

## Greetings

I believe that now is the time for people to talk more passionately about "hope", and also the most appropriate time to do so. With difficulties in front of us an "uncertain future" and sudden economic collapse looming, drastic changes can occur from one day to the next. When people stand up against difficulties that seem hopeless, they try to turn on the "light of hope". Who can change this "light" like prayer, to a burning "fire" ?

Barack Obama, whose name means "blessed" and "a burning spear" was born to father from a son of the Luo in Kogelo Village Kenya Africa, which is also called "the village of fighters", and a mother who is from Kansas, a devoted protestant, and related to a former president of the South during the Civil War era. This new president, who is the "star of America's hope", had the courage to say "CHANGE! YES, WE CAN." and also strongly urges in his book, "The Audacity of Hope", challenges toward the times of divisions and a "change" to a new reconciliation. With talk of globalization, people are still puzzled and wandering like a "Refugees of heart" by so many divisions caused by nationalism and greed.

America challenges to shift toward a new world, focusing on environmental improvement, with the new president in the lead, weaving social economy. The huge American fleet "Green New Deal" is leaving port. It is sure that people in the world anticipate a brighter future, from his talk in the presidential inauguration. He said, "...it is getting clearer that in our way of using energy, we are making the enemy strong and threatening our planet." and "we will reverse global warming, which threatens the earth.", he showed his determination toward national recovery and urged the nation not to give up. He also said, "...using solar, wind and earth energy for vehicles and factories.", centring this measure as a pillar of the recovery, and announced that to achieve the goal, people's cooperation is necessary, and pleaded with the people of the world to grasp the challenge. I can say that he is a new leader of the world. He is close to Ms. Wangari Maathai, winner of the Nobel Peace Prize, the leader of the Green Belt Movement, whose slogan is "Greening Africa". She also introduced a Japanese term, "Mottainai" (a sense of regret concerning waste not properly utilized) to the world. On the 7th of January, a few days before the inauguration ceremony, Continental Airlines, Inc. which is a U.S based company, succeeded in test flying a twin engine Boeing 737-800 loaded with bio-fuel extracted from *Jatropha* and an algae in Houston. "The aircraft loaded with bio-fuel in the second engine, quietly took off from the runway, and lifted up into a cloudless blue sky over Texas." exclaimed one excited reporter. We need to walk with him. We are making efforts in recycling and energy conservation in glass production, and would like to serve as a member of the global society. Having the urgent task of realization of a low carbon society plan, to halt global warming, we are heading from the "knowing time" to the "acting time". It is the "carbon gas reduction strategy". I also want step by step to continue this challenge in the factory with an activity of issuing the brochure for the promotional campaign for glass of environmentally friendly material.

"CHANGE! YES, WE CAN."

For an article about culture, I chose glass and its friends, which are measuring invisible time. We often lose sight of our own steps. I hope that we can improve our sight by reconsidering about precious time. In this article, we wrote about the sandglasses of the Age of Geographical Discovery, one of which we find in the "Science Museum" in London. As for the electronic quartz crystal watch, we had a lot of advice and photos from Mr. Masayasu Akisawa of "Seiko Institution of Horology". Moreover, Mr. Minoru Kaneko, a sandglass craftsman, which is rare in Japan, told us about the "bee waist" curve, which is the most important part of a sandglass, and gave us photos of his work. Mr. Masao Hino of "The Nima Sand Museum" also offered a lot of information. We really appreciate the people who helped us. For the celebrity interview, we visited the manager of a family-run winery in Sonoma Valley in California which is an environmentally advanced area of the States. We could write a nice article of introduction for the beautiful Italian celebrity and her Zinfandel winery which has been passed on for three generations since the 1900's. In the article about environment, continuing from the last article, we introduced the biomass compost system and the recycle shops for bulk waste in Karlsruhe and Munich. On the front cover, we offered the scent of the roses, the Queen of flowers, to Venus.

2009, Spring

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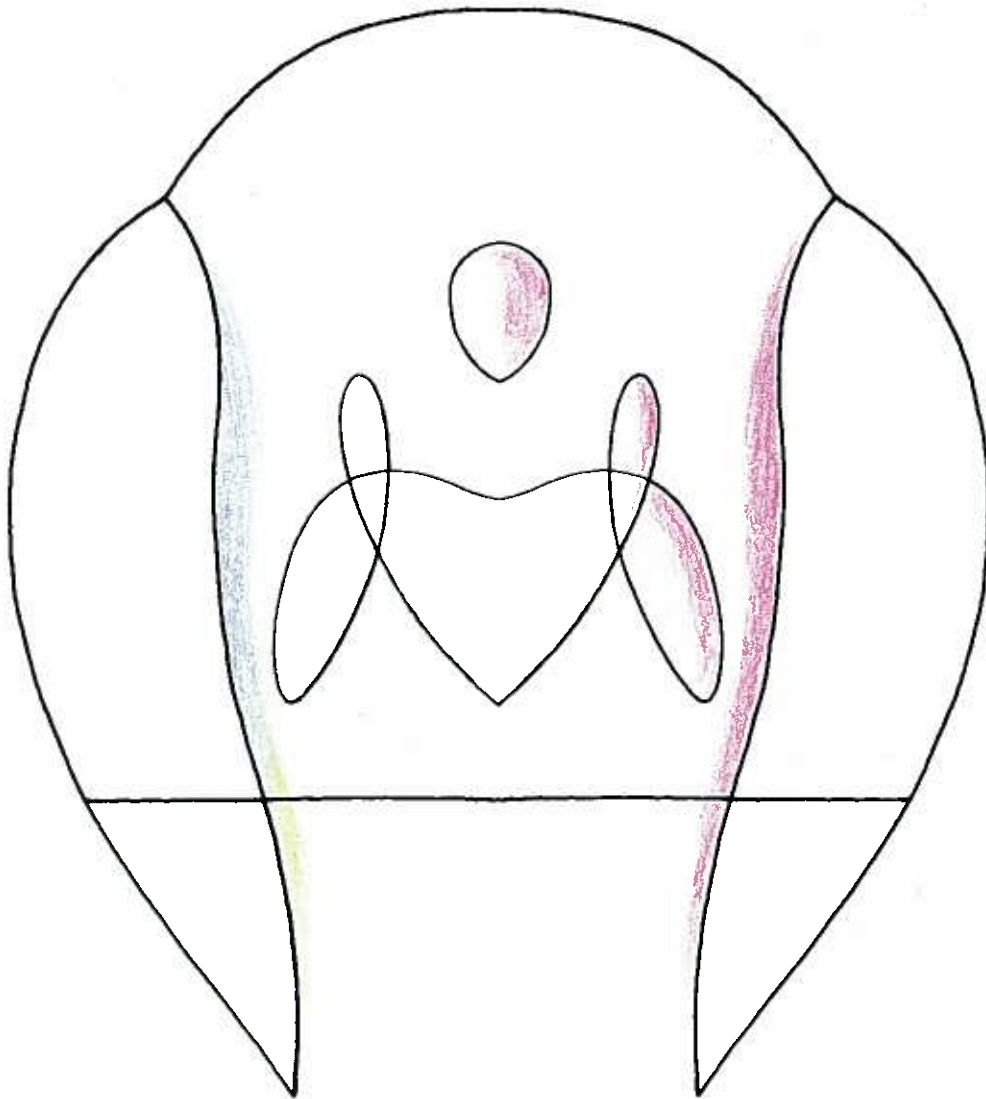
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## Glass, the gift from the earth repeating its rebirth



Everyone, who ever they may, looks at their own face as they look into the mirror, but it is often the case that the people around them are looking at their profile. The three-sided mirror has helped women maintain their physical appearance as the classic "third set of eyes", but even that is beginning to fade away. "The return of the three-sided mirror" That idea will no longer be a far-fetched dream thanks to a mirror with features that are perfect for the new age.

DNA of roses is vivacious and spirited  
Inspired by the Flora,  
The flowers from the birthplace Himalayas,  
Over 70 million years,  
Flying and drifting to North and South,  
Ceaselessly delivering the flowers and the scent.

Damask Rose among all,  
Comes from a family all the way from Persia,  
A descendant of "the scent of the rose".  
Serving once the "Sultan", a Muslim king,  
Blooming in Bulgaria,  
Planted and grown in "the valley of the rose" Kazanlaku village,  
Now, it's become "the scent of the world".  
A village girl picks a basketful of flowers,  
Giving birth to enchanting "scent drop".

The scent of the flowers,  
With over 200,000 rose families of the vivacious and spirited DNA  
Rule over "the world of fragrance".

The Queen reigning over the world of roses is,  
The Empress of Napoleon,  
The owner of the "Malmaison" in Southern France  
The "Queen of roses", "Josephine".  
A court painter Redoute served the Queen is a "servant of roses".  
Remaining 169 leaves of rose portrait "Les Rose",  
Decorate the "Malmaison" as the "rose crest".

Viva! The descendants of roses,  
Viva! The people wearing the crown of rose names,  
Viva! Perfumeries,  
Viva! Gardeners of roses in the world,  
Viva! Rose loving women of the world.



## The "time" that "Glasses" are weaving, is flowing slowly

An hourglass, an angel of time indefinite



**A** Measuring "time" wasn't easy in ancient time. But measuring "seasons", longer time periods, which have an affect on life, for example in agricultural societies, was of necessity and was established to formulate. People relied on the "movements of the stars" to begin with. Afterward, people started to use sundials and clepsydras as tools for measuring a day, but eventually, "hourglasses" were introduced and widely used as a simple tool for measuring time. They became popular because of their weather-imperviousness and portability. The birthplace of the "hourglass" is uncertain, but some say that it could be either Italy or China in 8th Century. The structure, which is merely two glass containers connected together with sand inside, hasn't changed even to the present day.

The "angels of time", that everyone knows have been connecting people's past, present and future, and continuously weaving "pieces of changing time" with the adroit combination of "glass" and "sand". "Sand glass (Sablier)", therefore, is popular aliases of "Hourglass" worldwide.

**T**he fleet of five ships with a combined crew of 237 with its flagship Trinidad, left the Sevilla in Spain with a gun salute on Monday morning the 10th of August 1519. Fernão de Magalhães (Ferdinand Magellan born in Portugal) was from a "hidalgo" (nobility). He got permission for the west-east voyage of exploration from the king of Spain (but not approval from the Portuguese government), to sail around the New World which had recently been discovered and then crossing the Pacific Ocean, and finally on to the Moluccas.

At that time, there were some great historical discoveries, such as the New World by Columbus, a sea route to India by Vasco Da Gama, a sea route to the New World, and the Pacific Ocean by Balboa. In those days, "sandglasses" were as necessary for a voyage as were compasses, azimuth measuring tools, cannons, guns, swords, food and water. Magellan prepared eighteen sandglasses and used them on his voyages. On voyages, some of the crew couldn't endure drowsiness or the cold, in which cases they turned the sandglasses before the sand finished falling. After a warning to those guilty the phrase "eating sand" was coined.

At that time the Moluccas, which are located in South East Asia, was known for its spices. A strong Muslim influence existed, but the battle for trading rights with Moluccas had been especially intense between Portugal and Spain, which were both developing their navy.

The party of Magellan believed that the new sea route promised a safe voyage to Moluccas. "Sandglasses", which were necessary in the "Age of Geographical Discovery", were still crude, but good enough for "ticking off" time each 30 seconds, 30 minutes, 1 hour and 4 hours.

**5**00 years later, in the 21st Century, the development of timing tools has been significant, the "quartz clocks", using "crystal" oscillator, whose frequency is 32,768 times a second, replaced the "sandglass" and "spring clock". The "time measurement tools" in

modern times, have only a few seconds error in a month. However, "sandglasses" subsist and play active roles. They are not a necessary item as they used to be in the Age of Geographical Discovery, but, they are used on computers as waiting symbols, as well as in kitchens for coffee and tea lovers, and in love stories for heroes and heroines they are serving as guardians of "time". Additionally, the "skill" and the "tradition" of sandglass making are inherited and applied. Modern day "sandglass" makers mainly give attention to making the "bee waist", which is the connecting tube between the upper and lower chambers. This gauge decides the "accuracy" and the "beauty" of the product.



**B**ut, some Modern sandglasses are huge and accurate. The "Nima Sand Museum" in Nima, Shimane Prefecture, Japan was built in 1990, in the glassy pyramid shaped building, a computer controls a huge 1-year sandglass, which is made from a 5.2 meter hand-blown glass container in height. And 1,000kg (640 billion grains) of sand, is quietly measuring time.

This is the result of a three year-struggle with sand and glass by Japanese and German craftsman. Choosing sand, washing it and sifting, to obtain fine and strong sand particles called "singing sand", which seems to create "embodiment of time". The assignment of the German



glass makers was to give life to the huge glass container, up to an artistic level. As with regular sandglasses, the design of the "bee waist" was the "control gate of the time flow", and to finish the internal diameter (0.81mm) accurately, took two years with much effort, including finishing of the artistic glass container.

**N**ow we want to go back to the Age of Geographical Discovery. One exploration ship arrived at Sevilla on Saturday 6th September 1522. It was the Victoria, which was one of the fleet that left the port with the gun salute. One of them defected; three consort ships were lost as well as Admiral Magellan himself so only the Victoria remained. Strangely, only eighteen crew survived the same number as the "sandglasses", which Magellan took on the voyage. It was a voyage of great suffering. The ship was laden full of "cloves", which had been traded and valued the same as "gold" at that time. After that, an Italian voyage recorder, Pigafetta, who was one of the survivors, published "Relazione del Primo Viaggio Intorno Al Mondo (Report on the First Voyage Around The World)". By this, Magellan's achievement of the voyage was confirmed. The three-year twenty-seven-day voyage only had a "one day" time error, despite crossing date lines, a concept that didn't exist at the time.

"Cloves" have been one of the prominent spices since ancient times. Because of their strong flavour, they are called "bai li xiang" in Chinese, which means "smelling to a hundred miles". They have been preserved in the "Shoso-in", which is an Imperial Treasury built in the eighth century in Japan, as well as working as a spice for meat, and germicide in Chinese medicine today.

A---A sandglass in the Age of Geographical Discovery. (The Science Museum in London)  
B---Producing a "Bee waist"  
C---1-year sandglass (The Nima Sand Museum)

## A human life reflected by a three-sided mirror

"I prefer simple make-up. The key of grooming is a mirror" A woman in San Francisco (Age 51).  
This time, I visited a manager of a family-run winery in Sonoma Valley which is famous for California wine.

The movie "Vertigo", directed by Hitchcock was shot in San Francisco. A former detective played by James Stewart, suffers from acrophobia. He chases a friend's wife played by Kim Novak, and in doing so he draws the audience into the city of San Francisco.

To get to the Mission Dolores, the oldest and most beautiful Spanish church in San Francisco, which appeared in the movie, I travelled by BART (Bay Area Rapid Transit), trains using a computer controlled traffic system from selling and collecting tickets to traffic control management, built in 1974. When I entered the station, my eye caught the sign "RECYCLE: BE A GLASS ACT!" (See the Photo).



This sign reflects the attitude of San Francisco toward the environment. Californians encourage the drinking of tap water instead of bottled water, and also offer organic fertilizer made from composted food scraps to wineries, showing their eagerness to help the environment. This time, I visited a manager of a family-run winery in Sonoma Valley which is famous for California wine.

The lady who opened the door to welcome me was, a 51-year-old pretty Italian lady with big eyes, brown hair, and a beautiful smile. My first impression was of a pleasant naturalness. She was doing paper work at home. Her hobby is Yoga, and she takes lessons 4 times a week. She has two children: the daughter is in high school and the son is in sixth grade. She told me that she likes to take care of others, so she was elected as the head of the PTA.

The style of their house is 1890's Victorian with high ceilings and curved corners. It is over 100 years old house decorated with sharp patterns, and the lintels are also decorated. All pieces of furniture are antique.

They have been living in the house for 14 years. The bathroom is at the top of the stairs.

The red carpet on the spiral staircase matches the Victorian style. Mirrors are in front of the sink and on the opposite wall. The mirror in front of the sink is original, but, the other was added later to check the back of the hair. It's a good idea. She was saying, "I like mirrors, because, they make rooms bigger. I check myself full-length with the mirror on the wardrobe before going out. I prefer simple make-up.

I used to wear a lot of the brand-name items, but now, I am buying clothes in department stores down town", and then she brought the red wine, "Elaine Maria" 2002. The label read, "Since our family moved from Italy in the beginning of the 1900's, for three generations, we have been growing Zinfandel grapes carefully, and making elegant and deep flavoured home-made wine on a small scale." Zinfandel grapes are known as California's unique and mysterious grapes, suited to the climate there, and having a good reputation for their rich and unique fruity taste.

Last of all, I asked about Japan, she answered that Japanese women are fashionable, and clean. And also Japan is a technologically advanced country, and "viewed favourably by others", she said with a smile on her face. Such a wonderful lady is living in San Francisco, the city of "Vertigo".



### Column Quartz - An architect, who changed "time" -



At the Beijing Olympics last year, in the women's 200 meter individual swimming medley semifinals, athletes from Japan and Hungary finished in the same time of 2mins 12 sec. 18, and had to re-race. In the Ancient Olympic Games, athletes were judged in "relative time", but the modern day Olympic Games requires "absolute precision timing" up to the one, one hundredth of a second. This highly accurate "time measuring" is made possible by quartz technology. In 1880 Pierre Curie, who received the Nobel Prize in Physics with Marie Curie, discovered that by energizing quartz crystal, it generates highly accurate vibrations. In 1969, using this principle, a Japanese clock maker commercialized the first quartz (crystal oscillation type) watch, and advertised it as "only 5 second time loss a month". Even the New York Times reported "Japan achieves victory with its high accuracy quartz watches". It was the moment that "Quartz watch", a new tool for measuring "Time" started "electronic ticking".



Natural quartz

Reference---The first quartz watch was 150,000 yen when the popular car, the Corolla was 820,000 yen in 1969.



# “The city opened a recycle shop! The most liveable city in the world is friendly to large waste.”

The Garbage Disposal Situation in Environmentally-advanced nation, Germany (2)

President Obama announced the “Green New Deal”, which will create new generation industries in new energy and environmental fields, such as wind power, solar power and so on. At present, one of the most advanced countries in this field is Germany. This is because people in Germany are environmentally conscious.

One example is their waste treatment methods in daily life. In the last issue, we introduced recycle waste treatment in Freiburg, and DSD (Duales System Deutschland GmbH) in Augsburg, in this issue, we would like to introduce the actual conditions in Karlsruhe and Munich, which are located in Southern Germany as well.

## A case of Karlsruhe : Utilization of food scraps compost

Each German family has three waste boxes for recycling, food scraps and general waste. For aesthetic consideration, these are installed in inconspicuous places outside. Food scraps collected by Karlsruhe government, pass through a high status housing area far away from the city, and are taken to a fermentation treatment plant on a mountain. The site was a food scrap incineration ash landfill space, at present, the place is pasture for sheep, and there are no houses within 1 km. The fermentation plant is run by the city, and the waste brought in will be changed to compost. The process is, after collection vehicles pour scraps into a collection pool, its movable pool bottom takes the scraps to the machinery to crush them, then, mix them with water, and remove floating plastic object, gravel, metal, and glass as sediment. After that, the scraps are poured into a methane fermentation tank for treatment, eventually, becoming compost. The compost is given to the locals, or used as surface soil for filling, but, in the future, after obtaining approval of the city council, they would like to sell it to the general public.



## A case of Munich : Bulk waste treatment and sales

Munich is called as the most livable big city in the world. Here also, waste treatment has been done thoroughly. The management cost of the city waste treatment office has been covered by waste treatment charges, therefore, in the case that the office makes a profit, the charge would be lowered, in the case of losing money, the charge would be increased.

There are 1300 workers, and all of them are community workers. One of the office characteristics is that they sell bulk waste. There are twelve bulk waste yards in the city. Eight years ago, they started taking the sellable bulk waste from there to the hall in the south of the city, which was the former office, and displaying and selling it. The opening hours are 10:30-12:30, and 15:00-18:00 on weekdays, and 9:00-14:00 on Saturday, 300-400 people a day visit on weekdays, and around 1000 people on Saturday. There are seven workers and the young manager decides the prices. Some prices are; a nice sofa for 40 EUR. Generally there are many reasonable items which cost 4-10 EUR. They only leave brief advertisements in the city hall without any description of items they sell, so that customers enjoy a sense of treasure hunting. The number of visitors is increasing year by year. It is a wonderful utilization of resources.



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