



*Go
Fly
a
Kite*

If you thought kite-flying is strictly for children, you couldn't be more wrong. For more than 2000 years, kites have been used in warfare, scientific research, the development of modern aviation – and, of course, for a lot of fun.

Written and photographed by
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Named after a graceful, agile bird of prey, the humble man-made contraption soaring at the end of its string is mankind's oldest form of aircraft. From the days of ancient warfare to the dawn of modern science, the kite, so often dismissed as a mere child's toy, boasts a proud and long-standing lineage.

The origins of kite flying go back more than 2000 years. During China's Han Dynasty (200 BC-200 AD), Chinese armies attached bamboo pipes to kites flown over the enemy. Wind passing through the pipes made an eerie whistling sound, causing the enemy army - especially its raw recruits - to run in panic. But about 500 AD, kite-flying had spread eastward to the Pacific islands and westward to Arabia.

Kite-flying was so popular in the early Siamese kingdom of Ayudhya that the king, in 1358, had to issue a decree outlawing the flying of kites over the royal palace, on threat of severe punishment, to prevent further damage to the delicate palace pinnacles. In 1689 another Ayudhya monarch, Phra Phetrarcha, used kites to conquer a rebel city. Unable to storm the defences by conventional means, he ordered pots of gunpowder with long fuses to be attached to kites and flown over the walls. The resulting aerial bombardment caused fires, chaos, and the ultimate capitulation of the city.



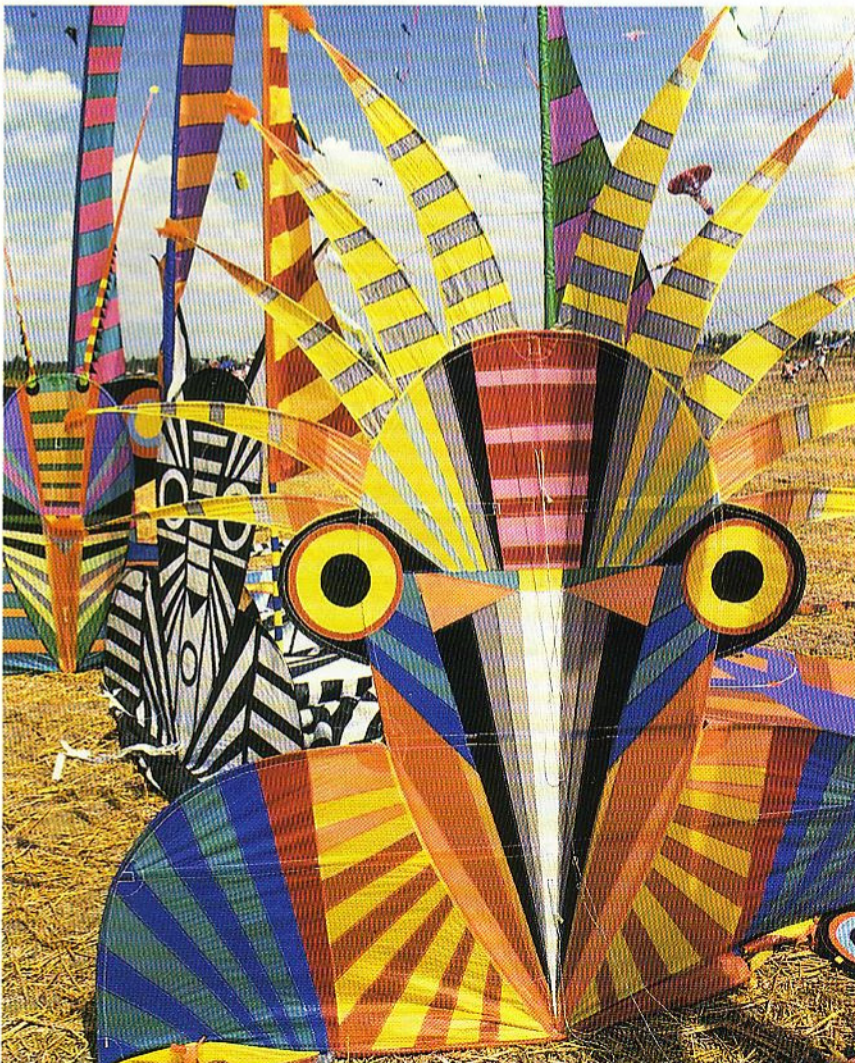
A huge patchwork blowfish windsock

Kites did not reach Europe until the Renaissance. A Dutch illustration of 1618, showing a familiar, two-stick kite, provides evidence that Dutch merchant seamen were the most likely cause of the kite's transmission from the Far East to Europe.

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The first record of the scientific use of kites in Europe is that of 1749, when Scotland's Alexander Wilson and Thomas Melvill used trains of kites to lift thermometers for measuring atmospheric temperatures at different altitudes. In 1752, the colonial American scientist Benjamin Franklin conducted the most famous kite experiment in history. Franklin and his son launched a kite into the path of an approaching thunderstorm, with a metal key attached to the string. A flash of lightning struck a pointed wire fitted to the kite and was instantaneously transmitted down the rain-soaked string to the key, causing a stunning spark. Luckily escaping being electrocuted himself - a fate shared by subsequent 'electro-kite' enthusiasts - Franklin proved that natural and artificial electricity are one and the same.

In 1825 an English schoolteacher, George Pocock of Bristol, used a kite to lift his daughter 90m/300 feet into the air. Although this was the first instance of a 'man lifting' kite being used in the West, such techniques had been used in the Far



The brilliant American kites



A woman holding phoenix kite

East for more than 300 years, at least since the time of Marco Polo (c.1254-1324), as mentioned in his book of travels. Pocock also used kites to pull lightweight carriages along English country roads at speeds of up to 32kph/20mph. In 1847, a kite helped to pull a cable across the Niagara River between the United States and Canada, the first stage in building a suspension bridge across the river.

Throughout the 19th century, kites were used for meteorological experiments. With the introduction of the bow kite and box kite in the 1890s, kites were commonly used to gather information about the weather. Alexander Graham Bell, best known for his invention of the telephone, also conducted experiments with kites. He hoped that his big 'tetrahedral' (four faced) box kites could be combined for lifting and transporting people - as aircraft.

Further experiments with man-lifting kites were a vital stage in the eventually successful development of the aeroplane. 'Lawrence Hargrave's box kite changed the way people designed flying objects. The Wright brothers used box kites as a basis for testing their ideas about wing warping. The results enabled the Wrights to make the first aeroplane in 1903,' writes historian Valerie Govig. Kites were even used during the two World Wars. In the First World War they were used to lift military observers, but the aeroplane soon made them obsolete. In the Second World War, huge box kites were flown above American ships to foul the wings and propellers of enemy aircraft. All flyers today, whether piloting a hang-glider or a supersonic jet, trace

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A multi-sectioned centipede



The Red Octopus kite

their beginnings back to the humble kite: mankind's first form of aircraft.

Over the past decade, as the kite-flying renaissance continues, there has been a veritable explosion of creative designs and configurations. I saw many of them at a big international kite festival held, appropriately, at Bang Sai in Thailand, on the outskirts of ancient Ayudhya. All reflected the kite-flyer's maxim that anything can be made to fly, even a barn door, if the wind is strong enough.

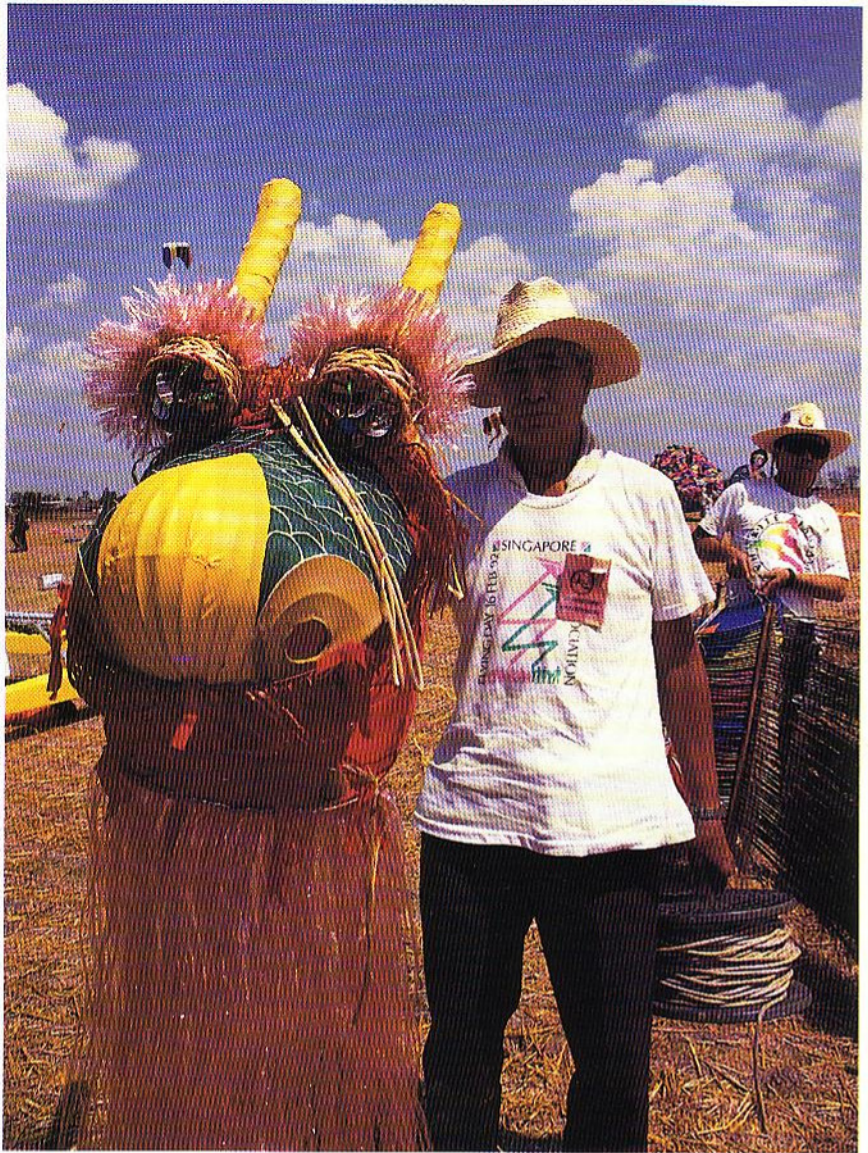
*In 1352, the king of the
Siamese kingdom of Ayudhya issued
a decree outlawing the fly of kites*

There were no flying barn doors at the Bang Sai festival, but there was just about everything else - some of them towering as tall as a multi-storey building. I saw a huge pink 'King Cobra', ready to strike; a gargantuan, cross-eyed 'Red Octopus'; a huge pair of runaway 'Legs', lazily striding across the sky, complete with blue silken running shorts and jogging shoes; an improbable floating 'Pink Pig', and a 'Guernsey Cow'; a multi-coloured, patchwork 'Puffer Fish'; a giant 'Manta Ray', a multi-sectional 'Centipede', a frolicsome 'Frog', and a positive invasion of 'Things from Outer Space'! Kites large and small, of every colour, shape, and size, were spinning, floating, soaring, swooping - and even, now and then, dramatically crashing to earth.

There was a Golden Dragon Chinese kite; an Indonesian Garuda kite; a host of Japanese kites; complex box-kite designs; serial worm or tube kites; spinning conical striped kites; and unending chains of star kites. Many of these were giant modern parafoils: flexible kites, sewn together in designs that take their shape from the wind like huge, billowy



At a kite flying festival



The chinese dragon kite

parachutes, with no rigid framework. They are made of rip-stop nylon: parachute material.

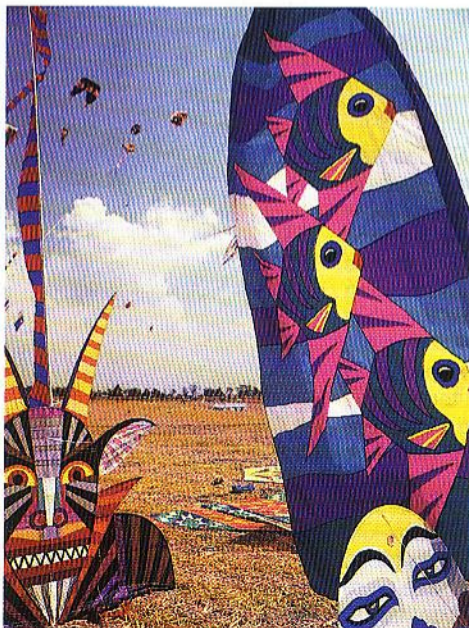
Students in design schools are sometimes assigned the task of designing original kites as proof of their ability to marry the worlds of beauty and function in a single

creation. Some such results are considered veritable works of art: pieces of aerial sculpture.

Large kite-flying contests are still held in Korea, Japan, and Thailand. In Hamamatsu, Japan, thousands of 4m/14-foot 'fighting kites' are launched during a three-day festival held in early May each year. Even larger, 8m/22 foot kites are flown the following month in the town of Shirone. But the biggest kites in Japan - 14m/48 feet by 11m/36 feet are flown every year in Hoshubana by teams of 50 men. Yet even these were dwarfed by the 19.5m/64-foot, four-tonne *wan-wan* monsters flown at Naruto, Japan, during the early years of this century. The sky is truly the limit!

In Central America, colourful 6m/20-foot *barroletas* are traditionally flown every year on All Saints' Day (November 1) by the young Maya Indians of Santiago Sacatepequez in Guatemala. Kites are even used for fishing, both traditionally by native Pacific islanders, and by modern, multi-line sport sailfishermen aboard sleek, hi-tech speedboats, with a kite carrying the line or lines out and away from the fisherman.

Thailand has a kite-flying tradition many centuries old. The fighting *Chula* (large, 'male') and *Pakpao* (small, 'female') follow a series of often dramatic and intricate



Hawii team kite



An Aussie kite flier ripping through the harvested rice field

manoeuvres. The aim is to capture or snare one another, bring their opponent to the ground, or cut each other's string in aerial combat. Their 'weaponry' includes split-bamboo 'talons' and loops, long tails for grasping, attached weights for smashing, or

strings embedded with shards of broken glass for cutting the opponent's string. All's fair in love and war.

The story is told of one ambitious kite-flier of a bygone era who proudly launched a magnificent hawk-shaped kite, radiating



Kite-flying.. a real fun

pure martial pomp and aggression. passing flock of lowly crows swooped down on the 'invader' and demolished it. So much for the permanence of temporal power.

As the old Celtic saying has it, 'May the wind forever be at your back!' ●