

September 2011

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On the Cover: An Eddy arch built by children in Argentina. Photograph by Diana C. Ross. More on page 38.

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## From the Editors

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Discourse is published on the Drachen Foundation website several times a year and can be downloaded free at www.drachen.org (under "Browse" > "Articles").

The exciting difference between Discourse and our previous publication, the Journal, is that articles come from anyone and anywhere in the world. Rather than passing through the Journal editorial filter that began with Ben Ruhe, articles for Discourse are left, to the greatest extent possible, in the original words of the writers. In this issue we have voices from Argentina, Nepal, Australia, New Zealand, Germany, and the United States.

The subjects covered span the gamut of the contemporary kite scene, from workshops with underprivileged children to commissioning of the new World's Largest Kite. We learn more about the long tradition of kites in Nepal and experience one man's environmental art.

But I have to mention the article by Dieter Dehn from Germany. Dieter presented the essence of this paper to the Historical Kite Workshop in Apeldoorn, Netherlands this spring, and he made our jaws drop! For all of us who thought that Gilbert Totten Woglom was a minor contributor to the American kite scene, and that William Eddy's Malay kite was the "bright shining star" of the time, Dieter demands that we reconsider. Nuances of Eddy's kite design were advanced by Woglom and the patents of their kites are eerily similar. Could it be that the famous Eddy kite in the Smithsonian collection is really more a Woglom than Eddy? Wonderful food for thought.

Scott Skinner
Board President
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## CONTRIBUTORS

## Dieter Dehn Frankfurt, Germany

A design engineer, Dehn has been occupied with kites and kite history since 1977, after buying David Pelham's book,

Kites. Dehn has participated in the Historical Kite Workshop since 2007. More info at www.dedrache.de.

## Maria Elena García Autino Buenos Aires, Argentina

A Barriletes a Toda Costa (BaToCo) member, Autino is a retired professor who taught for many years at the University of Buenos Aires. She has won national and
international awards for her work in education.


Peter Lynn Ashburton, New Zealand

Kite designer, innovator, promoter, and theoretician, Lynn is a world authority on kite design. His large kites are fixtures at kite festivals worldwide and he has influenced an entire generation of young kite designers.


Professor Nirmal Man Tuladhar Kathmandu, Nepal

Professor Tuladhar is the chair of Social Science Baha, a nonprofit that promotes social sciences in Nepal. He has participated in the Dieppe and Thailand kite festivals for many years and has been an advisor for kite competitions in Nepal.


Tony Rice
Brisbane, Australia
Rice has been an artist for over 30 years. His latest artwork is made from found plastic and expresses environmental concerns. Rice also gives kite workshops and is an innovative kite maker, adapting modern materials to traditional designs.


## CONTRIBUTORS

San Carlos de Bariloche, Argentina

A former English teacher, Ross has been making and painting kites for more than 10 years. Ross organizes kite workshops for all ages, in particular for young people at risk, and gives teacher-training courses
to promote kiting in Argentina.


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.


# Myth and Legend of the Kite Flying Tradition in Nepal <br> Professor Nirmal Man Tuladhar 



Boyd Michailovsky

A large Nepali kite made by the author, at right, and Ramesh Shrestha.

On July 7th, I made a presentation on "The Kite Flying Tradition in Nepal" followed by a kite making workshop and demonstration of flying Nepali fighter kites at The National Endowment for the Humanities Summer Institute: Literatures, Religions and Arts of the Himalayan Region at Holy Cross College, Worcester, MA. Professor Todd T. Lewis, Department of Religious Studies, Holy Cross College, was director of the Summer Institute. The participants were high school teachers from various states of the United States.

Myths

The tradition of kite flying has been in practice in Nepal from time immemorial.

Myth one: Kite flying sends messages to Indra, the god of rains, requesting him to stop rains as the rice fields have enough water.

Myth two: This pastime of kite flying brings prosperity to the family.

Myth three: Kite flying is a means of contacting and honoring dead ancestors.

Myth four: Kite flying is a means of guiding recently released souls to heaven.

## Legend One

Kite flying is a seasonal event associated with Dasain that takes place every year in late September or early October, according to the lunar calendar. [Note: Dasain is a 15-day national festival of Nepal that commemorates
a great victory of gods over demons.] Legend has it that once upon a time kite flying was not seasonal in the Kathmandu valley. It was enormously popular. The people would fly kites whenever they wanted to, and they were much happier with kite flying.

Unfortunately, the same could not be said for the birds. The understanding had always been that the people owned the ground and the birds the air, but now the airspace had been invaded. All of a sudden, the sky that had earlier been so open, wide, and free became a snare with nearly-invisible strings that stretched to the sky at all angles. No bird was safe - not the common myna headed homeward, not the vulture looking for carrion, nor the pigeon flying in to feed on the temple offerings, or the crow flapping over to the river for a bath. Every day, a number of birds got entangled in lines with manjha [string coated with powdered glass and used for kite fighting] and suffered lacerations. Quite a few lost control and crashed to the ground.

The people of Kathmandu were not aware that the airspace was in turmoil. The troubled bird representatives came together and decided to meet the king and tell him that his people had invaded their space. The king called an emergency meeting of bird and people representatives so that they could find a solution. After many heated discussions, they agreed that the inconvenience to birds must be minimized. The agreement that was reached between the two parties was written out on a large sheet of lokta paper by the king himself. It came to be known as the Treaty of Kathmandu.

The people and birds of Kathmandu have followed the Treaty of Kathmandu, both in letter and in spirit, since the day the document was signed centuries ago.

Therefore, not a kite goes up during the winter, spring, and summer, during which time the birds have unhindered use of the atmosphere. When the monsoon rains end and the afternoon westerly wind starts to blow, the kites of Kathmandu take to the air.

## Legend Two

There was the Buddhist tradition of flying the kites with drawings of the five Transcendent Buddhas - Vairochana, Akshobhya, Amoghasiddhi, Amitabha and Ratnasambhava - on the full moon day of the kite flying season. These kites would be flown from Swayambhu hilltop on Kojarta Purnima at the end of Dasain. This legend tells the story of the primordial Buddha's enlightenment and of the spread of Buddhism in Nepal. This special kite flying tradition that was sponsored by the social organization no longer exists.

## UNIVERSAL FACT

Kite flying has a long and popular history that may seem outdated. Modern life lacks the values of healthy outdoor participation, combining both physical and mental coordination skills. Parents may not yet imagine that one day their children may ask, "What is a kite, dad?"

Kites are toys invented by man's great imagination and handicraft skills. Flying a kite has the advantages of both physical and mental relaxation. It encourages a child's imagination. Some people say that human life is like that of a kite that has ups and downs, happiness and sadness, depending on the winds of change in modern life.

Only people who experience flying a kite will understand the amusement or liveliness of the sport. In urban postmodern society, people are busy with work, and fewer children have the opportunity to share the


Nirmal Man Tuladhar

Two Nepali kites: a Nepali kite with fancy paper at left, a postmodern Nepali kite at right.


Ramesh Shrestha

The author, left, makes kites with French members of the International Manjha Club. In the background are Nepali kites, and on the table, Nepali spools. Taken at the Dieppe International Kite Festival, 2008.
enjoyment of kite flying.
I concluded my presentation by reciting the following poem about two young boys named Mangale Dharti and Gopi Niraula in Dhankuta, a hill town in the eastern region of Nepal. It tells how they come together and make a partnership for buying and flying a kite.

## Mangale's Kite (Mangaleko Changā) Puneshil Gautam

Translated by Professor Nirmal M. Tuladhar
On the hill of Dhankuta
Is my small house.
My name is Mangale
My surname is Dharti.
Down near school
Lives Gopi Niraula.
We do have a spool and line.
We'll buy a kite.
Mother, give me
Fifty paisa today
Look, I've done my homework.
Tell me I'm a good boy.
Gopi, to your fifty paisa
Let me add mine,
Let's go buy
A kite at Goredai's shop.
Look at the redhead
With black beard on sides.
Our kite is cheerful.
It says it'll fly.
Pass me line, Gopi.
I'll fix a bridle.
You hold the spool.
I'll let the kite go up.
Look, the wind is blowing.
Fluttering
Our kite flies up
Like a myna.
When the line is reeled out
It goes down rotating.
When the line is reeled in

It goes up in the sky.
Gopi, give me a turn.
Let me fly for a while.
The sun is setting.
Let's fly the kite up above the clouds.
What a strong wind! The line is running out.
Up above the clouds
The kite is going out of sight.
Ha! Ha! Ha! Mangale,
Snap the line off.
Let the kite fly away,
Said Gopi laughing.
Oh kite, wait for us
on the moon.
We'll come up to see you
Riding on a rocket.

## The Kite Making Workshop

After my presentation, l took the participants out on the campus ground to demonstrate how to fly Nepali fighter kites. They took a keen interest in kites and enjoyed tremendously doing it. After this event, I was asked to teach them how to make a simple Nepali fighter kite the next day. Therefore, I conducted a workshop on kite making. A dozen participants joined the workshop and made kites.

[^0]
## World's Largest Kite

Peter Lynn


Above: First launch and flight of Peter Lynn's Mega Ray.

## Introduction by Scott Skinner

After dallying with kites for seven or eight years, I got seriously hooked in 1983 when I walked into Reza Ragheb's Hi Fli Kites, a store in Aurora, Colorado. Very shortly thereafter, I picked up a Saturday Evening Post and saw the shocking back-page photograph of Steve Edeiken being lifted by a huge kite on the Northwest Coast. Steve's shocking death sent a wave through the kite world and gave us sobering insight into the power and danger of these behemoths.

I remember one year at the Washington State International Kite Festival when the Dutch "World's Largest Kite" flew on a light wind day at the beach. I was impressed by the professionalism of the Dutch team in their preparation, communication, and
coordination working with volunteers to safely and successfully fly the kite. These two giant kites were so dissimilar, it helps to show the direction of evolution for future giant kites.

The Edmonds Community College kite, for which Steve acted as safety marshal on the day he died, was a then-standard parafoil design with multiple bridles and flares and an open leading edge. It displayed the dangerous characteristics of any large parafoil: rapid inflation, lots of moving lines, and extreme power. The Dutch kite was a very wise step forward in that it had a closed front, so it had to be slowly inflated through the work of a coordinated team. It had only three bridle lines, and,
additionally, guide lines or steering lines on each side. It had been designed to produce less lift than a parafoil design of the day. All of these made it a safer, if less spectacular, flier.

Today, there is a new breed of "World's Largest Kite," designed and produced by Peter Lynn in New Zealand. The first three, which were produced so they could be easily transported and flown in three regions of the world, were simple rectangular shapes, inflated through an open leading edge, and supported by a minimum number of bridles as well as supported by steering lines on either side. The kites were also equipped with a trailing line used for rapid deflation and recovery. The simple rectangular shape belied the extreme engineering done by Lynn. Internal lines allowed for complete control of the kite's airfoil profile, thus enabling Peter complete performance control both on the design computer as well as on the kite field.

Abdul Rahman Al Farsi is the newest owner of the World's Largest Kite. Mr. Al Farsi, from Kuwait, has become one of the great kite ambassadors of the world: hosting lavish festivals, commissioning numerous kites to show his countrymen their magic, and traveling and interacting with kite promoters and enthusiasts to encourage new kites and new kite promotions. I'm anxious to see this kite fly - it's a huge manta ray design - as it is another step forward in mega-kite design.

## World's Largest Kite by Peter Lynn

There is a new world's largest kite (WLK for short), flown in public for the first time at Berck sur mer, France on April 17th. Built by Peter Lynn Kites Ltd. for the Al Farsi Kite Team from Kuwait, it's a sort of an own-goal in that they (both of them) will be taking the
record from themselves - the Al Farsi's 1019 square meter Kuwait flag kite (also built by Peter Lynn Kites Ltd.) is the existing Guinness record holder.

This new one's a ray - after the style of the original Mega Ray (now owned and campaigned by German kite personality Lutz Treczok) - but it's twice as big at 1250 square meters ( 65 meter wingspan). In the most important respect, rays are an ideal shape for very large kites because almost all their area is "lifting surface," which is how qualifying area is calculated. Tails and other appendages don't count.

But they're also aerodynamically efficient, which makes for some difficulties. Large kites need to be docile fliers and have as little pull as possible. Zooming all over the sky like a high performance traction kite at four times wind speed developing 16 times static pull is not desirable - not least because no available mega-kite mobile anchor (we usually use a 12 ton loader) could conceivably hold. This apparent wind effect can be contained to some extent by flying on a very short line - basically off the bridles (about 80 meters) - when there's enough wind to be worrying.

But the approach that has caused ray style kites to emerge as the favored shape (for now at least) is that by using throughcording instead of ribs (what Europeans call "profiles") to connect upper and lower skins, and especially by using diagonal through-cords in selected places, it's possible to fine tune the kite's aerodynamic response so as to minimize pull.

This new WLK is now so finely balanced on the edge of luffing (nosing over and coming down) that even when it's generating a ton or more tension on the main line, just one person pulling on a nose line can cause it to descend.


Peter Lynn Kites

Left: Elwyn Lynn holds Tory the cat inside the massive Peter Lynn Mega Ray. Rıght: Abdul Rahman AI Farsi, owner of the kite, and others at Berck sur mer, France, where the kite was flown in public for the first time.

But the path to this ideal state was not smooth on account of Lufthansa's losing the 1/5th size prototype that I was using to establish these parameters in August last year. Without a model for checking dimensions, I had to make various guesses when specifying the kite's fundamental shape (adjusting the various diagonal through-cords is for fine tuning only). And unfortunately, because in October we were informed by United Airlines that the lost prototype had been found in Brazil and returned to Lufthansa at Frankfurt, the WLK's construction was then held back a further six weeks. I was desperate for data from the prototype so I could use more informed numbers in the design process.

Double unfortunately, Lufthansa then denied receiving the re-found kite. I suspect that by the time we supplied them with the tag numbers, names, flights, and the date it was returned to them, they'd managed to lose it again, and this time they wouldn't have been able to hide under limited liability, so chose denial.

I did put to them the question as to who had the most incentive to lie about whether or not the lost kite had been found and returned to Frankfurt: Lufthansa or United Airlines? But they declined to answer and have required that all further correspondence be directed to one Lizette Smit in Melbourne, Australia.

By the time it became clear that the original prototype was not going to be available (another was hastily put together in time to get bridle's lengths within the ballpark), there remained no possibility of New Zealand construction, just not enough hours in the day. So Simon Chisnal and Matt Bedford from PL Kites Ltd. took themselves off to PL Kites' partner manufacturer, Kaixuan Kites (Tan Xinbo) in Weifang, China, and the WLK was sewn there.

And what a fantastic job they did. Minus nine degrees at times, but they are not like us gone-soft westerners. Routinely working 12 hours a day with just 3 days off a month (if you need an explanation for why China is in the ascendant, this is a good one), in less than 3 weeks it was on its way back to NZ for through-cording, bridling, and test flying. Ms. Wu, lead kite maker at Kaixuan, is the best sewing machine driver I have worked with in a lifetime of kite making.

After a week of through-cording and bridling, there were only 2 days remaining before it had to ship out of NZ again. Fortunately the wind was perfect on the first test fly day. Doubly fortunately because I was rather a long way out with some of my guesses, and it took 50 or more attempts and serial adjustment over six hours before it eventually launched and flew, just as dusk overtook us. The next day conditions were not OK. This was one of those "near run things" that you generally only read about in history books.

And it flew perfectly at its Berck public debut: firstly on Sunday, April 17th and again on Wednesday the 20th. Its stability and flying angle are like nothing I've ever flown before - almost vertical and like a big rock immovably fixed in the sky for hours. It needs almost no wind, probably because a useful component of lift comes from heating of the entrapped air.

But on account of insufficient testing and development time, I still have worries. The wind at Berck was steady and very light, so light that the 22 meter pilots we were using to keep the mouth open for inflation (and nothing useful flies in lighter winds than these pilots do) fell out of the sky from time to time - while the WLK stayed up.

I'm concerned as to how it will respond to apparent wind effects when there's more wind - because even in these very light winds it generated a lot of line pull on the way up to its apex, though once up and settled it was lullingly docile.

And I'm a bit worried about how to get it down in one piece when the wind is up. Pulling even a few kg's on the nose takedown line causes it to luff and descend, but when it gets to the ground, it typically bounces up again energetically unless the nose line is then held in tight at the kite (and this is a dangerous place to be because of all the main bridles lying around there). And worse, pulling on the take-down line with a second anchor vehicle (or, I expect, releasing the main bridles so that the kite flies off the take-down line) can cause the wings to fold up like a butterfly. It does then de-power and come down, but maybe upside down (it inverted the only time we tried this) with potential for kite damage.

The use of the side lines is also problematic. Because it flies at such a high angle, pulling on, say, the left side line causes conflicting effects: the kite is pulled to the left, and at the same time, the left wing advances, skewing the nose to the right, which resists the pull to the left. An interim solution has been to move the side anchors downwind (usually they're rigged on a base-line at right angles to the wind direction so that they neither tighten nor loosen when the kite flies higher or lower). A better solution will be to eliminate the use of side lines entirely


Peter Lynn Kites

Images of the team and scene at the first public flight of Peter Lynn's Mega Ray.
and use some system on the main bridle set for left-right positioning. This kite is certainly more than stable enough for this approach to work, and not having side anchors will be a big plus, especially because they won't then have to be repositioned every time the wind shifts a few degrees. These challenges can be addressed given time and experience - the key being to gradually increase the wind speed that it's flown in, reviewing and developing appropriate systems step by step.

I can see no reason why this kite can't eventually be flown safely in $40 \mathrm{~km} / \mathrm{hr}$ plus, and in unstable winds (it's so big that it barely notices turbulence). Because it's so
rock-steady, the field size needed is basically just the kite dimensions plus line length, and with a creative launching technique, it should even be possible to fly in places where the clear ground is smaller than the kite itself.

Congratulations to everyone who has made this possible: Craig, Jenny, Simon, and others at Peter Lynn Kites Ltd. The Al Farsis for being perfect customers (and friends). Andrew Beattie, the inimitable intermediary, and always bouncy. Tan Xinbo, Betty, Ms. Wu , and others at Kaixuan Kites. And Dominico Goo, the best maker of kite fabric in the world.

Waste<br>Tony Rice

## Introduction by Ali Fujino

Tony Rice of Brisbane, Australia, has for years been able to live and thrive largely by giving kite workshops. Teaching all ages, he spreads joy wherever he goes. His secret is his outgoing nature.

An artist at the age of 16, he studied painting and pottery, and in that quirky but wonderful moment of life, he discovered kites. Read more in this 2005 article from the Drachen Foundation Kite Journal:
http://www.drachen.org/article/how-one-australian-manages-teaching-kitemaking-living

Tony is energetic, amiable, well spoken, and somewhat theatrical, all a great combination for a creative life. It is this combination which brought his latest project to the Foundation's attention. Join us in this digital presentation of his "Plastic Story."

## "Waste" Created by Tony Rice

Tony Rice has been a local Brisbane, Australia artist for over 30 years. His environmental concerns have led him to make artwork from found plastic washed up from the sea.

On a regular visit to Stradbroke Island, off the coast of Queensland, Australia, Tony came across some indigenous women on Main Beach gathering seedpods to germinate. These seedpods were deposited on the beaches due to a recent storm surge. Viewing these women inspired him to help with their collection. As
he searched through the ebbs of the sand, he noticed vast amounts of plastic that had been washed up on to the sandy shores. He says, "I came across the piles of rubbish and I noticed the beautiful colors of the many washed-up cigarette lighters."

Tony felt a need to collect them. "I started collecting and in two days, I had nearly three hundred lighters from the Main Beach alone." These rusted, faded bits of plastic individually appeared to be litter, but to Tony they were colorful and had interesting designs. Combining his collection, Tony laid his lighters across the sand.
"By arranging these beautiful bleached-out shades of pure plastic, it created a totally different response. I came up with spectral lines forming a colorful winding snake of lighters."

Photographing these lines in different beach locations, the relationship between the sand, sun, colors, and the "banded patterns" of the lighters began to grow. With a newfound passion for collecting plastic from beaches, Tony created life and beauty out of objects normally seen as rubbish.
"I started out with lighters but realized I had to pick up everything. I want to make artwork from this resource for many years to come."

Using plastic as a medium emphasizes the obvious environmental issues. "I wanted to create works that had within them a message regarding this as a pollutant of our watery environment. I discovered that the great islands of plastic congregate in the oceans of the world and slowly break down into micro-particles that are ultimately eaten by fish and enter the food chain."

With this scenario very apparent, Tony decided to create "Art Officials," human
forms made of plastic to symbolize our ultimate fate as humans with bits of plastic in our bodies.

There is a sort of transfiguration going on here in creating human forms out of our very own waste. This waste comes from the many creeks and waterways that empty into the ocean, along with rubbish from boats and beach goers, which all finds its way back on to the beach.

With this problem very apparent, Tony has replicated sea animals such as dolphins and sea turtles in an inspiring style. These structures have a skeletal appearance, and inside of the creatures is an internal digestive system made from the plastic that Tony has collected from the beach. He says that "occasionally animals can be found dead on the shorelines caught in plastic and nets, and others have rotted over time, revealing plastic embedded in their stomach." The Stradbroke Island Research Centre has been advising Tony about which animals are under the most threat. Tony has represented these animals with his sculptures made from bamboo, cane, and plastic waste.
"Plastic Dinners" are another of Tony's creations. Served up in a Japanese style platter, tangles of rope and plastic are presented as food. "Like the animal kingdom's version of 'the last supper.'"

Tony's exhibition, appropriately named "WASTE," contains over 300 lighters and more than 80 kilos of broken, beautiful, bleached plastic from the beaches of Moreton Bay and the Gold Coast. There is a never-ending surplus in our environment. But one local artist is exploiting this waste and crafting beauty, highlighting the obvious threat to our environment. Tony says, "I intend to spend the rest of my life collecting plastic from Moreton Bay."



The artist with his "Art Officials," human forms created from waste collected across Australia's beaches.


Jo Erskine

Skeletal fish with internal digestive systems made of plastic that was littered on the beach.

# Eddy and Woglom: The Parakite Contribution tothe Eddy Kite 

Dieter Dehn



A parakite built by author Dieter Dehn according to the instructions of Gilbert T. Woglom's Parakites.

Until a year or so ago, the Eddy kite was a rather boring thing in my eyes. The kite is quite nice for applications and is suitable as a fast made giveaway for children or other people interested in an easy start in kite flying. Apart from this, the kite is not anything special in structure and everyone who knows anything about kites thinks he knows nearly everything about the Eddy kite and its inventor.

What we all know about the Eddy kite is:
It is a tailless kite, probably the first in the western world.

The kite frame is made of two sticks of nearly equal length crossing at 18 to 20 percent of the length of the longitudinal stick.

The cross stick is bowed or dihedral to about 10 percent of the wingspan.

There is only one thing that is often cited in the kite's description that is not really clear: the cover of the kite should be somehow loose or wider than the frame to "bag" under wind pressure for improved stability. Unfortunately I found no description in any of my kite books that explained the meaning of a "cover somewhat wider than the frame."

Then, when I was searching the internet for kite books of the late 19th century, I found a scan of Gilbert T. Woglom's book Parakites. I soon learned that both Eddy and Woglom lived most of their life in rather close proximity. William Abner Eddy (Jan. 28, 1850 - Dec. 27, 1909) was born in New York and lived in

Bayonne, New Jersey from 1887 on. At this time he worked in New York as an accountant at the New York Herald. Gilbert Totten Woglom (May 21, 1840 - Sep. 15, 1915) was also born in New York City and lived most of his life there. In 1863 he began a trade as a jeweler and was later one of the founders of the Jewelers' League of New York and the Jewelers' \& Tradesmen's Co. For Woglom, kite flying was mainly a hobby and pastime to relax from his business, or as he writes in Parakites: "When engaged in the management of a train of parakites afloat in the air, one gives no thought to stocks, finance, the store, his profession or his quest for the elusive dollar. Were more men thus engaged in restful work we would hear less of paresis, heart-failure, and Bright's disease in these days of over-active business men." [Note: Paresis is a condition typified by partial loss of movement. Bright's disease is a historical classification of kidney diseases.] Both Woglom and Eddy flew their kites on different occasions from buildings in New York City. One of these events was the "Sound Money Parade" of October 30, 1896, when they flew their kites at the same time not much more than a mile apart.

In 1896, Gilbert T. Woglom published his book Parakites - A Treatise on the Making and Flying of Tailless Kites for Scientific Purposes and for Recreation. Here we find a detailed description of a "parakite:"

It is a tailless kite.

The kite-frame is made of two sticks of equal length crossing at 17 percent of the length of the longitudinal stick.

The cross stick is bowed to a depth of 10 percent of the wingspan.

For improved stability the cover of the kite is 10 percent wider than the frame and folded
in "box plaits" along the spine to form two concave surfaces under the pressure of the wind.

This sounds very much like the description of the Eddy kite but with more precise specifications. As in my opinion this must have been more than pure coincidence, I began to look for all possible information about Eddy, Woglom, and the New York "kite scene" of the last ten years of the 19th century. With all the facts I found from different sources, I then began to build some kind of timeline:

1891 to 1894: After some unsatisfactory experiments with trains of classic American flat kites, W. A. Eddy develops a tailless bowed kite based on information about Asian kites.

1894 and 1895: Eddy visits the Blue Hill Observatory in Massachusetts. He makes experiments to lift meteorological instruments and on August 4, 1894, he reaches a height of 1430 feet with a train of kites carrying a thermograph.

Up to 1895: G. T. Woglom develops his "parakite" based on information about Oriental kites he has gathered (and written down in his book).

May 4, 1895: At the dedication of the Washington Arch in New York City, Woglom lifts a 10 foot US flag on the line of a train of parakites that he flies from the tower of the Judson Memorial.

May 30, 1895: With a $31 / 2^{\prime \prime} \times 31 / 2^{\prime \prime}(9 \times 9 \mathrm{~cm})$ Kodak roll film camera lifted by a train of his kites, Eddy takes his first aerial photos.

Nov. 20, 1895: Woglom applies for a patent for his parakite as "Kite Like Aeroplane."

1896: Woglom publishes his book Parakites.
1895 to 1898: Eddy makes different experiments to show the use of his kites, including more aerial photography, lifting flags or lights as


THE WOGLOM PARAKITE, SHOWING THE BOX-PLAIT FULNESS OF ITS COVERING, DISPERSED INTO TWIN CONCAVES ON EITHER SIDE OF THE UPRIGHT FRAME-MEMBER.


LEFT: A picture of the Woglom parakite from his book, Parakites. RIGHT: Woglom's patent drawing for US patent 658.544, showing front and top views of the kite.
signals, or towing buoys across the water (in cooperation with John Woodbridge Davis).

Nov. 24, 1896: Eddy applies for a patent for his camera rig, approved March 16, 1897 as US patent 578,980.

Aug. 1, 1898: Eddy applies for a patent for his kite.

March 27, 1900: 1 year and 8 months after the application, Eddy receives US patent 646,375 for his kite.

May 1, 1900: More than $41 / 2$ years after the application, US patent 648,544 is approved for Gilbert T. Woglom's kite.

Apart from the long difference in time from application to approval of the two kite patents, this timetable shows the parallel development of two rather similar kites. How very close these parallels were, I found out on closer examination of certain points of this timeline.

When looking for information about W. A. Eddy, there is one photograph that can be found at different places on the internet: the picture shows Margaret Eddy, the daughter of W. A. Eddy, together with some of her father's kites. In all sources, this photo is dated to the year 1895. A second picture, obviously taken at the same occasion, shows an unnamed boy holding up a kite frame. We can assume that these two pictures show a part of Eddy's stock of kites in 1895. When we take a closer look at these kites, we can see that the kite sticks are crossed at about 18 to 19 percent of the kite's length, as written in the "recipe" for an Eddy kite, but we can also see that the end of the cross-stick is not only bent backwards but also downwards. Thus the edges of the kite are not in the 18 percent range but at about 32 percent of the kite's length. This fact can be observed especially at the "naked" frame the boy is holding in
the second picture. As a conclusion, the Eddy kite of 1895 still shows a lot of its Oriental ancestor's attributes.

In the same year, Gilbert T. Woglom appears in public as a kite flier. On the 4th of May, he flies a train of kites carrying a big flag from the tower of the Judson Memorial Church over Washington Square. With this "special" on the occasion of the dedication of the Washington Arch, he is part of the news of the day and known as a kite specialist from then on. In November, he applies for a patent for his "Kite Like Aeroplane." In the text and the drawings of this patent, Woglom gives the full specification of his parakite as published in his book, with the only exception that in the patent he recommends the sticks be crossing at 15 percent, while in the book it is 17 percent. In particular, the patent contains exact recommendations on the size of the kite cover (10 percent wider than the frame) and how it is folded as a "box plait" along the longitudinal axis of the kite (clearly shown in his patent drawing at letter "G," pictured below).


At the same time, W. A. Eddy exchanges letters with James Means, the publisher of the Aeronautical Annual. In two letters of December 1895, Eddy describes "the best Eddy kite for winds above 6 miles per hour, for the season of 1895." In this description we can find the remark: "The paper should be gathered on a box pleat from A to E. This causes concavity along the central upright," and sketches of this pleat that show great resemblance to Woglom's patent drawings.


Left: Margaret Eddy with her father's kites. Photo taken ca. 1895. RIGHT: Boy with the frame of an Eddy kite. Photo is obviously taken at the same occasion as the photo at left.

Eddy concludes that the pleat "is at times of considerable assistance in enabling the kite to withstand very high winds but that is only of use to a specialist who is working at difficult phases of the problem." With these notes, the "box pleat" appeared in Eddy's kite descriptions but apparently was put aside again very fast.

After a number of occasions when Eddy and Woglom showed their kite experiments to the public, the next important contact of their "kite lines" is Eddy's patent application. Two years and nine month after G. T. Woglom's application, Eddy writes down the specification of his kite. Here we can find the source of the Eddy mystery, the cover that is wider than the frame: "...This cover is made, preferably, of suitable flexible material, such as cloth, and while in shape conforming substantially to the lines connecting the ends of the frame-pieces is wider along the line of the cross-bar than the length of the cross-bar." We can also find the instruction that "...the greater width of the cover is taken up by gathers or folds along the portions of the wires or guys which run to the top of the kite..." That does not really help our problem, but so far we have only looked at the general description of the invention. The important part of a patent are the claims. The first two claims are about the kite cover that is "wider than the frame secured along said guys and gathered near the medial line of the frame" and the bowed cross stick. Claims 3 to 9 deal with variations of the first claims and details of the fittings for the crossing and tips of the sticks. The 10th and last claim seems to be a summing up of the previous and differs from the others a bit in size and complexity:
"10. In a kite of the character described, the combination of crossed extender members, guys passing there-around to produce a symmetrical frame, a covering secured upon
the frame, and means upon the covering whereby under the action of the wind said covering is adapted to have formed in it two concavities extending longitudinally of the upright extender member, substantially as specified."

The italics are added by me to highlight a fact that attracted my attention. When I read this text it sounded somehow familiar to me. I went back to the Woglom patent and found the following claim:
"Having described my invention, what I consider as new, and desire to secure by Letters Patent, is -

1. In an object of the character described, the combination of extender members and guys cooperating to form a symmetrical frame and a covering secured to said guys, said covering being provided with a longitudinally-extending double fold or box-plait at its middle portion, so that when the covering is under the action of the wind it will have formed in it two concavities extending longitudinally of the upright extender member, substantially as described."

Again I highlighted some words as before. Comparing these highlighted parts of the text, it can be seen that these two patent claims are virtually identical. Obviously either Eddy or his patent attorney knew the text of Woglom's patent too well to get it out of the mind. Nowadays the effect of this similarity of patent claims would be that the patent that had been applied last would be of very questionable worth.

The next witness of the connection between the Eddy kite and the Woglom parakite dates from somewhere between 1898 and 1900, and this time it is not only paper but the real thing. Rather early in my investigations about William A. Eddy, I
found an article in the Drachen Foundation Kite Journal of Fall 2001. In this article, Eden Maxwell describes his visit to the National Air and Space Museum in Washington. Here, in the Garber preservation and restoration facility, one of the last original Eddy kites is stored. According to the label on the sail naming it "War Kite," this kite surely is none of Eddy's "homemade" kites, but must be one of those that have been manufactured by E. I. Horsman in New York. The size of the kite corresponds to the standard recipe of an Eddy kite, length is $61^{\prime \prime}$ ( 1550 mm ), crossstick is $60^{\prime \prime}$ ( 1537 mm ), sticks cross at 19 percent of length, the cross stick is bowed to approximately 10 percent of the span. The frame and the fittings are, apart from insignificant modifications, as shown in Eddy's patent drawings. So far, there is nothing wrong, but when we have a close look at the picture showing the top end of the kite, we can see a nice pleat sewn in the cover on either side of the spine, as below.


To express it in a somewhat extreme way, here we can see William A. Eddy's answer to our question of how to fix the cover that is wider than the frame: we take Eddy's kite frame and combine it with the cover of Woglom's parakite!

Nevertheless, apparently all this had no
effect on the personal relations between Eddy and Woglom. In all the newspaper articles, notes, and letters to the editor I found, neither of the two wrote anything about plagiarism. The only controversy was about the taking of the first kite aerial photograph. Woglom wrote in his book that on September 2, 1895, he had taken the first aerial photo on a glass plate with the help of a kite, not mentioning that W. A. Eddy took his first photos on May 30 of the same year using his Kodak roll-film camera. The relationship between the two kite fliers must have been so good in the end that in an article of the New York Herald of February 23, 1900 about a gathering of the Woglum (Woglom) Family under the headline "ONE WAS A KITE FLYER," we can find the passage:
"Gilbert Totten Woglom was the first scientific kite flyer in New York. He is now associated with Mr. Eddy, of New Jersey, in experimenting with kites. He was at yesterday's reception."

In 1900, at the end of our little trip through the 1890s, the Eddy/Woglom kite was at the peak of its evolution. There was not much impulse for further development, for the "professional" kite fliers had turned to box kites, and the Eddy kite was left to amateurs and children. So, over the years, this kite lost a lot of its old refinement and became what I stated at the beginning of this text: nothing special, sometimes even boring.

In addition to confirming that there is nothing boring in historical kites, for me, all my research on this subject showed again: it always pays to look a second time, look at something else, learn something else, and than have a third look at your first object. With your new knowledge, your third look will reveal new things to you that had been there all the time. for, as J. W. v. Goethe said, "You only see what you know."

# The Rocket Kite 

Scott Skinner

One of the first archival discussions at the Drachen Foundation came from original board member Martin Lester. It was about a rather small and nondescript canvas tube with several surprises inside: a survival kite that was meant to be launched with a flare gun, automatically opening and becoming a rigid, winged-box kite. Additionally, closer inspection of the canvas tube revealed a sophisticated line-management system that encapsulated the flying line in the walls of the tube. The idea was for a downed airman or seaman to hold the flare gun overhead, fire, have the folded kite be carried airborne while the flying line played out to its maximum length, then the kite would unfold, find the wind, and fly, allowing a radio antenna to be lifted and used for communication. Needless to say, serious study of this kite could only be done by meticulous inspection and manipulation of the case and close inspection of the kite and its spring-loaded system.

Enter Jan Westerink of the Netherlands. Jan was the lucky buyer of not one, not two, but three (!!!) rocket kites and their complete kits. I should note that the package containing all the kites arrived at Jan's door having cleared customs and having been transported by at least two national postal services. Inside were at least three potentially live flares! With three examples, Jan was able to seriously study each of the
kites and form a plan to recreate a real-time launch and flight. As an aside to American kite fliers, burdened with litigious lawyers and an abundance of less-than-bright thrill seekers, this demonstration could never have been accomplished on American soil.

In the serene country setting of Apeldoorn, in the Netherlands, about 25 historical kite enthusiasts walked to a large open field to watch what Jan had spent weeks preparing. Armed with one of the rocket kites in its line-carrying case, Jan produced a contemporary survival-issue flare gun and followed the rocket kite instructions to prepare the system for launch. With the enthusiasts stationed at a safe distance (we hoped), Jan was ready for the launch.

POW! As the flare gun fired, line beautifully played out of the kite case as it rose into the air. Alas, not enough altitude was attained and the un-deployed kite fell to the ground. A less-than-spectacular ending to a grand experiment. The reenactment gave us all a moment to think about the development of a product like the rocket kite: made for a one-time use, with little chance of failure, on which a person's life might well depend. On this occasion, we were all left stranded with a rocket kite that didn't deploy.

Watch a video of the launch on YouTube: http://www.youtube.com/watch?v=BxxbMfYY9Bw

## INSTRUCIIONS FOR LAUNCHING KIIE



Scott Skinner

Instructions to launch the rocket kite, a vintage system that once allowed a downed airman or seaman to lift a radio antenna for communication using a flare gun and a kite.


Line from the rocket kite's sophisticated system. At the author's reenactment, line beautifully played out of the kite case as it rose into the air.

The rigid kite in flight after reenactment. Alas, during the reenactment, not enough altitude was attained and the un-deployed kite fell to the ground.

Watch a video of the launch on YouTube: http://www.youtube.com/watch?v=BxxbMfYY9Bw

# Tiger's Tayil: <br> A Kite Experience Among Earth Ancestral Songs of a Mapuche Community <br> Professor Maria Elena García Autino 



A delta Argentine flag kite, generously lent by Alberto Barrero for the children of Aluminé, Argentina to enjoy. The Mapuche ("people of the Earth") are a native South American people inhabiting south Chile and southwest Argentina.
"I have a vision of the Songlines stretching across the continents and ages; that wherever men have trodden they have left a trail of song...!"

- Bruce Chatwin

There are times at the "Cordillera de los Andes," especially in Aluminé, Neuquén, Argentina, when the wind is not particularly "kite friendly..."

On a beautiful mountain morning during our last visit, the community children hoped to enjoy flying their own kite creations and some simple models we had brought from as far as China. Especially anticipated was the flight of a tiger kite, evoking for the Mapuche native tradition the strength and courage of the puma, which they call tiger.

But the wind refused to blow smoothly, until some of those present recalled the tiger's "tayil," an ancient ancestral singing of theirs. Soon, a melody was climbing the gorges, a mixture of hum, singing, and scream. The tiger was then there with us, his marvelous power managed to evoke the wind and it flew at last.

We traveled to Aluminé, Argentina this year to build kites, to participate at the 95th anniversary festival of this charming small town, continuing with many previous experiences we had there. It was an opportunity to learn more about the ancient myths and traditions of the native community living in the "barrio intercultural" (intercultural neighborhood).

Flying kites together is often a wonderful occasion to share feelings, beliefs, and experiences with others, and to learn about their surroundings, their dreams, hopes, and difficulties. This time we would like to communicate what we learn about "tayil."

The tayil is one and many. It is earth's secret hum and also the voice of the tiger, the lion, the condor, the gull, and also it is the voice of stones, winds, pehuen trees...

When evoked by humans, tayil are groups of articulated sounds, repeated at will. These are not words of human language, but songs. Like traditional Australian Aboriginal people, all land here is regarded as sacred, and the songs must be continually sung to keep the land "alive." The Mapuche natives consider that the tayil preserves the god's voices, their inherited spirit inside everything.

The whisper of the river, the shriek of the wind, the squawk of the gulls, the croak of the frogs? It is not noise, but sung tayil! It is the language of their ancestral gods perpetuated in living species.

Tayil isn't a common song or a prayer. It is an ode to mesmerizing. His little variation lends this effect, which becomes more blurred in the sweet and particular way in which it is sung. That's why it is also used to raise the trance of "viewers."

As a peculiar singing way, the tayil follows, without doubt, the Aboriginal concept of choral singing. It is considered not purely Araucanian but spread very far in the American continent and even outside of it.

Women are those who sing tayils, although at ceremonies there is no shortage of men, particularly those who are "viewers." Tayils, in spite of their transcendental nature, are not necessarily old. From time to time, some
new tayils appear. Others are reserved for public ceremonies, accompanied by dances and family prayer.

The Mapuche culture was represented on our kite train by the kultrun, a ceremonial drum, the most important musical instrument of the Mapuche culture. It is used by the machi (healer) for cultural and religious rituals, along with tayils, as well as during the Ngillatun (annual rite of fertility).

It is a hemispherical membranophone, membrane bounded, played by direct percussion, roughly between 35 and 40 cm (about 14 to 16 inches) in diameter and 12 to 15 cm (about 5 to 6 inches) high. Its body is made of laurel or lenga. It is built by hollowing out a trunk into a concave cone shape. A lamb or horse leather patch covers its mouth, strained tight with leather ties.

The kultrun is held in the hand and played with a stick or supported on the ground and played with two sticks.

In the Mapuche worldview, a kultrun or cultrun represents half of the universe or the world as spherical. The four cardinal points are represented on the patch, which are the omnipotent Ngenechen (god) powers represented by two crossed lines. Its endpoints branch into three lines representing choyke (Rhea).

I had the privilege of listening to the sound of the tayil a few times, and I have always been touched by its mysterious charm and the deep wisdom of this myth: each single being on earth has its own sound that we must pay attention to and respect. Every animal, every plant, each river deserves our care and protection.

When we build kites with native children, each time we discover their concern for nature. This is reflected by their paintings


Maria Elena García Autino

On a beautiful morning in Argentina, a train of children's kites hang with the mountains of Patagonia behind.


Maria Elena García Autino

Many of the children saw a kite for the very first time. Building and flying kites were unprecedented experiences.


The author writes: "Flying kites together is often a wonderful occasion to share feelings, beliefs, and experiences with others, and to learn about their surroundings, their dreams, hopes, and difficulties."
and written messages and also by the enthusiasm they show towards a collective project.

What is a kite for? To discover the wind secrets, and the Mapuche wind tayil is one of them. It tells us about the wonder of our incredible universe. The message through kultrum or didgeridoo music teaches us again and again, in Argentina as well as in Australia, that we don't own the land, that we are part of it.

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# Fly Your Rights: Kites Used for Work with Vulnerable Children <br> Diana C. Ross 

## Introduction

in Argentina during the months leading up to the 2001 crisis, and as a result, great distress and economic deprivation. Barter clubs ${ }^{3}$ sprouted up everywhere, and organizations like Grupo Encuentro, became soup kitchens, drop-in centers and night shelters for children from disintegrated families, in an effort to alleviate the hard times that had fallen on many in the Alto.

Among those who came regularly to Grupo Encuentro, there were street working children, who spent most of their time on the streets fending for themselves but returned home at the end of the day, and others who had run away from their families and lived temporarily in ranchadas, hovels
made from scrap metal, cardboard, and other junk, which they set up in vacant plots and abandoned buildings in the town center, or even in a small cave dug into the rampart by the lake, deprived of family care and protection.

Some of these children resorted to petty theft and were regular consumers of carpet glue. The sale of this product to minors is now banned in Bariloche. Others engaged in some kind of economic activity, mostly begging in the town center, especially outside supermarkets, or rubbish picking, either on their own, or under the supervision of a parent or other relation, often late at night and in freezing weather. In many cases, their earnings were the main upkeep for their families.

They were often harassed by the police, especially the teenage boys, in regular "cleanups" of the tourist and shopping areas.

People at Encuentro warned me it was not easy to get the kids enthusiastic about activities. Due to the demands of providing around three hundred and fifty lunches per day in the community dining room, and attending to the more pressing issues, like assistance and medical care for deprived children and their families, there was no one giving organized art workshops at the time. There were too many problems and too few people to deal with them all.

In this context, I offered the kite workshops, and here is the story of what happened.

An Unpromising Beginning
I had been making kites for about a year and a half, relying on Margaret Greger's Kites for Everyone, ${ }^{4}$ Kiteworks by Maxwell Eden, ${ }^{5}$ and whatever kite-related material I could get my hands on, not easy here in

Patagonia. I would email friends in the Buenos Aires kite club, BaToCo, ${ }^{6}$ whenever I got stuck, which was quite often at the beginning, since I had no experience at all, just a great deal of enthusiasm.

For my first workshop, I chose to teach the Vietnamese kite in its simplest form: newspaper and slim bamboo sticks. When I entered the community dining-room, there were around fifteen children, between 7 and 16 years, boys and girls, silently sitting at a long table and definitely measuring me up. They had been invited by Grupo Encuentro staff members. During the next hour, I took them through the process of building the kite. I remember some were quiet, sometimes nudging each other and giggling, while others were more inquisitive, still others restless, but the workshop went generally well and by the end everyone had their kite ready.

That is when I looked through the window and noticed the wind: a strong, gusty, typical Patagonian wind had risen. This means 40 km (about 25 miles) an hour, with maybe 50 or 60 km gusts. I was not prepared for what followed.

I started to say, "We'd better fly these kites some other time..." but my warning was lost in the rush when all fifteen of them grabbed their kites and winders and dashed into the football pitch, an area of compact earth just outside the building. I followed in trepidation, and the worst scenario unraveled before my eyes: kites everywhere tangled up, torn, totally destroyed in a few chaotic moments, amidst the swirling dust in the football pitch.

Later, everyone was quiet. I did my best to explain that it hadn't been such a good idea to go out in such a wind. They listened politely. "Señora, sus barriletes no vuelan," ("Mrs., your kites don't fly") stated
the last boy to leave, flatly.
I was utterly downcast, such bad luck that an hour's work had been ruined by these winds. My credibility lost, all I could do was return home and consider how to pick up from there.

The following classes were empty, not one child appeared. I had been labeled useless no doubt and my rather idealistic dreams of happy children flying kites were shattered.

## Learning to Fit In

I decided to visit with no further objective in mind than to get to know the children and learn how I could fit in. I began to take part in other activities, sharing mealtimes, noting how other adults related to the children and finding my own way to deal with these new relationships. I was working in a private school at the same time, and remember it felt like moving between two worlds. During that summer I would go to Encuentro with nothing particular to do, and just sit on the bakery doorstep to chat and drink mate ${ }^{7}$ with whoever was around and willing, getting the feel of the place and the people. I understood they were definitely not going to open up to a "rich" outsider just because, except for the small children, who were always delighted to have someone to play with. They were the affectionate hugging sort, who would come running to greet me, borrowing my sunglasses, full of talk and fun.

Sometimes I'd take kites and organize impromptu kiting afternoons, which soon proved popular. We'd fly on the small plateau at the top of La Lomita, the low hill behind Encuentro, with a wonderful view of the mountains, Nahuel Huapi Lake, the city centre, and the Alto. The trail we followed to get there, picking our way through scattered rubbish, and avoiding fierce dogs
behind flimsy fences, lead through a cluster of poor huts with no facilities, not even running water except for a communal tap. Radio music (cumbia mostly) could be heard, and there would be small children playing around in the dust.

With a westerly wind, the kites overflew the settlement, ${ }^{8}$ and the children would point out their neighborhoods in the distance to me: "There's Arrayanes, behind the cemetery," "I'm from Malvinas over there. See that blue roof, it's my school," "There was a shootout in Omega the other day. I rushed into my house..."

There is still a huge derelict building on La Lomita, the cause of many a heated argument when I decided it was off-bounds for safety reasons. Climbing onto the roof to fly the kites was undoubtedly dangerous. Establishing my authority, on this and many other issues, was a challenge, and led to some children stalking off, cussing under their breath, but I stood my ground and the rule remains.

Having lowered my expectations, I began to have fun, the children got used to my presence, and soon I felt ready to offer the workshops again.

## A Second Chance

Kiting as a popular activity had been on the wane for a great many years in Bariloche as far as I can tell from the memories of people born and raised here, who recall their childhood kites with nostalgia. Yet in the Alto, kites had not completely disappeared.

When I started to look around on really windy days, I saw boys flying plastic squares and diamonds, their most remarkable feature being their unruly fringes, so long, unkempt, and punkish, I've never seen anything quite like them


Children proudly display one of many kite projects. The author, shown at left, writes: "Over this long period of time, I gradually deepened my conviction that building and flying kites is one of the most appealing, inclusive activities that can be offered to children of all ages."


Children fly for "Fly Your Rights" (Remontá tus derechos), part of a project to raise awareness in a community where impoverished children and youth are sometimes perceived as criminals, stigmatized by the police and the public.
anywhere else. On closer examination, these kites proved to be crudely made, with sturdy sticks - in some cases nettle stalks with the thorns removed - so heavy, you'd think they would never fly. Yet here they were, battling the winds, our rugged local kites. I took note, and adapted some the models I would teach, reinforcing them and making them heavier than recommended in most plans.

My only workshop enthusiast for several months was Tomas (not his real name), a quiet ten-year-old who had ended up in the hospital a couple of times for overdosing with glue. But he showed persistent interest in making kites, and I got my practice in teaching. Marilena, a cheery 7 -year-old, soon joined us. Others came and went, and I had to learn to deal with disappointment when a full class was followed by an almost empty one, since the children were not used to regular activities and keeping timetables, and a few days or even weeks could pass before I saw them again.

Therefore being constant was my task, creating a space. It took some determination not to give up, but small achievements kept me optimistic and I always felt it had been worthwhile at the end of the day. In 2001, giving the workshop included having a queue of people with pots and plastic containers waiting to collect lunch winding its way through the middle of the class, not exactly an ideal setting, yet that was the situation at the time.

## Cielo Abierto (Open Sky)

During the next ten years, we made and flew kites regularly from September through May, and the workshop, now called Cielo Abierto, became established. In July, with snow covering the landscape, children would start to ask, "So...when are we going to make kites?"

We worked twice a week. Very soon I had several helpers, teenagers and young adults. Grupo Encuentro had a staff of ten young coordinators, most of whom had a past history of life in the streets themselves. Based on this knowledge, they could approach children found begging in the town center, gaining their trust, the first step in this kind of work.

For the kites, we got private and state subsidies to buy materials and sustain the workshop, also appealing to shop owners, friends, and acquaintances for donations. We also made traditional paper kites for sale during several summers.

Over this long period of time, I gradually deepened my conviction that building and flying kites is one of the most appealing, inclusive activities that can be offered to children of all ages. As anyone with knowledge of kites can attest, the possibilities are boundless. Some children became regulars at the workshop for five or six years running, so I had to search for new models, carefully plan and try out different approaches, and offer a variety of related activities to avoid any boredom or repetition.

We made sleds, deltas, diamonds, squares, hexagons, octagons, stars, Vietnamese kites (yes, the original, and a larger version with 4 mm spars that could do quite well in a stiff wind), Siamese serpents in various shapes and sizes, octopuses, cats, boxes, winged boxes, sailing-boats, and others, both traditional and modern. Other windrelated toys and objects, windmills, messengers, parachutes, drogues, and mobiles also proved popular. Among our projects is an Eddy arch with 65 kites, each built and painted by a child, which is flown during festivals and at the march for children's rights, held every year at the end of November. When BaToCo made a giant
banner kite, nicknamed La Banderola ${ }^{9}$ in 2005, we sent a panel with a painting of children flying kites, created in the workshop. The children were amazed to see their panel as part of this huge kite being flown in Buenos Aires on a video a few months later, and delighted with the warm letters sent by BaToCo members congratulating them on their work.

At first, many of the kites would be painted the color of the two most popular national football teams, blue and yellow (Вoca), or red and white (River), with light blue and white, the Argentine flag colors, a distant third. Drawing was mostly restricted to the name of the child or famous rock stars and groups, well-known trademarks, symbols and doodles, such as hearts and smileys.

Through exercises and creativity games (plus some cajoling!), decoration became more original and personal: patterns, abstract shapes, portraits, and landscapes.

I would sometimes start telling a story, preferably one that could be related to the kite we would make, or to wind, ecology, and nature. Thus, before making boatshaped kites, we read about the Caleuche, a mythical ghost ship from Chiloé, in the Chilean archipelago. The Legend of the Morning Star, and the Origin of the Pleiades, both Native American legends, led to the building of stars. Then we had the Inuit legend of Kinak - the mountain-sized god whose breathing was said to cause the north winds - who takes pity on Tako, a woman escaping ill-treatment by her husband, a situation sadly familiar to some children. The story of Lucia Zenteno, the Woman Who Outshone the Sun, as told by Zapotec poet Alejandro Cruz Martínez ${ }^{10}$ is about a beautiful earth mother, and was a great introduction to making Vietnamese fish kites and origami fish. And of course Puss in Boots and Garfield for cat kites!

We encouraged pair and group work. Older children and fast workers were expected to help newcomers and smaller children. Some children became quite confident and independent in all the steps leading up to a finished kite, from cutting out the sail, to framing, bridling, and calculating how long the tail of a particular model should be. It was these children who were always looking forward to and demanding new and more complicated models. Sometimes they would take a new child "under their wing," proudly playing the role of teacher. I just loved to see them do that.

At Grupo Encuentro the approach is essentially rights-based and holistic (that is, looking to the whole child, not just a particular aspect of a child's life). Within such an approach, we found work with kites was highly suitable in many ways. Besides stimulating fine motor skills, social skills were also attended to. Sometimes new children would begin by destroying their half-made kite, angrily stalking out before we could stop them, usually due to some small mistake or because they thought their work was "ugly." It was also quite usual for them to leave a piece of work unfinished. Redoing, fixing, and improving became possible once a child was offered support for doing so, but seeing their peers engaged in patient work and attention to detail was by far the greatest stimulus.

## WINDOWS IN THE SKY

"I would like you to imagine that our kites are windows. In each window there is someone looking through...who's that someone looking through your window? When we fly our kites, all these characters will be looking at us from the sky!"

With these words I introduced a 2009 project for making squares and minidellaportas, with three groups of around
fifteen children in each, aged between six and fifteen.

Through sketching and coloring on paper, a variety of quaint characters emerged, including bus drivers, a pirate, a nurse, bikers, football players, rock singers, gothic girls, and dangerous looking devils and scarfaced men. We traced the drawings onto Tyvek, painted with tempera, not forgetting the background and "windowframe," while the children invented short stories about their character.

Most children had flown kites at least several times and in different winds as part of the workshop. How to fly a kite, alone or with a helper, how to choose the right place to fly, problem solving, getting entangled, freefalling, fixing faulty kites, were all dealt with during our outings. It was always an intense learning experience, during which the children participated actively. The fact that their kites flew high was reason for great satisfaction and sense of achievement, and we always did our best to get all the kites flying, though high winds sometimes caused havoc. Of course it was useful to make observations on the wind: its direction, speed, gusts, turbulence, and to compare how different kites flew and why some flew higher or more successfully than others.
"My kite doesn't want to come down!" "Mine flew higher!" the younger ones would say. After the initial intensity of launching the kites, and when the wind was friendly, we would sit on the ground or on rocks to gaze at the sky and chat.
"So, what did your character say?" I asked some of the children at the end of the Window Project. Here is what they wrote:
"So nice to see everyone together." Milagros, 8 years old
"I passed you all! I saw a helicopter; I saw my owner, the children, the mountains, the lake, and the view." - Jeremías, 10
"At last I'm free! And I'm not alone up here!" - Braian, 9
"I felt a bit bad because I'm afraid of the height, and felt tickles in my tummy, but I had a great time really. You can't imagine everything I saw! The pine trees looked so small, like the people. A bird flew by right beside me. When my owner brought me down, I didn't want to!" - Ailin, 11
"Hoooo people, children! I'm flying so high. I want to stay up here for ever!" Priscila, 9
"I thought I was a window that opened the sky." - Rodrigo, 11
"I flew so high, I touched a helicopter that passed by. I fell and bumped my head. The sun was so strong I had to wear dark glasses." - Hernan, 11

## On an End Note: Fly Your Rights

Last year on June 17, a Bariloche police officer killed a 15-year-old boy running from an alleged robbery. In the protest riots that ensued, two more young men were killed in dubious circumstances. ${ }^{11}$
"Fly Your Rights" (Remontá tus derechos) was part of a project to raise awareness in a community where impoverished children and youth are sometimes perceived as criminals, stigmatized by the police and the public.

Organized by Mesa Interinstitucional Malvinas-Nahuel Hue, ${ }^{12}$ an alliance of local NGOs (non-governmental organizations) and government workers, "Fly Your Rights" was designed to draw attention to children's


Asked to imagine what their kite characters said while flying, Braian, age 9, wrote: "At last I'm free! And I'm not alone up here!"
and adolescents' rights and to address key protection issues.

Based on our experience at Grupo Ecuentro, we held kite workshops for parents and teachers, offering them training in the building of simple kites, which they could then reproduce in their schools, kindergartens, and community centers. All kites were to be decorated with statements referring to children's rights. More than fifty people did the workshops, and several crowd-attracting kite days were held in different neighborhoods of Bariloche.

At the time of writing this article, snow is starting to cover the ground; kites are in the making on my worktable and ideas brewing for future projects.

It could happen any day now. We might be playing a game, or perhaps giving the finishing touches to a puppet. A child will look through the window and say, "So...when are we going to make kites!"

I hope this experience is of interest to others working with children at risk, both in formal and non-formal education, and that our experience will encourage others to continue exploring the joys and benefits of flying kites for children's rights.

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I would like to thank everyone, staff and children, at Grupo Encuentro for their longstanding support and enthusiasm.

Thank you to my friends at BaToCo, for their interest and valuable advice.

And special heartfelt thanks to my friend David Gordon, from Indonesia, who once said, "Fly a kite." I did. Thank you for the sharing over all these years.

Notes

1. Bariloche is a city in the province of Río Negro, Argentina, situated in the foothills of the Andes on the southern shores of Nahuel Huapi Lake. It is located inside Nahuel Huapí National Park. The city has a permanent population of 108,205 according to the 2010 census and is a major tourism center. The Alto, where approximately $60 \%$ of the population lives, comprises mostly working-class families, immigrants from rural areas and neighboring countries, including descendants of Mapuche Native Americans.
2. Grupo Encuentro - Contact grupoencuentro@bariloche.com.ar
3. Barter clubs flourished in Argentina following the country's 2001 economic crisis. Each item brought to the club is given a value by its owner, who then trades it with other members for whatever goods or services they are offering - everything from homemade clothing to homegrown vegetables, in exchange for fixing a washing machine or cutting the lawn. During 2002 there were around 5000 clubs nationwide, and more than two and a half million people participated on a regular basis, which, if one takes into account their families, means between 5 and 8 million people benefitted from the bartering system organized by civilians outside the economic system. In recent years, as Argentina's economy bounced back, fewer people showed up, but ever since the global financial crisis hit, they say barter clubs are more popular than ever.
4. Kites for Everyone - Margaret Greger (1923-2009), the author, was named American Kite Magazine's 1996 Kite Person of the Year. She taught kite making for over forty years and taught others to both enjoy and teach kite making. Her instructions for fabric kites range from the simple Square Kite to the complex Flow Form. Site: www.kitesforeveryone.com
5. Kiteworks: Explorations in Kite Building and Flying - Maxwell Eden, Sterling Publishing Co., Inc. New York
6. BaToCo (Barriletes a Toda Costa) is the leading organization for kite fliers in Argentina. It is a private non-profit association, supported entirely by its members. BaToCo members are dedicated to the enjoyment and promotion of kite flying as an artistic, scientific, and sporting activity for people of all ages. Site: www.batoco.org
7. Mate is an infused drink prepared with dried yerba (Ilex paraguariensis) leaves, in a calabash gourd, into which hot water is poured. A bombilla (crafted metal or cane straw) is used to sip and share this green infusion.
8. La Lomita settlement was dismantled in 2005-6, its residents relocated by the Municipality to other neighborhoods.
9. View the Banderola in flight at www.batoco.org/barriletes/ 2009/05/labanderola.html
10. The Woman Who Outshone the Sun: The Legend of Lucia Zenteno - from a poem by Alejandro Cruz Martinez, Children's Book Press
11. Trials were held, and the police officer found guilty received a 20-year-sentence, which has been appealed. No one has been accused of the other two crimes.
12. Mesa Interinstitucional Malvinas Nahuel-hue: CAAT $\mathrm{n}^{\circ} 8$, Centro Infantil "Pequeños corazones", Escuela no 315, Promoción Familiar Area Libertad Asistida, ETAP inicial y Primaria, Defensoría del Pueblo, Grupo Encuentro, Iglesia San Cayetano, Centro de referencia del Ministerio de Desarrollo Social Dirección Nacional de Migraciones, Centro de salud Frutillar, Club 3 de mayo, Comer en familia, Junta Vecinal Malvinas, Junta Vecinal Nahuel Hue.

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