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old Helen Keller flies a kite with Alexander Graham Rell, Helen Keller was an	MAY 2012	
Bell. Helen Keller was an American author, political activist, and lecturer. She was the first deafblind person to earn a Bachelor of Arts degree. See page 16 for more from "The Magician's Oath: a Conversation with Pat Hammond on Magic, Science, and the Wind."	From the Editors	3
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NABX 2012

SCOTT SKINNER

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One of two photographs taken 100 years apart grace the cover of this issue of *Discourse*. Kite fans will recognize it as the famous image of Helen Keller and Alexander Graham Bell. Find the second photo in the engaging profile of San Antonio kite-lady, Pat Hammond, written by Christopher Ornelas.

Email correspondence from Julie Scott paints a picture of the power of kites in the aftermath of the tragic earthquakes in Haiti. The making of *kap* (Creole word for kite) empower young people and are a symbol of hope in Haiti. Cheang Yarin celebrates the second edition of *Khmer Kites* by sharing stories from the Cambodian countryside. She and partner Sim Sarak continue to document and encourage the rebirth of Cambodian kite making.

A reunion, of sorts – with Carl Robertshaw in Cervia, Italy in 2011 – led me to New York City to work with Carl and James Tattersall on the set installation for Antony and the Johnsons at famed Radio City Music Hall. Magical images from the performance grace this issue.

Finally, travel with me to the funky desert town of Primm, Nevada and get a taste of the North American Buggy Expo (NABX), the largest gathering of kite traction enthusiasts in North America. Growing numbers are finding their way to the Ivanpah dry lake bed to experience the thrill of land-based kite traction.

Scott Skinner Board President Drachen Foundation

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CHRISTOPHER ORNELAS San Antonio, Texas

Ornelas is a writer, sculptor, and San Antonio native. He is the co-author of Wings of Resistance: The Giant Kites of Guatemala. He graduated from Yale in 2007 with a degree in Latin American Studies.



Chris Ornelas

JULIE SCOTT Suwanee, Georgia

Scott took her first trip to Haiti while at Vanderbilt University. After graduation, she married a team member from that trip and spent several years in church youth ministry. She currently serves as the U.S. coordinator for Haiti Child Sponsorship.



Alysia Wood

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.



lose Sainz

CHEANG YARIN Phnom Penh, Cambodia

Instrumental in reestablishing the traditional craft of kite making throughout Cambodia, Yarin's extensive travels across the country with Sim Sarak resulted in *Khmer Kites*, a book that has brought the long Cambodian kite history to light.



Dek Sarin

KITE MAKING IN HAITI

Email Text and Photographs by Julie Scott



Julie Scott

A student in Haiti shows off a kite of his own design.

INTRODUCTION BY ALI FUJINO

I have never met Julie Scott in person, but like many stories at Drachen, they begin with a simple encounter through the phone, email, or letter. This particular collaboration started with an earthquake, not a small one, but a large one that has left a small island a disaster. The nature of many earthquakes renders the residents in much despair and tragedy, shattering their everyday living patterns to that of survival. You know all the asks: "Where do we get uncontaminated water, building materials, medical supplies?"

About two months ago, I received a call from Julie Scott, who explained she was looking to purchase good kite materials for her students in Haiti to make kites. Laurie in our office carefully explained we had inexpensive kits of all types: low cost, high in flyability – but was cut off by Julie's comment: "They know how to make kites, they just don't have any materials!" How can one know how to make kites without having any materials?

I became a part of the conversation and found they do know how to make and fly kites, but due to the earthquake, there is nothing to spar the kites with and no line to fly them. Julie told me how much money she had in her program to purchase materials, and we did the best we could to discount her costs and give her as much material (bamboo and line) as possible.

As Julie emailed early on: "Yes we are a nonprofit working in Haiti. We want to give kite continued on page 7



Julie Scott

Building kites made from reclaimed and donated supplies.



Julie Scott

The Creole word for kite is *Kap* and means to lift up and is a symbol of hope in Haiti.

making supplies to 1300 students at a school. String on a plastic holder, 2 bamboo spars (probably the 1.8 mm) and we will supply them with colorful plastic bag and tail. Honestly we are counting on them for the design. We are limited because we cannot supply scissors or tape. They love kites and they make them out of anything they can find. The Creole word for kite is Kap and means to lift up and is a symbol of hope in Haiti. We thought it would be a perfect gift. Just giving them the materials will bring them great joy!" [an excerpt from one of Julie's first emails to Drachen]

Here is her email trip report and photos:

Dear friends at Drachen Foundation,

We had a great trip to Haiti. Thank you so much for the discounted kite supplies. We were able to share the supplies with hundreds of students at the school. These students have suffered much since the 2010 earthquake and it was a joy to share some hope with them! Since we are not experts in kite-making, they basically taught us! They wanted more than 2 bamboo spars and we were able to give them extra. Haitian kites look more like the spokes on a wheel! Here are the best of the photos.

The students and teachers enjoyed a fun afternoon of kite-making and kite-flying thanks to your support!

– For Haiti, Julie Scott

The photos that we publish here are so heartwarming. The samples shown are beauties and all engineered by the students to fly. There is possibly no better exercise for a handful of bamboo sticks, string, and scraps of plastic bags than kite making.

From disaster comes good things that fly and entertain. •



More kite making and testing.



These students have suffered much since the 2010 earthquake and it was a joy to share some hope with them!

Illuminated Crystal Kites in Flight

Scott Skinner

About a year ago, at the Cervia Volante kite festival in Italy, I was lucky enough to bump into one of my favorite kite people: Carl Robertshaw (www.kiterelateddesign.com).

Readers of *Discourse* will remember that Carl was a contributor to Heather and Ivan Morrison's kite projects (*Discourse* issue #8), but my memories of Carl go back to the early nineties when he and his brother James Robertshaw were the founding members of Airkraft, one of the world's best sport kite teams. Airkraft took on the personality of James and Carl and took a highly innovative, avant garde approach to team flying: specially produced music, mind-bending maneuvers, and a break-neck pace that was well ahead of its time. In catching up with Carl, I learned that his trip to Cervia was really a therapeutic one, as business and life changes had led him to Cervia to get re-energized with the positive spirit that kiting brings to all of us.

Even in this transition time for Carl, though, he shared with me a project that would prove to lift him up and bring us together in early 2012. Carl had collaborated with performance artist Antony Hegarty, and, as it turned out, Carl would design the set for about half a dozen performances of music group Antony and the Johnsons (www.antonyandthejohnsons.com) at music festivals throughout Europe. In the varied venues encountered, Carl's set evolved from show to show and grew or shrank based on the size of the stage. The set designs were based around three sizes of "crystal" box kites, each with five differently shaped faces. The kite crystals proved to be a flexible set that

could be erected and raised easily in endless combinations for use at any venue.

"These beautiful crystals can be found in the center of dark mountains, yet somehow they hold an inner luminosity."

Antony Hegarty, explaining the crystal kites during a performance

I was thrilled to hear from Carl in late 2011 that he would be working with Antony on a show at New York City's Radio City Music Hall (RCMH). He and James Tattersall (also an artist with amazing kite connections: www.jamestat.com) enlisted the help of several local – and in my case, not-so-local – kite people (Rob Banks, Tod and Melissa Maguire, and Bob Drosnick) to help assemble, erect, and install Carl's set above the Radio City Music Hall stage.

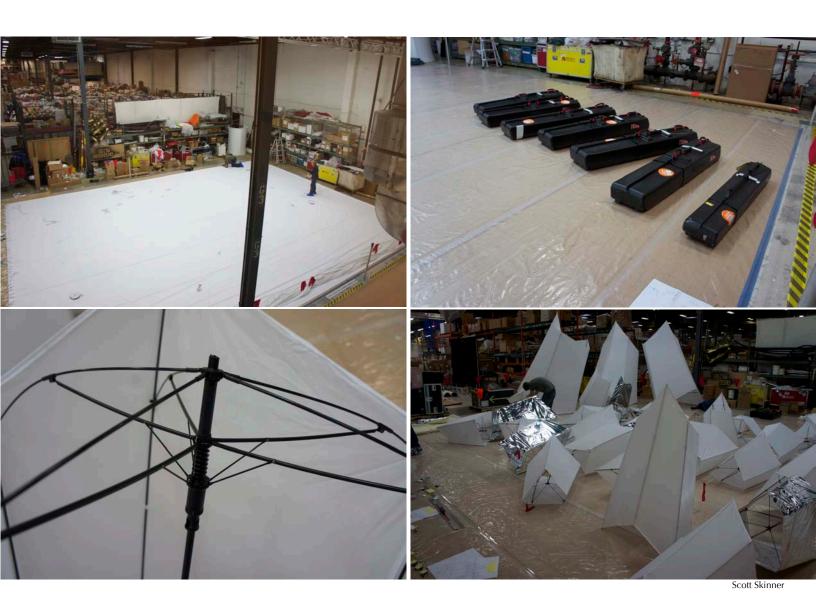
With funding from MoMA's Wallis Annenberg Fund for Innovation in Contemporary Art, Antony and the Johnsons were commissioned to perform "Swanlights" on January 26, 2012. Theater critic Klaus Biesenbach commented on an earlier performance at the Manchester International Festival: "Antony worked with set designer Carl Robertshaw to create three-dimensional wall structures that could move, extend, expand, inflate, and deflate throughout the concert. The staging had the effect of translating one of Antony's delicate but strong crystalline drawings into a dynamic, changing space..."

Carl knew that installation of the set at RCMH would be a real trick; all the crystals would be transported to RCMH to arrive at 8am on the day of the performance. The plan was that they would have to be unpacked, organized, re-erected, and lifted within four hours. The set also included three huge, white, rip-stop walls that followed the crystalline theme, and it was in

a New Jersey warehouse that I got an idea of how large these were. (See photo on next page.) The way many productions work in New York City is that costumes, sets, and promotional material are produced off-site, and then, in the case of a stage play, for example, all would be brought to the venue prior to opening, and would be installed for the run of the show. This was a unique production, however, because it was a one-night-only performance and had to be in and out of the theater on the same day!

Working at the Rosebrand facilities in New Jersey, we received the set from shipping and began erecting and laying out the set elements. Crystals came in three sizes and two materials: ripstop, of course, but also silver mylar. The small and medium crystals were supported by a clever umbrella mechanism that Carl found – where else but in one of the oldest umbrella shops in London – and adapted for the five-spar arrangements of each box kite. The very large crystals were framed with fiber-glass spars that any kite maker would be familiar with. After two days of work, erecting and re-erecting crystals, measuring and painting drop lines, and arranging sets of kites on site-specific drop lines, we were ready to prepare for transport to RCMH.

I think we all were a little shocked when we saw the vehicle assigned to carry everything to Radio City. Small was the understatement of the day! It was apparent that every kite/crystal would have to be broken completely down. Every bit of the set would have to be assembled and erected onstage. Now you might think that Carl's ingenious sparring system and his formidable organizational skills would be enough to ensure success, but now the whole exercise became one of communication. None of us were supposed to touch anything while on stage at RCMH. It's a union house, and only union members



ABOVE LEFT: This gives you an idea of the size of the Rosebrand facility. That's one of Carl's walls on the floor!
ABOVE RIGHT: The entire set (minus the three walls) as it arrived from England. Below Left: The umbrella system for the cellular structures. Below RIGHT: A number of crystals.

are to do any work. As they told us at 8am, "Look at your hands – they should be just as clean when we finish!" That meant that we would all have to show and tell someone else how to do what we'd been doing for the previous two days. I heard James explaining to one of the crew that the measurements on the main lifting bar were in meters, and I could see a cloud of confusion as I walked away. Great credit to James that somehow the bars all got measured and marked.

We actually worked right up to the minute that Antony started his rehearsal, but Carl, James, and the four of us successfully installed the set and had the luxury of listening to the rehearsal and seeing some of the lighting effects while we decompressed in the theater. Lunch and dinner were provided for the entire crew on this very busy day, so now the time seemed to drag by as we waited for the evening performance.

The pictures to follow show the magnificence of Carl's design, matched only by the stunning performance of Antony and the Johnsons.

The performance is now moving to Mexico City May 19th for the Festival de Mexico with Orchestra Philharmonic of Mexico City: www.festival.org.mx/fmx/ ◆

MORE ON CARL ROBERTSHAW

A man of many talents...

Rumor has it that Carl started making and designing kites when he was 3.

I first met Carl when I was competing in the world cup in Japan in 1992. At the time he said he was going to put together a team and win the world championships. You know what – he did!

He is three times European and British sport kite individual champion. The Pairs European and British sport kite champion with the Evolver Team.

World champion with Airkraft (1995) and three times silver medal winner. He has held world indoor duration records for dual line flying.

Born May 1972.

Completed a graphic design/arts degree at Central St. Martins, London.

Started flying kites seriously at 18.

Got seriously hooked when travelling in USA and Australia at 20.

Competed for ten years with Airkraft, and performed with James, as Evolver, individually using two and four line kites.

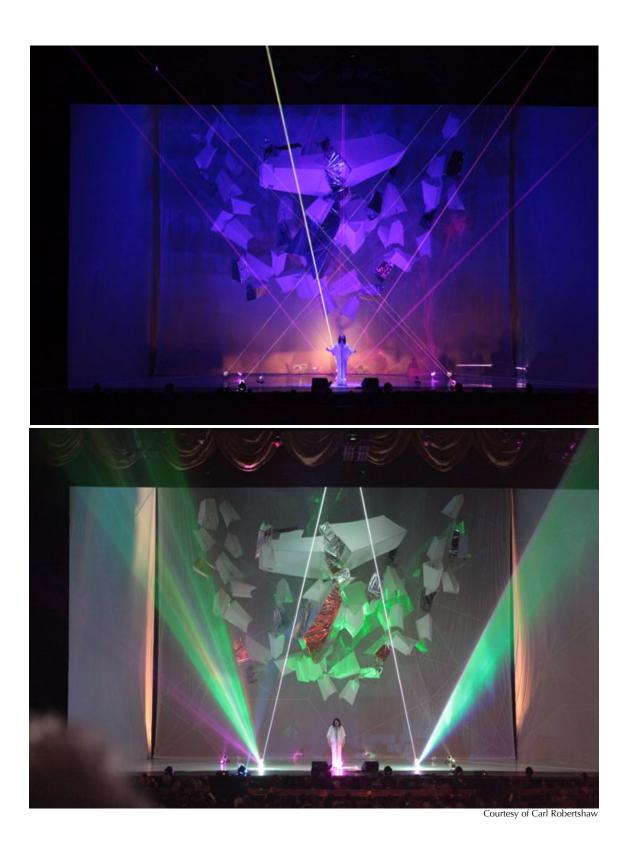
Famous maker of single line kites

Occupation: Carl Robertshaw kite related design, building kites and kite related designs used by designers and architects

Favorite Food: Lasagne Favorite Color: Blue

Hobbies: Scaletric (race cars on track) and Lego

 Taken lovingly from the website of Paul and Natalie, The Kite Couple: www.kitecouple.com



A spectacular performance by Antony and the Johnsons at New York City's Radio City Music Hall.





Courtesy of Carl Robertshaw

Carl Robertshaw designed the impressive set, based around three sizes of "crystal" box kites.

THE MAGICIAN'S OATH: A CONVERSATION WITH PAT HAMMOND ON MAGIC, SCIENCE, AND THE WIND Christopher Ornelas



Christopher Ornelas

ABOVE: A "chain letter" outside of Hammond's front door. This one is a riddle. Can you guess what it is?

The walk up to Pat Hammond's house is just as I remember it, a jungle of plants under a canopy of arching oak trees. Statues of lambs carved in stone guard the path leading to her home.

At the door, I am greeted by a set of numbers written in rusty old chains laid out on the ground: 3 1 4 1 5 9 2 6 5. It's a chain letter. Literally.

My first visit to her home in San Antonio, Texas, was in 2009, when I came to do research for an article I was writing on Mexican kites. Hammond is an authority on kites. She penned a short book entitled *The Book of Common Air: A Highly Irreverent Collection of Kites*. And she is the inventor of "Kitechism," her own theory of aerodynamics: "Name them, they fly better." On April 1, 1972 – April Fools' Day

- she became the first woman to win the Smithsonian's annual kite flying competition. After collecting kites for forty years, she has amassed an untold treasure of kites and kite ephemera.

On my previous visit, I was greeted by the letters "H C," short for Heather and Chris. Hammond's chain letters are her way of saying, "Welcome." However, THIS chain letter is very different. I stare at the numbers at my feet, rather perplexed.

The bell hanging from a thick rope rings louder than I had imagined. I peer into the large glass window in the front door, and then I turn around to stare at the numbers again. What could they mean?

When I turn back to the door, Hammond is standing there to greet me with a warm smile.

I come into the house and head for the kitchen, but before I get there she stops me to ask about the chain letter.

I did see it. But, no, I haven't figured it out.

"Well, it's not for you. But it is a message," says Hammond.

I go back out of the door to take a third look.

"It is pie in the sky," she says with a grin.

I concentrate on the numbers intently. I notice that it starts with today's date, March 14, but the significance of the other numbers remains a mystery.

"Come on now, it is as easy as pie," she says, hands on hips.

I start adding up the numbers aloud. Three plus one is four. Four plus one is five –

"No! No! No!" says Hammond, getting impatient. "I gave you a big clue! Think pie in the sky!"

I stare sheepishly at the numbers and then look back at Hammond for help. "Come on now," she says. "Think, today is 3-14."

That's when it hit me. It's pi! [Pi is the mathematical constant that is the ratio of a circle's circumference to its diameter: http://en.wikipedia.org/wiki/Pi.]

I walk into the house – relieved that the test is over. Hammond stops me with an earnest look and says, "I say two things in the morning that remind me why I am grateful for being alive. 1) I can remember the speed of light, which is 186,000 miles per second. 2) I can remember pi to the ninth place. At the age of seventy five, I may have forgotten many things, but as long as I can remember the speed of light and pi – I know I am still okay!"

In this moment I am reminded of why I came to visit Hammond in the first place. She is a puzzle. She is a kite collector, but her interest is not in owning kites, it is in discovering them. She is a magician, yet there is logic behind her magic. She is fascinated by the infinite. The speed of light, the count pi, the pull of kites are indicators of reason meeting transcendence. Things that we can sense but whose true perception hinges on two modes of seeing happening at once, reason and beauty, science and magic – bound in one object, one form. Experience is the form and it comes before understanding. Magic comes first.

We move into the living room, past what I call the hall of treasures: a room filled to the ceiling with a menagerie of toys, bubble machines, and masks gathered from her

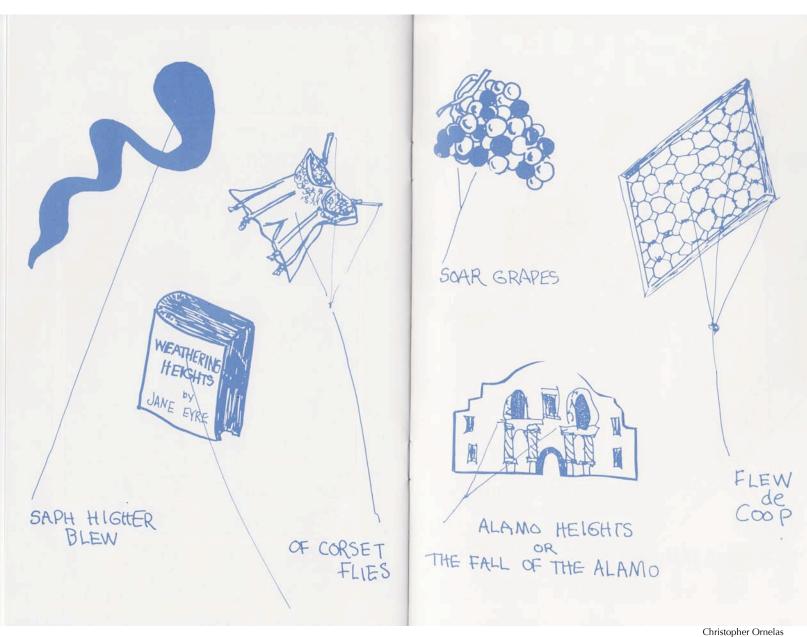


Pat Hammond at her home in San Antonio, Texas.



Lisa Ornelas

These 100 red kites, made of Mylar, are one of Hammond's many creations.



An illustration from Pat Hammond's Book of Common Air.

travels to Mexico and Guatemala. Baskets overflow with so many masks and gizmos that I can barely make sense of them all. We sit down for a cup of tea.

*** * ***

The foyer is spacious. It opens to the rest of the house and there are no doors between the rooms. I can see into the hall of treasures and into the living room to the left. It has high ceilings, white walls, and dark wood floors. It is spartanly furnished with a single grand piano and a fanciful wooden sculpture made by her son, Robert, at the age of seven. There is a wooden staircase to the right, paralleled by a large blue border that snakes along the wall. Heritage oak trees shade the house, but the rooms are still bright. Large windows around the house give each room a soft glow. Hammond inscribed many of them herself with a small etching pen; only those who look closely can read the secret messages.

The living room looks out onto the verdant yard. A stately portrait of an anonymous matronly woman with the air of Queen Victoria hangs above the fireplace. But the books lining the walls from floor to ceiling draw my attention the most. They overflow the shelves, creating neat stacks along the floor. Old books, embossed with the seals of Tsarist Russia are tucked away under the end tables.

On a table in the middle of the room, a small herd of hand-carved sheep are arranged around a sign that reads "Lambscape." To the left of the sheep lies a large book, slightly worn around the edges, written in Braille. The honeycombed texture of the book is strikingly beautiful.

"I found this book at the Book Cellar," says Hammond. "I had no idea what it was, but I just had to have it."

The book is *Tenochtitlan en una isla*, ("Tenochtitlan is an Island"), the Spanish account of the conquest of the Aztec capital by Ignacio Bernal.

We begin to talk about Mexico. Her husband, Hall, is fascinated by early sixteenth century Mexican architecture. In the mid-seventies, they made numerous trips to central Mexico and Guatemala to investigate old colonial structures dating to this period.¹

"Well, you know about the story of my Mexican kite?" she inquires, eager to tell the story anew.

"We were on a highway traveling to Oaxaca when a boy wanders up from seemingly out of nowhere holding a kite. The kite is made from a raggedy cover of a comic book. The edges are frayed. It has holes in it, and the paper is pierced with two turkey feathers for struts – no tail. The string is made of pieces of thread tied together in a ball.

"I think to myself, 'This poor kid. There is no way that thing is going to fly.' Everything I knew about kiting told me that kite could not fly. The next minute the boy throws the kite up in the air and it went straight up!

"I wanted that kite – bad. But I couldn't bring myself to buy it from him. It was his. He needed to keep it," and from the tone in her voice, I can tell she still dreams about it. She tried to re-create the kite several times but has never been able to. "It is my favorite kite of all time," she says.

On the coffee table, I notice another book written in Braille. The cover reads, "National Geographic August 2011." In addition, there are three ordinary *National Geographic* magazines resting on the table.

One is also dated August 2011. It includes an article about the High Line park in New York City entitled, "Miracle Over Manhattan." Her son, Robert Hammond, co-founded Friends of the High Line, the non-profit that saved an abandoned elevated railway and transformed it into one of the most innovative public spaces in the world.

"I have all three *National Geographic* magazines memorized," says Hammond. She holds them out and tells me to pick one. I pick one with dinosaurs on the cover.

"Now, turn to a page, any page," she says. I turn to page 39. It has a picture of Peruvian women in hats gathered around a fire next to Lake Titicaca.

She holds up one of the other magazines. "It helps me to remember," she says. She holds her hand to her head trying hard to concentrate. "Okay, are there craft vendors sitting by a fire on a big lake?"

Yes, yes, there are. Smiling, I read the caption out loud: "Craft vendors wait for tourists on an island sacred to the Inca."

Oh, I'm impressed, and I interpret this show of bravado as an example of Hammond's quirkiness. But of course, I should know better.

She gives a big smile and lets me in on the prank: they're all the same! Each magazine is the issue of August 2011, but with a different cover on the outside. "It is good for getting the attention of teenagers and grandkids," she explains.

"A few years ago, I hired a magic tutor to teach me magic. I wanted to learn simple magic to do with my grandsons, not fancy sleight of hand tricks, but simple magic tricks I could do with a five-year-old. It was great fun, but after the first lesson he told he me he couldn't teach me any further until I signed the Magician's Oath.

"'What is the Magician's Oath?' I asked. You have to vow that you will not repeat and reveal any magic tricks,' he said. The oath is an ancient tradition passed down from magician to magician for generations.

"I was so upset in the car ride home. 'I can't repeat or reveal?' But that is exactly what I wanted to do!

"And that is when I realized: that's science. If it is science, then you have to repeat and reveal."

I did not understand this at first. But as I pondered the difference between magic and science, Hammond's words became clearer.

The tricks of magic are only magical as long as they remain a mystery. They fascinate us because they seemingly defy the laws of reason and what we know to be real. However, once you repeat and reveal a trick, it ceases to be magic because it ceases to mystify.

Science, on the other hand, depends on one's ability to repeat and reveal what has been discovered. This is perhaps the simplest definition of science. Any experiment must be replicable before it can prove or disprove a theory.

After leaving the magician that day, Pat stumbled upon an old truth. Magic and science are inseparable and contradictory. Science creates magic, and magic creates science. Science can make real the seemingly impossible: carriages that run without horses, pictures that move on their own, people who fly to the moon! Likewise, the mystery of the unknown is at the heart



Christopher Ornelas

The "hall of treasures," filled with Hammond's collection of toys, masks, dolls, and bubble machines.



Lisa Ornelas

Hammond holding her trophy for winning the Smithsonian's annual kite flying competition on April 1, 1972 – April Fools' Day.



An illustration by John Audubon in Hammond's home of a Swallow-tailed Hawk, the bird from which the English word "kite" is derived.

of scientific truth.

But is there truth in the Magician's Oath? When we know the secret of the mystery, does it cease to fascinate the mind?

*** * ***

After this first meeting, I fiercely scribble copious notes. We conversed about so many things: Benjamin Franklin, Helen Keller, L'Abbe de L'Epee.² We discussed the history of sign language and static electricity. We talked about the "Texas rainmakers," and the use of kites in WWII.³ We looked at Audubon's paintings of Mississippi and Swallow-tailed Kites – the birds from which the English word "kite" is derived – and examined a small box containing wings of real birds!⁴

I am bowled over by Hammond's encyclopedic knowledge, but more so by the seemingly ineffable meaning behind the myriad things she knows by heart — a meaning both logical and absurd — that I sense to exist, but I am at a loss to explain. Perhaps she is Don Quixote, chasing after kites, believing them to be giants.

I have the clues to a riddle, but what is the question?

I return for a second visit two days later, eager to understand how things connect. I knock on the door with a list of questions in hand. Some of these are about the "little details," questions about her family, her collection, names and dates. But, of course, I know these are not the things she wants to talk about.

But luckily there were other questions. Bigger questions. After pondering the numerous articles, artifacts, photographs, and stories, I've identified three things that seemingly link everything together. I want to

know about magic, science, and the wind.

"Is that all?" asks Hammond. "Well, are you sure you haven't left anything out?"

Then she looks at me in the eye and says, "Life is like licking honey off a thorn. This is one my favorite sayings.

"Did you know I have a honey collection?" she asks. The top of her fridge is covered in a plethora of glass jars filled with different shades of honey.

"I used to eat honey by the spoonful. But when I heard this saying, I thought, 'Huh?'"

She pulls out a small container of toothpicks from the kitchen cabinet (Hammond also has a large collection of toothpicks). In the cabinet, I can see toothpicks of all shapes and sizes. Some are made of twigs; others look like small sabers. The crown jewel of the collection is a box of Le Négri goose quill toothpicks, sterilized and wrapped.⁵

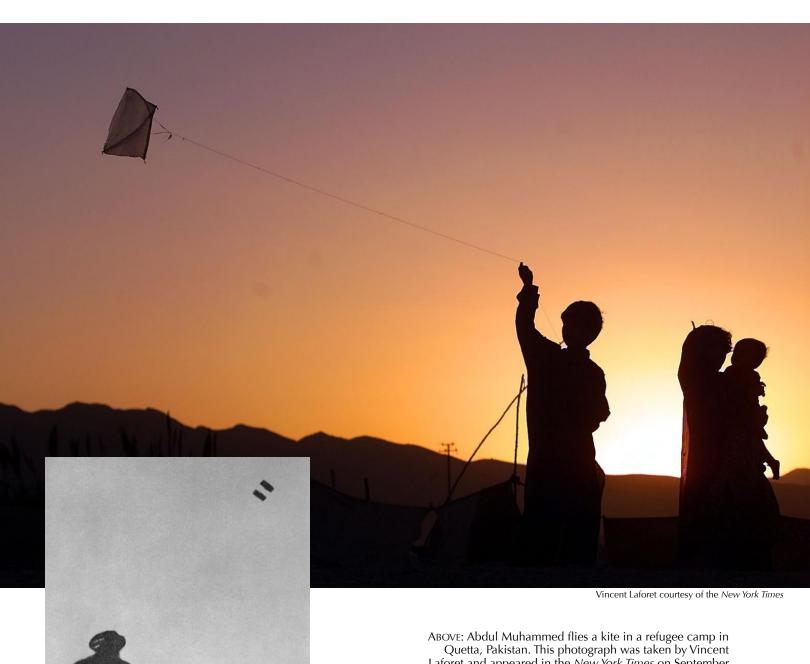
"Here, give it a try," she says. I take a small toothpick of honey, pinch my nose, and put the toothpick in my mouth.

"Close your mouth, and let the honey stay on the middle of your tongue. Then kind of swish it. Let the honey spread across your tongue to the back of your mouth. Now, open your nose and taste."

The honey explodes across my taste buds. It has the faintest hint of blueberries.

"You see? All you need is a tiny bit," she says.

She then pulls out two black and white pictures from a drawer. "This is what I find most fascinating about kites," she says,



ABOVE: Abdul Muhammed flies a kite in a refugee camp in Quetta, Pakistan. This photograph was taken by Vincent Laforet and appeared in the *New York Times* on September 30, 2001. LEFT: This photograph shows a ten-year-old Helen Keller flying a kite with Alexander Graham Bell on September 25, 1901 in Cambridge, Massachusetts.

handing the pictures to me.

The two photographs were taken one hundred years apart. A boy named Abdul Muhammed flies a kite in the first picture, taken at a refugee camp in Quetta, Pakistan. He and his family fled his village in Afghanistan in anticipation of the U.S. invasion. The photograph appears in the *New York Times* in an article dated September 30, 2001.⁶

"The Taliban banned kite flying," she says. "If they caught you flying a kite, they would chop off your hand. And here is this tenyear-old boy, probably the head of his family, escaping from the atrocities of war. And what does he do? He creates this kite out of nothing. Out of nothing!"

A man and a girl fly a kite in Cambridge, Massachusetts in the second photograph, taken on September 25, 1901. The two photographs are nearly identical. However, the second one shows a ten-year-old Helen Keller flying a kite with Alexander Graham Bell. In her autobiography, Keller talks about experiencing the feeling of the wind, feeling the tug of the string.⁷ "Altogether, we had great fun..." she writes.

"This is all the kite is," says Hammond. "It is the feel of the wind.

"You can't see the wind, but we can feel it, we can hear it. The kite indicates something that is otherwise invisible."

Hammond grabs a brown paper bag folded into a square. "I learned this in sixth grade," she says. Suddenly, she whips the bag toward me and – "WHAM!" The bag snaps loudly as it breaks the wind.

"You see, all sound is just air being forced across a sharp surface." The creation of sound via the telephone, a guitar, or a paper

bag: these are all different ways of manipulating wind.

Surely, Alexander Graham Bell must have understood this. It is no wonder that Keller writes, "To Alexander Graham Bell, who has taught the deaf to speak and enabled the listening ear to hear speech from the Atlantic to the Rockies, I dedicate *This Story of My Life*."⁸

Ultimately, science and magic are not at odds. They are not mutually exclusive. "The aerodynamics of flying a kite can be understood," says Hammond, "but each time you fly a kite the experience is going to be different, because the wind is always changing. There is something unpredictable and magical about every experience.

"The kite itself is a pretty boring object. It only becomes exciting when you add the wind. Only then is it magical. And there is always magic in that moment, the moment it comes to life.

"The kite is very flimsy and delicate. It is made with just skin and bones. It is no different than we are, really. It is the wind that makes it come to life."

I remind Hammond of my desire to know the connection between wind, science, and magic.

She looks at me for a moment and then says, "As long as we live, we will have all three. When wind goes, we no longer have need for magic or science." •

NOTES

1. Hammond provided invaluable information and assistance for my research

on the traditional kites of Mexico. She visited the Santiago giant kite festival in Guatemala in the early 1970s, and has preserved one of the earliest examples of barriletes gigantes still in existence. Christopher Ornelas, "Adrift in el Istmo: A Kite Journey to Juchitán," Discourse: from the end of the line (Drachen Foundation) 1, no. 3 (December 2008): 23-31. Alison Fujino et al, Wings of Resistance: The Giant Kites of Guatemala (Seattle: University of Washington Press, 2012).

- 2. L'Abbe de L'Epee is the humble French priest who invented sign language in 1760. Before this time, the deaf were outcasts in society and considered little more than idiots. Many lived in abject poverty under the bridges of Paris, forming their own communities and communicated using primitive signs. L'Epee founded the first school for the deaf and developed their crude signs into a genuine language. Lane, Harlan, When The Mind Hears: A History of the Deaf (Random House, 1985).
- 3. There is a long history of kites used in military combat. In WWII, soldiers trained in anti-aircraft artillery for the first time using kites for target practice, and emergency rafts launched from airplanes came equipped with kites attached to transmitters detectable by radar. One of these rests in Hammond's basement unopened.

Hammond also owns an original copy of a *Scientific American* journal from 1892 exposing a hoax by Texas "rainmakers" who fooled the national media into thinking they could create rain by setting off explosives on the tail of a kite. "Nearly all the accounts of recent rain making experiments in Texas appear...in most instances, to be grossly exaggerated, and, in some cases wholly destitute of truth," wrote the journal in an article entitled "The Texas Rain

Making Experiments," Scientific American, Vol. 66 (New York: Munn & Co, Jan 2, 1892): 5.

[This article can be read on the Drachen Foundation website: www.drachen.org/collections/rainmaking.]

- 4. Hammond uses the wings for educational purposes and has a permit to own them from the U.S. Fish and Wildlife Service.
- 5. Shakespeare makes reference to toothpicks in his final play, *The Winter's Tale*, "A great man, I'll warrant; I know by the picking on 's teeth" (IV.iii.751-753). Toothpicks were a foreign fashion, to possess one showed that the owner had traveled.
- 6. Douglas Frantz, "A Nation Challenged; Refugees From Afghanistan Flee Out of Fear and Find Despair," New York Times: (30 September 2001).
- 7. Keller, Helen, *The Story of My Life* (Clinton, MA: Airmont Publishing Co., 1965): 157.
- 8. Ibid, above.

KHMER BELIEF IN KITE FLYING

Cheang Yarin



This tonal *Khleng Ek* (pictured here in the Phnom Penh Khmer Kite Museum) won a prize at China's Weifang International Kite Festival in 2007.

INTRODUCTION BY SCOTT SKINNER

Cheang Yarin and Sim Sarak have proven to be very special kite ambassadors for their home country of Cambodia. After publishing Khmer Kites in 2003, and after countless trips to the countryside to teach kite making and ferret out lost Cambodian kite heritage, Cheang and Sim have now published an updated version of Khmer Kites. Illustrated with many more photographs, the new edition continues to shed light on the obscured past of Cambodian kite culture.

As in the first edition, contemporary Cambodian kite makers are featured in the book, with more detailed pictures and drawings of their kites. Cambodian kites fill a very interesting niche of South East Asian kite culture, and the efforts of Cheang Yarin and Sim Sarak provide a model for kite preservation.

TEXT BY CHEANG YARIN

Until recently, most Cambodian people's livelihoods were agriculturally based, and their main crop was rice. In the 1960s, Cambodia was even able to export about 500,000 tons of rice per year. As most of the people were farmers, their beliefs and festivals were related to farming. Today, Cambodian people are Buddhists, but their beliefs are a blend of animism, Brahmanism, and Buddhism.

Every month at least one festival is held. Cambodian people call these Pithi Tvear Tuosmeas, or ceremonies of twelve months of the year. These festivals have been consistently held from the past until the present. They are classified into two major groups: those organized during the rainy season and those in the dry season. This chapter briefly describes two festivals held at the beginning of the rainy season and two others in the first part of the dry season.

The two festivals performed at the beginning of the rainy season are the Royal Ploughing Ceremony and the Fete of Neakta.

Pithi Chraoat Preah Naingkorl, or the Royal Ploughing Ceremony, has been observed for many centuries, and was held at the initiative of a Khmer king in the ancient times. This ceremony is held to pay tribute to the god of earth for her gracious favor in providing land to the farmers to cultivate their rice. It is actually performed in *Pisak* (May), the sixth month of the Khmer lunar calendar, and marks the start of rice cultivation.

The Fete of Neakta (an animistic spirit or deity) takes place a fortnight after the Royal Ploughing Ceremony. Local ceremonies of this type are organized to invoke the spirits to bring rains for farming. The Khmers believe that Neakta or ancestor spirits would stay around to look after their children. Neakta are responsible for protecting younger generations from epidemic diseases, ensuring sufficient rains for farmers, and bringing prosperity for all in general.

Marking the end of the wet season, the Khmers have more festivals, including the Water Festival and the Festival of Kite Flying.

The Water Festival is held on the full moon day of *Kattik*, the twelfth month of the Khmer lunar calendar, which usually falls in

October or November. It ushers in the final season of the year. The Cambodian people celebrate the festival to thank the earth and water for their gifts in the form of soil for farming. According to Buddhist belief, the festival began as a celebration of Buddha's tooth, kept by the king of the Naga.

Exactly one month after the Water Festival, the Festival of Kite Flying follows and brings together kite makers to demonstrate their talents in the full-moon night of *Maksir*, the first month of the Khmer lunar calendar, which usually falls in November or December. For Khmers, the festival means an occasion to pray for good weather, good harvest of crops, and a favorable situation free from destruction by floods or heavy rains.

BUDDHIST BELIEF IN FLYING KITES

The locals also believe that they perform the festival in honor of the *Preah Chula Muni Chetdei*, a stupa (a structure containing Buddhist relics) at the second level of paradise where the Buddha's tooth was kept.¹ At the end of the kite flying season, the locals organize a ritual ceremony to offer a meal, gift, or contribution to the monks, and they dedicate these offerings to their ancestors and the former sage Thmenh Chey for his kind contribution of the *Pnorng* kite to ancient China.² These days, not many people are aware of the meaning of this prayer.

HINDU FAITH AND CULT OF FLYING KITES

As Hinduism inspired several religious cults and also became a dominant form of worship in the past, the locals flew their kites in honor of various Hindu gods, namely Shiva, Vishnu, Brahma, and other minor divinities, including *Preah Suriya* (the sun), *Preah Chantr* (the moon), *Preah*





Sim Sarak

ABOVE: The Royal Ploughing Ceremony in Angkor, 2010. BELOW: The third national Kite Festival for Peace, 1999.





Ministry of Tourism

ABOVE: The Water Festival in Phnom Penh in 2005. BELOW: The Water Festival in 2010.

Phiruna (the rain), Preah Mer Thorinee (the earth), and Preah Agki (the fire).

The Festival of Kite Flying is also to express gratitude to *Preah Peay* (the wind) for giving us air to breathe, for blowing clouds that create the annual precipitation of the country, and for bringing no rain but dry weather to ripen crops.

When the rainy season is nearing an end, the southwestern monsoon brings strong winds, high humidity, and heavy rains. These torrential rains are accompanied by long and loud echoes of thunderclaps, which the locals call Pkor Pdam Kdam Kyang, meaning that the thunder is conveying its message to crabs and snails that the wet season is nearing an end very soon. Sometimes rains continue after the rainy season and create havoc, but the locals are inclined to believe that flying kites can help prevent floods. Therefore, the locals try to get up to seven different tones out of the musical bow of their Ek kites in order to express gratitude to the divinity of wind. By doing so, they believe that the beautiful sounds of their kites can convince the northeast wind to blow huge clouds away and not create any precipitation.

For their part, a segment of local inhabitants of Pursat district in Pursat province tend to throw a dog into the water as an offering to *Ganga* (the water), hoping that this action can help prevent flooding while they harvest rice.

OTHER MEANINGS

In Khmer folklore, the kite has always symbolized many things. A good number of locals hold the Festival of Kite Flying annually and wish for peace, freedom, and happiness for everyone.³ Others prefer flying kites to welcome the new year's goddess who should assume her

responsibility for prosperity of the country toward the end of each dry season.⁴

It was formerly believed that if a *Khleng Pnorng* or *Khleng Ek* kite dropped down on to any rooftop, the house owner or his dependents would suffer a misfortune. Therefore, the kite flier would have to prepare a ceremony to invoke success and prosperity in favor of the house owner's family members, instead of leaving the house owner unhappy and resorting in a legal claim against each other.

The kite fliers performed these ceremonies because some of the people compared Khleng Ek to Khleng Srak (a type of owl, possibly Strix flammea) whose cry in a village or near a house is said to invoke a disease or to presage the death of a sick person. Out of habit, people always chase Khleng Srak or Khleng Khmoch (ghost owl) away by insulting and cursing it. And people can also throw a piece of burning firewood or fish cheese at this nocturnal bird. Now in the countryside, this kind of belief is no longer as popular as it was in the past. •

NOTES

1 and 2: Eveline Porée-Maspero, *Etude sur les Rites Agraires des Cambodgiens*, Paris Mouton & Co. La Haye, 1964.

3 and 4: Statements of Nop Nen (kite flier of Kompong Thom province), Mang Yong (kite flier of Prey Veng province), Krong Nguon Ly (kite flier of Phnom Penh), and Eng Setha (kite flier of Kandal province).

NABX 2012

Scott Skinner



Scott Skinner

Panorama of the 2012 North American Buggy Expo (NABX) on Nevada's Ivanpah dry lake bed. NABX is growing due to the popularity of kite-traction sports.

For over twenty years, the center of North American land-based kite traction has been the unlikely Nevada border town of Primm. Lured by the funky ambiance and inexpensive hotel rooms in this casinotown, and by the Ivanpah dry lake bed just outside the back door, kite buggy enthusiasts from around the world have been making pilgrimages to Primm ever since kite retailer Fran Gramkowski brought his son Fritz to the desert to celebrate a spring break. Fran and local Vegas retailer and buggy-enthusiast Corey Jensen have held numerous events over the years – each growing ever-bigger - until the North American Buggy Expo (NABX) was created about a dozen years ago. Administered by a committee of devotees led by Floridian dean jordan, NABX is held annually in early April, usually a week before or after North American land sailors and blokarters arrive. (blokart is a compact, land sailing vehicle.)

Desert weather in April is always in flux; many days begin with no wind and finish with moderate and steady breezes in the afternoon. Others start with blistering winds and don't change for the entire day. A heavy rainstorm, something that rarely happens, can drive everyone from the lakebed as the dry surface becomes so slippery it's hard to walk and damage to the lakebed occurs with cars in the slop. Almost every NABX has a variety of winds during the week, challenging the most avid buggiers.

NABX attracts an eclectic bunch to the desert and is growing due to the popularity of other kite-traction sports, notably kite skiing and kite surfing. A mostly younger crowd than those of us who have buggied for 20 years, these fliers will be the future of the sport as they set aside their mountain boards and climb aboard buggies for the



Buggiers at NABX compete in a NASA wing race, held this year in memory of Charles Jackson.



A racer flies across a course on the lakebed. The desert has a variety of winds, challenging even avid buggiers.



NABX attracts an eclectic bunch to Nevada each year, including land boarders.



Long-time NABX attendee Susan Orgeron buggies with her well-behaved dog, Beau.

first time. Pioneer kite buggier Peter Lynn has been to the desert several times and has been impressed by the surface and potential for high winds and high speeds. Indeed, a record speed was set by Brian Holgate (just over 84 MPH) about a week before this year's event.

Japanese friends Miki and Tsune Baba come to the desert almost every year, since there is nowhere in Japan that offers the discount lodging and great expanse of space for the sport. In the only buggy race I ever entered, 1995's Buggy Roo in Australia, Tsune and I took the top two spots. He is an experienced buggy rider ready for the challenges of the desert. Another long-time attendee is Susan Orgeron, who camps on the desert floor for the week and brings her well-behaved dog, Beau, to enjoy the buggy scene.

Finally, a longtime sponsor of the event is Revolution Enterprises and Joe Hadzicki of San Diego, California. Joe is one of the holdouts who has never gone to the inflatable and twin-skin kites favored by most riders. Instead, he uses a Power Blast Rev that provides great acceleration and notable upwind performance. As buggy speeds get higher and higher, framed kites may well be in the future evolution of the sport. Speaking with Craig Hansen (avid buggier and head of Peter Lynn Kites) just a week after this year's event, he recognizes the limitations of bridles and fabrics as wing loads increase at such high speeds (now approaching 90 MPH).

Much of the pleasure in going to NABX is knowing that there are plenty of people who will help even the newest of kite buggiers and land-sailors. The Flexifoil team [Craig Sparkes, Will McKean (Ginger-boy), and Dave Roberts], Blake Pelton, dean, Corey, Joe Hadzicki, and Jose Sainz all make a trip to the desert safe, fun, and

exciting. Kite buggying is a sport with a large learning curve, and with tips on equipment, safety gear, and flying technique, NABX continues to grow. Stressfree racing teaches buggy skills that many take years to master, while trick-riding clinics and out-and-back challenges build confidence and character.

Only one thing left to be said: come to NABX 2013!

www.NABX.net

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POSTSCRIPT

Record-setting buggier Arjen van der Tol is currently recovering from a serious snowkiting accident in Norway. The enormous expense incurred by Arjen (Fast Arie) puts a financial burden on top of the physical one that Arie is courageously fighting. Help Arie by visiting the NABX website and going to www.nabx.net/articles/the-american-effort-to-help-arjen.html. A small donation will get you a shirt and put a few dollars toward Arjen's medical expenses.



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