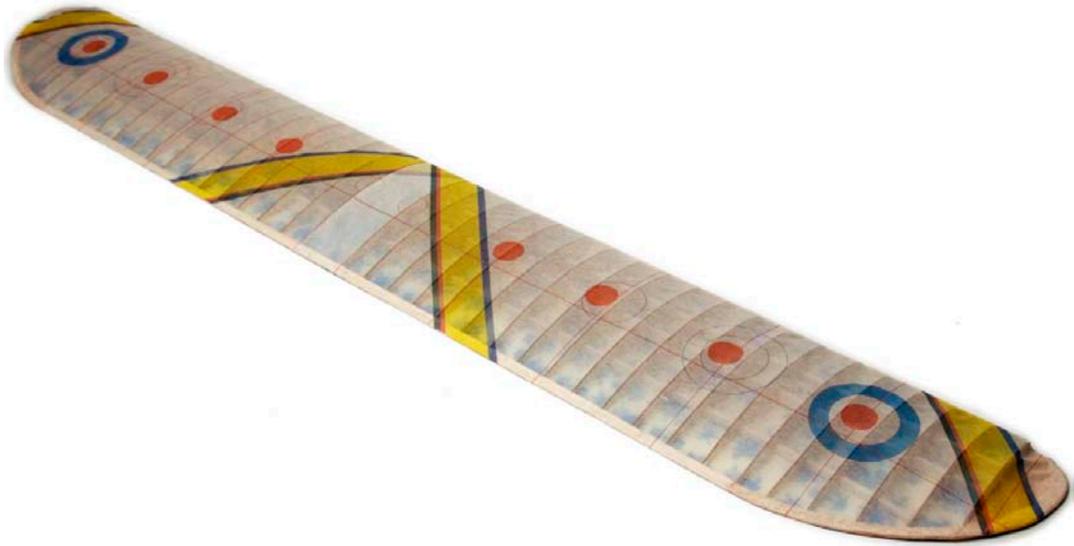
Stephen Hoskins

LEFT: *Golden Section 2*: Screenprinted handmade Japanese paper, glass fiber rod, and Dacron thread.
RIGHT: *Digital Golden Section*: Inkjet printed Japanese paper, glass fiber rod, and Dacron thread.



Stephen Hoskins

LEFT: *Newcastle Kites*: Inkjet printed Japanese paper, glass fiber rod, and Dacron thread.
RIGHT: *Laser cut Hodamura*: Glass fiber rod, inkjet printed and laser cut handmade Japanese paper, Dacron thread.



Centre for Fine Print Research

TOP: *Model aeroplane wing*: Laser cut balsa wood, inkjet printed handmade Japanese paper. 2 m x 20 cm x 4 cm.
BOTTOM: *Balsa wood Malay with Aerofoil section*: Laser cut balsa wood, carbon fiber rod, inkjet printed handmade Japanese paper. 1.5 m x 1.2 m x 8 cm.

traditional steaming to bend spars into unusual shapes.

For the past seven years I have been working on 3D printing as part of my research. We currently have 11 3D printers in the labs, ranging from the cheap desktop printers through to high quality printers that print in great detail. We are leaders in the field of 3D printed ceramics. I have been trying to find a way to combine 3D printing with kitemaking and art in a way that goes beyond just printing connecting pieces for the spars. Recently we have been discussing the prospect of printing structures similar to feathers and coating them with a thin layer of cellulose, in the same manner as tiny indoor model airplane wings used to be coated. It should then be possible to either print joining sections or find other ways of joining them to make larger kite structures, which I am sure would fly.

The idea of making a kite that is primarily made by 3D printer appeals to me, and may at long last be one way for me to combine my research with my passion for making kites and prints that fly. ♦



WORDS ABOUT THE 30TH INTERNATIONAL KITEFLIERS' MEETING, FANOE, DENMARK

Scott Skinner

Scott Skinner

Parafoils by Ed and Bonnie Wright spontaneously take to the air over Fanoe, Denmark.

29 years ago, seven enthusiasts met on the island of Fanoe, Denmark and established the most unique of world kite events. This annual meeting would not be a “festival” in the traditional sense: no sponsorships, no paid attendees, and, for the most part, no formal schedule. From those original kite crazies, the event grew to host well over 8,000 fliers in the late 1990s and early 2000s. The Kitefliers’ Meeting has held steady with over 5,000 attendees to the present and it maintains a special spirit. People come because they want to come. They pay their own way, and they fly kites at their leisure.

Original founders and organizers Wolfgang Schimmelpfennig and Rainer Kregovsky, along with fellow kitemaker Til Krapp, have attended all 30 of the Meetings. Rainer has celebrated milestone birthday numbers 50, 60, and 70 on the island with kite friends, while Wolfgang has unveiled new creations throughout the Meeting’s history (including Big Boss, Snakey Jak, and now a new power-lifter).

It struck me while attending this year’s Meeting that there are others who have witnessed all 30 Meetings: Claudia Kregovsky and Helga Krapp! Both laughed

as they recalled the first years when their husbands and others would fly kites all night long and then start the process again the next day.

There is a new movement on the island as the Kitefliers' Meeting moves forward. Windfriends.org is the online face of an organization that will promote wind-related events on the island of Fanoë, year-round. Based upon the success of the Kitefliers' Meeting's history, Fanoë wants to host land-yacht racing, kite buggy events, windsurfing and kite surfing events, among many other wind-driven sports.

Windfriends is the functional organization that, in the short term, will work to enable event organizers to provide services to their participants and to promote Fanoë as a year-round destination for wind-sport enthusiasts. I hope *Discourse* readers and followers of the Drachen Foundation will visit the Windfriends website and Facebook pages. Make no mistake, you'll be asked to pledge your support in the most tangible of ways, and your support will manifest itself in both the short and long term.

Short-term, finances gathered by Windfriends will go to support wind events on the island. This support might take the shape of secure beach storage, reduced ferry tickets, or on-the-beach shelter and food service. Long-term, Windfriends hopes to build a worldwide following that will help convince investors to build a Wind Sport Center, much like the Danish wind-surfing Mecca, Klitmøller. ♦



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