Blending Technology with Tradition:
Amazing Paper in Japan
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Paper can be a lot more than just a medium for communicating and recording information. The Japanese have long been adept at using paper for a wide variety of purposes. That flair is very much alive today, demonstrating new possibilities for paper.
Washi: Tradition and Evolution

Paper has played a prominent role in everyday life in Japan, as culture and paper converged in unique ways. These pages offer a perspective on the rich Japanese culture of paper.

Early beginnings

Paper-making techniques came to Japan from China, reportedly in the early part of the 7th century. Back then, it was made from hemp. Hemp fibers are very long and tough, and getting them into a workable state requires strenuous, time-consuming cutting and beating. So a switch was soon made to the fibers of native shrubs like kozo (paper mulberry), gampi and mitsumata (paper bush), which are broken down more easily. Kozo is used for making a pliable yet heavy-duty paper, gampi for a densely woven, glossy product, and mitsumata for a smooth, glossy finish. Hold washi up to the light and you will see how the fibers are intricately woven together. The longer the fibers, the more they are knit together, creating the potential for a sturdy paper. The length of kozo fibers is about 10 mm, while gampi and mitsumata both come in at about 5 mm.

Washi is light in weight, and soft in texture. The fibers tend to ride up on each other, creating an opportunity for the formation of tiny layers of air. Although the paper may appear dainty, it is hard to rip, giving them many purposes. The Tale of Genji, thought to have reached its existing form by the early 11th century, included this comment: “Foreign paper is easily torn,” So even back then, people were aware of the strength of washi.

The toughness comes also from the manufacturing method. The nagashi-zuki method interweaves long plant fibers into a uniformly sturdy sheet. The fibers are rocked back and forth in a mixture of water and neru, sticky matter made from horosono (sunrise hyos- cus) or some other plant having glutinous properties. As the long fibers weave themselves together, liquid is cast out in a repetitive motion until a tough, evenly formed sheet of paper is made. Papermaking spread through Europe around the middle of the 12th century, and as time passed, artists switched from hemp to cotton fibers. They used the tame-zuki method, letting water drain out through the mold, rather than casting it out, as in the nagashi-zuki method. This is suitable for short fibers that disperse themselves well in water, but the draining occurs only once, and this tends to result in a paper that is easily torn and uneven in quality.

An inspiration for Japanese culture

Artisans apparently established the nagashi-zuki method in the Nara period (710-784), when copyists were printed in 770, making it many purposes. The Tale of Genji, thought to have reached its existing form by the early 11th century, included this comment: “Foreign paper is easily torn,” So even back then, people were aware of the strength of washi.

Among the best-known washi production centers are locations in Gifu Prefecture, where they make a kind of washi called Hon-minoshi, in Shimane Prefecture, where they make Sekishu-Banshi, and in Saitama Prefecture, where Hosobako-shi is made. These three washi varieties are now on UNESCO’s Intangible Cultural Heritage list. Other varieties deserving mention are Echizen-washi from Fukui Prefecture, a high-quality paper once used for official documents of the feudal military class, and the richly varied Tosa-shi from Kochi Prefecture. The locations are blessed by nature with water that is both plentiful and crystal clear, two requirements for a papermaking industry. The necessity of artisanal expertise has also been passed down by artisans from one generation to the next. Fukui Prefecture is the only place in the world honoring a goddess of paper. She has a shrine dedicated to her, and it is said that her support has sustained the industry there up to the present day.

Washi came to serve many purposes because it is sturdy, beautiful and highly versatile. Traditional architecture in Japan would hardly be Japanese without shoji and fusuma sliding screens and partitions. Their use of washi is striking. The shoji latticework is covered with washi, and light passing through it calms the interior with a touch of nature. Fusuma are covered with decorative paper to define and beautify space.

Washi can be made waterproof and stronger with a coating of persimmon tannin lacquer or oil, for the manufacture of containers, umbrellas and other often-used products, even items for the wardrobe. Washi, either cut into fancy shapes, folded or glued together, demonstrates its adaptability: in annual festivities as tako kites flown at New Year’s, koi-nobori banners fluttering in the wind in May, and oshibana strips of paper in summer; in games such as karuta and sugoroku; and as decorations for Shinto and Buddhist rites and festivals.

Washi came to play many roles in daily life in Japan, and some live on to the present day.
Handmade washi entered into a decline in the Meiji period (1868-1912), due to the importation of paper from large-scale mechanized factories overseas. The paper we use today is made from fibers about 1 mm long, solidified from a wood pulp mush with the help of chemicals. This makes it suitable for mass production, but also makes it easy to tear and limits the ways it can be used. Washi can still satisfy many needs because of its manufacturing techniques and characteristics. For instance, although Japan’s paper currency is known for the advanced technologies used to print it, less known is the fact that the bills incorporate certain advantages of washi—they contain mitsumata materials for a smooth finish and extra strength, and have watermarks developed by washi makers to prevent counterfeiting.

I often display items made of washi at overseas exhibitions in Paris, London, Milan and elsewhere, seeking to spread appreciation of its charms. Visitors are surprised that a natural material can be used in so many ways. My recent projects include mixing traditional materials with wood pulp or rayon, using machinery to replicate manual techniques, and developing new types of washi for interior decoration and ink jet printers.

The potential continues to grow. And one thing is sure—new varieties of paper for as yet unknown purposes will be developed. They will hold true to the tradition of washi while fitting in with modern lifestyles.

With Washi, Light and Space Shimmer in Harmony

1. Koi-nobori: Windsock-like banners resembling huge fish (carps), flown to celebrate a boy’s growth on May 5 each year.
2. Tanabata: Decorative paper strips inscribed with wishes and attached to thin bamboo poles. Displayed on July 7 every year.
3. Karuta: Small rectangular playing cards made of thick paper, printed with illustrations, writing, etc.
4. Sugoroku: A board game. Lines divide the paper board into squares that make up a highly illustrated tableau. Players advance their pieces by the number shown on thrown dice.

Light passing through washi paper softens the contours of space.

Top: Ceiling illumination for the Fuji-no-ma Hall at the Kyoto State Guest House. (Photo: PIXTA)
Above: Washi gate. The work is called Kyouka (“Rainbow Light”). Threads of seven colors were incorporated within the paper during the manufacturing process. (Kyuuko Eriko Exhibition, 2012. Photo: Asakawa Satoshi)
Tapestry art expressing the moon in different phases. The washi was given pale tints during the manufacturing process. A creation of Horiki Eriko, Japan’s most prominent designer using handmade washi to give artistic expression to space. This is a vision of the design of architectural space in Japan and abroad. (At Hanamurasaki Restaurant in Ishikawa Prefecture; Photo: Photography department of Shinkei-shuku-sho Co., Ltd.)
For Rituals and Celebrations, for Art and for Fun... Paper Brightens Up Life in Japan

Top: A Paper figurine made with mizuhiki (twisted cord made from thin strands of washi paper). You are just about sure to see one at tables on formal festive occasions. (Photo: amanaimages Inc.)

Two items mid-page left: Esugoroku paper board games. They became popular in the Edo period (1603-1867). (Property of the Paper Museum)

Bottom: Karuta cards. The object of the game is to match the e-fuda (picture card) with a text. (Photo: Kuribayashi Shigeki)

Washi is light, making it perfect for kites dancing in the sky. The three here are (clockwise from top): Nambu-dako, Oni Yozu, and Oni Yocho. (Property of the Kite Museum, Japan Kite Association)

Top right: The Tanabata festival is a time to write hopes and desires on colorful paper strips, then hang them on thin bamboo poles on July 7. Seen at Kitano Tenmangu Shrine, Kyoto. (Photo: Sudo Koichi/Aflo)

Bottom right: An uchiwa fan will cool you down on a hot summer day. Washi paper glued to a bamboo framework. (Photos: Komaru-ya Sumii (above) and Aiba (left))
Washi paper and shi Fuji paper cloth are two traditional materials bringing excitement to today’s fashion world. Young manufacturers recognize the uniquely pleasant texture that only paper can give, and with the application of technology and design they are opening up new frontiers for clothing.

1. Parasol. The canopy is paper cloth made from traditional Mino-washi (Gifu Prefecture). The texture gently softens the light underneath. (Photo: Hayashi Kogei)

2. Earring with a modern design, but inspired by traditional mizuhiki (a twisted paper cord used since ancient times for tying a gift package in a decorative fashion). (Photo: TRART)


4. Blouse made from woven washi paper, cotton, and linen. Special techniques make it possible to transform washi into thin threads. The result is a supple texture. (Photo: Natural Dye Studio Tezomeya)

5. Shawl made from 100% washi material, colored with natural dyes. Light, warm, and beautiful too. Absorbs and then releases moisture well. (Photos 4 and 5: Natural Dye Studio Tezomeya)

6. Bags made from a fabric developed by one of Japan’s well-known product designers, Fukasawa Naoto, and the washi paper manufacturer Onao Co., Ltd. Highly durable. (Photo: SIWA)

7. Baby’s first shoes. Made entirely from kozo grown in the locality famous for Sekishu-Banshi, which is now on UNESCO’s Intangible Cultural Heritage list. The paper cloth threads are all made from natural materials worked by hand. (Photos: Kawahira, a manufacturer and seller of Sekishu-Banshi and Sekishu-washi)
High-Tech Paper: Bringing Convenience to People’s Lives

Paper is used in every aspect of daily life, and in Japan the race is on to develop technologies for new types of paper that offer even greater freedom and convenience.


A world of possibilities: Paper processing and special types of paper

Here are some highly unusual products you might not believe are made of paper, until you look closely. They come from a small printing company in the Tokyo suburbs specializing in paper processing techniques like punch cutting and intricate folding methods. The company is getting plenty of attention for its stunning “air vases,” manufactured in collaboration with outsourced creators. They seem to float in air and show an ever-changing shape. Each one is made from a single sheet of paper, cut in an extraordinarily delicate manner which looks like a beehive. Before succeeding with a finished product, the company’s dedicated artisans used their intuition to make more than a hundred prototypes during a project that began with manufacturing metal dies and ended with punch-cut paper strands with thicknesses in the 0.01 mm range.

Another project pursued by the company, this one in collaboration with an architect, came up with 1/100 scale model kits containing miniature paper parts. The kits have taken the model-making hobby industry to a new level, and are now commercially viable thanks to painstaking and attention-to-detail punch cutting techniques.

Japan’s ancient papermaking traditions are alive today in techniques used to make a special product called synthetic paper. One type has a surprising role on voting day. When the ballot is folded and dropped in the ballot box, something strange happens inside the box—the ballot opens up by itself. This makes ballot counting a lot easier and leads to faster election result announcements. The ballots are printed on YUPO Synthetic Papers®, which are a type of film material made primarily from polypropylene. It looks like paper and feels like it, too. In the early development stage it was too smooth, but this problem was soon eliminated, making it easy to write on, even with a pencil. The same manufacturer has developed a machine to automatically read which candidate the voter has chosen, and this too has helped create a highly advanced election system.

Paper diapers and other high-quality sanitary products include an advance you would naturally expect to come from Japan, in the form of improved tissue paper. The paper includes glycerol and other substances for a moisturizing effect and has a soft, gentle touch, a blessing when blowing your nose a lot during a cold or pollen allergy reaction. The paper hit the market about 20 years ago, and now offers many types of moisturizing ingredients, including menthol, hyaluronic acid and collagen. Many women use it as part of their makeup set.

A miniature world of paper created through a combination of the design ingenuity of architect Senda Naota and the innovative die-cutting techniques of Fukunaga-Print Co., Ltd. Precision-cut pieces of paper come together to form a 1/100 scale model of a scene during the cherry blossom season. The scene measures 103 x 148 mm. (Terada Mokei and Fukunaga-Print Co., Ltd. Photo: Masunaga Kenji)
And then there is a paper that rapidly breaks down when moistened with water. It was developed by shortening the bonds between paper fibers to a minimum. The disintegration speed is far greater than what one could expect from ordinary toilet paper—the new paper simply vanishes in water, making it an excellent choice for sowing seeds in bags in the ground, for paper lanterns set afloat on a river, and for other purposes requiring the paper to disappear. It also demonstrates the future possibilities of paper.

A helping hand for industry

Paper is doing its part in one of Japan’s key industries, car manufacturing. The clutch in automatic transmissions uses thin steel discs to transmit the force of the motor, taking advantage of friction for automatic gear shifting. It was paper that inspired the idea, and the discs are actually covered with a friction material made out of paper. The material is first treated so that it readily absorbs oil and releases heat, giving it the ability to withstand wear-and-tear practically forever and perfecting a friction material for automatic gear shifting. It was developed by shortening the bonds between paper fibers to a minimum. The disintegration speed is far greater than what one could expect from ordinary toilet paper—the new paper simply vanishes in water, making it an excellent choice for sowing seeds in bags in the ground, for paper lanterns set afloat on a river, and for other purposes requiring the paper to disappear. It also demonstrates the future possibilities of paper.

New paper materials offer potential for a brighter future

New materials are turning the whole idea of paper on its head, ever since Professor Hagiwara Akira of the Faculty of Agriculture at the University of Tokyo was awarded Sweden’s Marcus Wallenberg Prize, which is considered the “Nobel Prize” of the forestry industry. Many corporations and universities are conducting research in cellulose nanofibers, a structurally refined material obtained from wood fiber, but his research lab was the first in the world to succeed in using a special chemical reaction to break down wood pulp to the structural unit level of microfibrils, which form strong bonds within the cell walls of cellulose and tend to be difficult to separate. This success led to the creation of an entirely new type of cellulose nanofiber.

Cellulose nanofibers are five times stronger than iron, and five times lighter. They can also incorporate many metal ions. These advantages have led to developments achieving greater recycling and a more sustainable society by reusing wood from Japanese cedar and Japanese cypress trees, which make up about half of Japan’s forests.

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Paper has an important role to play in agriculture, as well. In a Japanese orchard you are likely to see paper bags carefully protecting the fruit for a certain period of time before the harvest. One reputable manufacturer has made bags from traditional washi paper for more than 100 years, coating them with persimmon tannin. Today, its purpose-designed paper bags protect the fruit from wind, rain and insects while repelling water and maintaining just the right amount of ventilation. Moreover, baggies for apples, placed over the fruit a month before harvest, keep out excess sunlight to control the production of chlorophyll and give a brightly colored effect. Mangos are also covered with bags, which are double-glued at the bottom to prevent the fruit from dropping out when fully ripe. These are just two of the bag types developed specifically for each fruit.

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Cellulose nanofibers are five times stronger than iron, and five times lighter. They can also incorporate many metal ions. These advantages have led to developments promoting the commercialization of ballpoint pens with dependable ink flow, and paper diapers with more than three times the deodorizing power,” explains Professor Hagiwara Akira.

Because they have properties similar to carbon fiber, cellulose nanofibers show potential in the manufacture of aircraft and motor vehicles. And they hold the secret to achieving greater recycling and a more sustainable society by reusing wood from Japanese cedar and Japanese cypress trees, which make up about half of Japan’s forests.

“The knowledge built up by engineers in the paper manufacturing industry is now being transformed into new industrial know-how, thanks to Japan’s world-class, cutting-edge papermaking technologies,” says Professor Hagiwara Akira with evident pride in his voice.

Paper has played an important role in the everyday lives and industry of the Japanese for more than a thousand years. Today, those techniques are moving in new directions for the benefit of future generations.
Washi paper has a history going back 1,300 years, and its traditions are alive and well today with growing possibilities for the future. 

Photos: Miyamae Masanori

Washi and graffiti art: Graffiti artist TOMI-E

Ukiyoe woodblock prints had their heyday in the Edo period (1603-1867). Their subjects were often famous places or beautiful women, and they were incisive in depicting the expression he wants. When he was 16 he went to the United States, where wall graffiti art was quite an eye-opener for him. He began experimenting in ways to express his own identity as a Japanese person through art. He came upon washi, and after that he decided to work with washi.

“Washi takes in ink well, giving a rich luster and colors that you couldn’t get with canvas or a wall. When I saw that, I knew I’d found what I was looking for.”

He was captivated. While studying the possibilities, he discovered washi made by the recognized Living National Treasure, Iwano Ichibei. Every one of Iwano’s sheets has its own spirit, each with a slightly different thickness and texture. Making the most of Iwano’s paper, TOMI-E’s approach to his own art form changed.

“A wall can be painted and then repainted on top of the old, but with washi paper you have only one chance to get it right. So I tend to concentrate more than before when using washi paper.”

Using spray to depict our own times on washi paper, TOMI-E is creating a new type of art.

Three generations, linked by papermaking tools: Yoshida-ya Sashimono Joinery

Making washi by hand requires many kinds of tools. In Fukui Prefecture, where Echizen-washi paper is produced, such tools have been made by Yoshida-ya Sashimono Joinery for nearly 100 years. It is still making and repairing tools such as suki-geta (wooden frames), at a time when tool artisans are declining in number in Japan.

The person primarily in charge of work there is Yoshida Minoru. He is the third-generation owner and the father of the fourth-generation successor, Kiuchi Masa’aki. Wooden frames stand up well to water and are made with lightweight wood from a tree called Aomori hiba. It takes many years of experience to make a good wooden frame—forty years, for example, the thickness of the frame has to be calibrated to prevent them from bending under water pressure when the pulpy liquid is lifted. Masa’aki says, “I had a different kind of job before, but I didn’t want to see my father’s technical skills disappear with the passage of time.” This is why he decided to carry on the family’s work. They get orders from places throughout Japan. “It can be kind of stressful. But if we don’t keep at it, techniques could die out.”

Minoru’s grandson, Masayasu, is training in this craft. “I’ve wanted to do this kind of work ever since I was a kid. My grandfather is awesome—he can sense right away what people want in their tools, and he makes them accordingly. I want to be able to do that.” He certainly shows his dedication on the job.

Presenting Edo-Karakami decorative paper charms to the world:

Yanagi Tomoko, Interior Design Coordinator

Edo-Karakami is a kind of washi with a wide range of decoration. Its ornamental techniques, which were developed in the Edo period (now Tokyo), can be used to create just about any kind of pattern, by combining colors and washi paper. It is often used on fusuma (sliding doors and screens), and it was an important element in traditional Japanese houses. Today, Yanagi Tomoko is working at making Edo-Karakami better known outside Japan.

For her, it all started while searching for ways to use washi for retail space design. Then she happened to visit Tokyo Matsuya Inc., an Edo-Karakami wholesaler.

“Edo-Karakami decorative paper expresses the essence of the traditions and craftsmanship seen in the patterns and colors which the Japanese have been fond of. I was amazed.”

She had studied architecture in Italy, and the experience convinced her that people living outside Japan would appreciate the artistic effect of the paper. So she organized an Edo-Karakami exhibition in Italy. Until then, the paper had only been distributed in Japan. “I planned an exhibit that would depend on the beauty of the paper itself.” She used large-size sheets, depicting a world of color and dynamism, and the people who came marveled at the artistry achieved by expanding the boundaries of humble paper. She received an order to decorate the ceiling of a private residence, and is now pursuing opportunities to market the paper abroad.

“I think it would be great if people all over the world used Edo-Karakami as a decorative feature in their homes,” says Yanagi, her eyes lighting up at the possibilities ahead.

People from three generations working together—they show how treasured techniques are being passed down through the years, helping to maintain washi manufacturing.
Make a bird, an animal, a plant or a geometrical shape by folding a single sheet of paper. Many Japanese became fond of origami in their youth. Origami is now attracting attention in the fields of science and technology as well. Origami engineering uses the techniques and special characteristics of origami to manufacture things. Using computer technology, engineers have developed design methods called computational origami, treating origami as a mathematical tool to expand the potential of a craft that was until recently a pastime for kids. The originality and methods of origami engineering are attracting worldwide attention, because they are being applied in many fields, from the space industry and automotive sector to medical treatment and fashion. Especially well known are miura-ori folds, a folding method developed for the design of structures for space exploration. Common examples of miura-ori folds are seen on maps and beverage cans.

"Origami's most famous example is the crane. But it doesn't look much like a real crane because it is simplified and abstract; in other words, we fold the piece of paper to make a simple shape that somewhat resembles a crane, or at least represents it," says Hagiwara Ichiro, a professor at Meiji University in Tokyo. His research looks for ways to apply and promote origami engineering for different purposes. Trans Core panels, which he developed, were inspired by 3D origami concepts. Two panels, which are generally made of metal or plastic, are embossed with rows of triangular pyramids, and then placed face to face to make a structure that is light yet crash resistant. Trans Core panels are used in solar arrays to generate electricity.

Professor Hagiwara is also working on the development of an origami-type 3D printer. His system converts the 3D data of a three-dimensional object into a two-dimensional figure with many folds, a folding method known as "miura-ori." The connecting triangles make the can stronger while keeping it lightweight. (Photo: Toyo Seikan Co., Ltd.)

"A fold-out pavilion used at an exhibition can be folded up and taken to a disaster-stricken area for shelter. The materials are reused, not thrown away. The building would have a built-in 'memory' for future use." In the old days origami played a role in etiquette, when giving a present. Today there is still the sen-ba-zuru custom, folding 1,000 pieces of paper to make a thousand cranes, in a get-well wish for an invalid. Each fold, one after the other, expresses the desire to be of use.

The desire to make something of use is alive in origami engineering. Assistant professor Tachi explains origami's charm: "Origami has Japanese qualities, but it is also universal, global. Origami research extends across multiple disciplines to include engineering, mathematics, the natural sciences, medicine, education and design. So I feel it has lots of potential."

Innovation from Origami
Collaboration: TAKEO Co., Ltd.

plane faces. The figure is printed with an ordinary printer. The result is faster and cheaper than what could be obtained with a conventional 3D printer, which builds up layers of material. And his method can be used to make large three-dimensional objects. Expected uses include the manufacture of product samples and pre-production prototypes. This method could quite likely be used in urban planning, by reproducing buildings and other structures from aerial photographs.

Origami is unusual in a number of ways, especially the folding methods, how the object is formed, and its ability to be folded either in or out. All these features make origami concepts useful in building construction. Tachi Tomohiro, an assistant professor at the University of Tokyo, is researching ways to use origami techniques in architecture. The key to success, he says, is to use flat "rigid origami" panels and assemble them into a strong, flexible structure. The structural components are easy to fold in and out, offering applications like retractable roofs and furniture such as tables. And because the structures are light and easy to transport, they are suitable for short-term display facilities, or temporary housing for people displaced after a disaster.

"Rigid origami panels moved into different configurations from left: Beginning flat, the structure becomes a three-dimensional body with the potential for vertical and horizontal expansion. It can even be folded small. Right: Image showing the application of rigid origami principles for a building. (Images and photo: Tachi Tomohiro)"
When winter comes to Japan, hot pot is sure to be one choice on the menu. Everyone gathers around a big earthenware or iron pot at the dining table, and when the heat underneath gets everything piping hot the chopsticks get busy, transferring food from pot to dinnerware. It may be cold outdoors, but in homes and restaurants, happy voices ring out.

Enjoying a hot pot alone is also an option—then the pot is smaller and the meal’s ingredients are for one. At traditional inns in tourist spots, the amazing thing recently is, the pot is often made of paper! The kami-nabe (paper pot) is just for you, with your own supply of solid fuel. As food from the sea and fields heats up and becomes ready to eat, its appearance and taste are star attractions at the table, creating long-lasting travel memories of a culinary feast.

Since the paper is thin, the heat spreads evenly and the ingredients cook more quickly. The pot absorbs froth seeping from the food, another benefit of using paper. Even if the heat comes in direct contact with the paper, the water never gets hotter than 100 °C, of course, whereas the ignition temperature of the paper is more than 300 °C. As long as there is water in the pot, the paper will not burn.

Today’s paper pots are almost all made of machine-made paper treated to make it waterproof. But some specialty shops serve menus of kami-nabe made from traditional washi paper, which tends to be strong due to its long fibers. It is probably these qualities that inspired this intriguing idea, simmering food in paper.

“Kami-nabe are light, they can be stacked, and they are the perfect image of clean cookware. Paper pots—what a great invention!” says Okuda Toru, the owner of a Japanese restaurant called Kojyu. A chef there prepared the food photographed for these pages.

“Japanese people find being in nature soothing and relaxing, and we have long favored natural materials such as clay, wood and paper for many uses, and cuisine is certainly no exception. I suppose it was that appreciation of nature that led to the paper pot.”

Taking pleasure in both the food and the dishes it is served in, while feeling close to the natural world, led to the eminently unique invention of the paper pot.
Home to Handmade Paper Recognized as an Intangible Cultural Heritage

Mino

Photos: Miyamura Masanori, Mino City Sightseeing Association, and Mino City Government
Maps: Oguro Kenji

Hon-minoshi, now registered on UNESCO’s Intangible Cultural Heritage list, is made in the Mino district of Gifu Prefecture (which is located in the middle of Honshu, Japan’s main island). Mino is favored with the clear-running waters of the Nagara River, and paper has been made there continually ever since the earliest days of handmade paper in Japan, 1,300 years ago. Artisans use only kozo, and the paper is known for its beautiful white tones, and for two seemingly contradictory qualities, softness and strength. While some ateliers with centuries of heritage are disappearing, here in Mino, they are keeping old traditions alive by sharing workshops, as the next generation carries on the ancient craft of making paper.

Mino, home to one variety of Japanese traditional paper, lives up to its reputation with events associated with washi. The Mino Festival in spring is a time of spectacular scenes and excitement, when pieces of washi, dyed pink and shaped like cherry blossoms, are carried on hana mikoshi floats through the streets. The floats, some large, some small, number about 30 altogether, and with all their hana (blossoms), they give the impression of cherry trees in full bloom dancing energetically. In autumn, during the Mino-washi “Akari” Exhibition, highly unusual lanterns with washi shades create a fantastic scene, which is appreciated by many tourists every year. Light shining through the paper casts a magical glow over the street at night.
Take a stroll along Menoji-dori Street near the city center and you will surely notice some unique roofs in this old, well-preserved district: above the tiled roofs of the row buildings are structures extending above the roofline at both ends of each unit. These fancy add-ons are called *udatsu*, designs differ, depending partly on the time of construction and the depth of the original owners’ pockets. At any rate, it is fun to look up and compare. One roof, for a sake brewery built around 1773, has an arched shape and interesting *udatsu*. It will certainly draw your eyes.

The area around Menoji-dori Street has a number of old houses renovated to serve as tearooms, eating and drinking establishments, and shops selling washi products. Stroll through traditional architecture highlighted by ornate *udatsu*, and savor tastes of nature in the form of local Mino chicken, ayu fish and edible wild plants. If you are looking for souvenirs, you will find a wide selection. How about decorative washi to stick on glass for a restful mood, or *kiri-tori* (sunset hibiscus) root fibers, which facilitate the blending of washi components, are softened by soaking in water, then strained. Bottom: Three young artisans have been making paper at their community-owned atelier. From left: Hoki Miho, Takahashi Mayumi, Ieda Fumiko. (All three: Shiyu)

**Architecture on Menoji-dori Street maintains its traditional style,** with *udatsu* extending above the roof on both sides of each building unit. Left: A residence that was formerly a rice store. Right: This *udatsu* has a shape that is unusual even for this neighborhood.

Top left: One stage of the paper-making process, called *shin-hon*, involves carefully remerding unwanted material stuck to the wood fibers. Top right: *Furoshiki* (narrow hibiscus) roof fibers, which facilitate the blending of washi components, are softened by soaking in water, then strained.

Bottom: These young artisans have been making paper at their community-owned atelier. From left: Hoki Miho, Takahashi Mayumi, Ieda Fumiko. (All three: Shiyu)

**Top left:** Decorative washi seal for a mobile. (All three: Shiyu)**

**Top right:** Washi bricks for a mobile. (All three: Shiyu)**

Left: Saké brewed locally in Mino at Kosaka Shuzojo, a brewery with its own ornamental roof. Saké brand name: Hyakushun.

**Center:** Locally raised chickens, sweetfish and edible wild plants are some of the ingredients used in Mino’s own cuisine. **Restaurant:** Right: Take a break from strolling through the old town to enjoy sweet delicacies at a café that was remodeled from a private residence. (Sabo Tomiya)

**Left:** A residence that was formerly a rice store. **Right:** This *udatsu* has a shape that is unusual even for this neighborhood.

A branch of the Itadori River rushes through Kataji Gorge. The natural beauty of the area changes with each season.

**Getting there**
From Tokyo Station, take a JR Tokaido Shinkansen train to Nagoya Station (about 1 hour 40 minutes). From there, take a limited express train to Mino-Ota Station (45 minutes), then a Nagaragawa Railway train to Mino Station (30 minutes).

**For more info**
Tourist Guide to Mino City
Mino City Sightseeing Association
http://www.minokanko.com/ (Japanese-language website)
Kawaminato Todai, the old lighthouse for the river port, which was once the center for local transportation. It still keeps its light glowing.
A branch of the Itadori River
Mino City
http://www.city.mino.gifu.jp/minogami/ (Japanese-language website)
Kaminoshigoto
http://kaminoshigoto.net/ (Japanese-language website)
Kosaka Saké Brewery
http://www.kosakasaketsuru.com/ (Japanese-language website)
Shiyu
http://www.shiyu-mino.jp/ (Japanese-language website)
Sabo Tomiya
http://sabo-tomiya.jimdo.com/ (Japanese-language website)
Tatsumiya Restaurant
http://www.tatsumiya.html (Japanese-language website)
Kawaminato Todai
http://www.minokanko.com/ (Japanese-language website)
Mino-shi
Minako and Sugimoto Wakana.
Minako and Sugimoto Wakana.

**Mino Area Maps**

**Map A**

**Map B**

**Map C**

**Map D**

**Map E**

**Map F**

**Map G**

**Map H**

**Map I**

**Map J**

**Map K**

**Map L**

**Map M**

**Map N**

**Map O**

**Map P**

**Map Q**

**Map R**

**Map S**

**Map T**

**Map U**

**Map V**

**Map W**

**Map X**

**Map Y**

**Map Z**

**Map AA**

**Map BB**

**Map CC**

**Map DD**

**Map EE**

**Map FF**

**Map GG**

**Map HH**

**Map II**

**Map JJ**

**Map KK**

**Map LL**

**Map MM**

**Map NN**

**Map OO**

**Map PP**

**Map QQ**

**Map RR**

**Map SS**

**Map TT**

**Map UU**

**MapVV**

**Map WW**

**Map XX**

**Map YY**

**Map ZZ**

**Map AAA**

**Map BBB**

**Map CCC**

**Map DDD**

**Map EEE**

**Map FFF**

**Map GGG**

**Map HHH**

**Map III**

**Map JJJ**

**Map KKK**

**Map LLL**

**Map MNN**

**Map OOO**

**Map PPP**

**Map QQQ**

**Map RRR**

**Map SSS**

**Map TTT**

**Map UUU**

**Map VVV**

**Map WVV**

**Map XXY**

**Map YYY**

**Map ZZZ**

**Map AAAA**

**Map BBBB**

**Map CCCC**

**Map DDDD**

**Map EEEE**

**Map FFFF**

**Map GGGG**

**Map HHHH**

**Map IIII**

**Map JJJJ**

**Map KKKK**

**Map LLLL**

**Map MMMM**

**Map OOOO**

**Map PPPP**

**Map QQQQ**

**Map RRRR**

**Map SSSS**

**Map TTTT**

**Map UUUU**

**Map VVVV**

**Map WVVV**

**Map XXXX**

**Map YYYY**

**Map ZZZZ**

**Map AAAAA**

**Map BBBA**

**Map CCBB**

**Map DCCC**

**Map DDDD**

**Map EEEE**

**Map FFFF**

**Map GGGG**

**Map HHHH**

**Map IIII**

**Map JJJJ**

**Map KKKK**

**Map LLLL**

**Map MMMM**

**Map OOOO**

**Map PPPP**

**Map QQQQ**

**Map RRRR**

**Map SSSS**

**Map TTTT**

**Map UUUU**

**Map VVVV**

**Map WVVV**

**Map XXYX**

**Map YYYY**

**Map ZZZZ**

**Map AAAA**

**Map BBBB**

**Map CCCC**

**Map DDDD**

**Map EEEE**

**Map FFFF**

**Map GGGG**

**Map HHHH**

**Map IIII**

**Map JJJJ**

**Map KKKK**

**Map LLLL**

**Map MMMM**

**Map OOOO**

**Map PPPP**

**Map QQQQ**

**Map RRRR**

**Map SSSS**

**Map TTTT**

**Map UUUU**

**Map VVVV**

**Map WVVV**

**Map XXXX**

**Map YYYY**

**Map ZZZZ**

http://www.city.mino.gifu.jp/minogami/ (Japanese-language website)
http://kaminoshigoto.net/ (Japanese-language website)
http://www.kuramoto-kosaka.com/ (Japanese-language website)
http://sabo-tomiya.jimdo.com/ (Japanese-language website)
http://www.minokanko.com/ (Japanese-language website)
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**Chochin**

Photos: Kawakami Naomi, Getty Images, PIXTA

Chochin are traditional Japanese lanterns, made by gluing washi paper on a framework of bamboo hoops. They are illuminated by a candle inside. When not in use, they can be folded small by collapsing the hoops upon themselves. They are made to be portable.

The design of toro, a lantern, was adapted around the end of the 16th century to make the bamboo hoop chochin. The typical shape has not changed much since then, although other shapes and sizes were developed later, with the paper displaying a name or family crest, and the lantern being carried by hand or hung from an eave as a kind of sign. Over time, brightly colored chochin came to be used in ceremonies to welcome the gods or the souls of ancestors, and different designs were created for decorating the interiors and exteriors of homes.

Even though electric lights have been common for a long time now, chochin still have a job to perform, as signs for restaurants serving Japanese cuisine and for izakaya eating and drinking establishments, as street decorations for shopping districts, and as extra color for summer festivals. Their role conveying a traditional Japanese touch or creating a special ambience on festive occasions would be hard to overestimate.

As a souvenir, chochin are an obvious choice for many people. Pop-style varieties, perhaps inscribed with a place name or decorated with an ukiyoe image, are almost sure to be sold in tourist spots. Even without a candle inside, they will add a fabulous Japanese touch to interior space.