

Studies on the Developmental Stages of Japanese Printing Arts as a Unique School of Arts

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Abstract: The Japanese printing arts is considered to be one of the most important arts that helped the spread of printing in the whole, because of the secrets and mysteries contained in these arts adopted by Japanese artist in the printing process, which was passing through several stages and very complex considered Japanese artist is not considered the printing process as usual typographical process, but the process is sacred process, because and so what was the expe Buddhist monks from printing operations, which were restricted to them from the eleventh century to the beginning of the sixteenth century, this is in addition to completion of four different people who the artist and character and cutter and publisher, which make these valuable printing arts technically different from European publications, which relied on individual performance the beginning of the artist from the idea of working to complete the printing processes and production of final versions. It is worth mentioning that, the Japanese printing arts were dependent on pillars of spiritual, philosophical and private subjects sunken in the local through in distinct instruments and used them to handmade securities called washi and it depends on natural water printing materials and methods of scrubs handicrafts and artistic influences of different and characterized by complexity and ambiguity, which ceased to exist by factors of time and disappearance from the artists, this research tried to addresses these printing arts in excellence and take advantage of different genres and its secrets and try to develop it to be suitable with the requirements of modern printing arts. Yasser mounir gaber.

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Key words: Japanese-Printing arts-Ukiyo-e-Ton-e-Beni-e-Benizuri-e- Beni-e- Urushi-e-Kapa Zuni –e- Early printing- Hand coloring- Mechanical coloring- Technical refinement.

Introduction:

The technical publications depends on a variety of different methods specially Japanese publications, which was marked from the other in the diversity of these methods, especially the style of printing, prominent stereotypes of wood and covered by the special Japanese artist -style in which the artist expressed substantive themes focused on the registration aspects of daily life of the citizens of Japan and these publications implemented wooden blocks made of wild cherry wood, which experted in the Buddhists artists deal with this kind of publications and kept secrets from the eleventh century to the sixteenth century and express the printing process with much of the sacred and attention, the Japanese artist attempted to stay in the service of Buddhism and its teachings in at least fifteen years until his license to practice and learn its secrets printing, we have to imagine the accuracy in the completion and implementation of these publications which is performed by four different people, and although this Japanese technical publications artistic unity and shown with completed values and distinctive expressive styles.

Japanese artist has keen in the printing to prepare all the materials of technical hand publications derived from the nature around him in order to be his publications is a spiritual link and sensory with the

Japanese sacred land and a confirmation to his own philosophy in preparing these publications even print templates and technical papers which is made from herbs and fibers of the plant called jampi, water inks made of stone and hand-made tools used to dig alongside with western topics as myths and kabuki theater prints, all this make Japanese prints a particularly important source of print artists throughout the ages.

Aim of the work:

This study has aimed to discover the secrets of these manual publications and tried to take the advantages of them in our modern publications and re-discovery of these instruments and employed them in the field of technical printing, which missed a lot of the diversity of artistic styles.

Materials and Methods:

This search has tried to describe Japanese printing arts in a deep study and attention paid to these publications and to identify methods of spread within Japan, as well as analysis of the direct causes which called for the spread of Japanese publications, especially religious publications that carry the teachings of Buddhism and especially used to the style of printing templates of wood and rely on historical method in tracing the history of this publications.

This research was keen to use the analytical method to benefit from the analysis of the experiences

of Japanese artists printing with the water handmade papers and research also has depended on a descriptive method in describing Japanese themes and traditional printing methods and diverse influences.

This research has tried to link between the historical aspects of the Japanese printing arts and analytical aspects in the most important of which was marked by excitement and mystery that made their publications as a unique school regarding artists performance and valuable themes.



P.1: Waxy seal model represents a symbol of one of the provinces of Japan

About a century and half before printing writing texts in Japan, nearly in 770 A, Japan was influenced significantly with China in all fields of political, cultural and religious aspects, Alnejonajy is the official history of Japan has indicated that printing wooden templates, used in Japan in the first place in the print on Silk and that in the period between 734-740 AD were found in the city of Nara on a number of pieces of silk printed with wooden templates.

In the regions of Hisen and Higo (Southern the Japanese island of Kyushu) rolls of paper printed with templates of wood was found and the history of printing the registered in the year of twelfth since the age of Emperor Tempyo corresponding to the year 740 AD and contains forms of printed images of the god called Voodoo, which is a clear example of the interaction of civilizations in that time where letters of words and Chinese printing method, and the method of writing is an engineering, it is the geometric language, a special priests Alboven in addition to, it is of Japanese made as a roll of Diamond called Diamond Sutra.

Meanwhile the method of printing with wooden templates is attributable to the sixth century, with the advent of Buddhism and its spread and then the art of digging on wood turn from China to Japan in the eighth century and different compositions has

Results and Discussion:

The beginning of the emergence of print in Japan was in the form of wax and wooden seals, used in the printing on silk and paper and those seals moved from China to Japan, especially during the connection of Japan with China, during the reign of Tang Dynasty 618 AD and then Japan seals made to the provinces those carrying a logo or symbol of these Provinces (P. 1).

indicated to be the oldest examples of this art is the divine manuscripts, printed in a manner of wooden templates, which is called Hagakumanto Dhareni, it has been allocated to the temples of the top ten in the 770 AD year.

These Chinese publications were devoid of tenderness, which are illustrative copies of literary Buddhism manuscripts, which was known as Amosako Ashida.

The main objective of printing in this time was a Buddhist service where they were used in the preparation of printing copies of the paintings and the above-mentioned religious texts on the walls of Buddhist places of worship in order to spread the teachings of Buddhism among the general public and a private class or poor or who live in places far from places of worship.

With the spread and prosperity of this method, it becomes a tool to clarify the literature (text), and people's lives fees, because the old subjects were free of any paper or fun and had lost luster reality, it lost so interesting people with it, as those people interested in pictures of Buddhists saints and Chinese philosophers and animals, which lasted in meditation and there are flowers that symbolized to innocence and purity.

New layers of people got up and occupied a pride place in Japanese society and missed in the art

record of the views of their lives, resorted new artists to the implementation of their actions through the media drilling to achieve their goal of producing copies of art, using multiple wooden templates, which helped to spread the art of printing widespread. It can be said that the art of printing in wood has been used in Japan for different purposes of arts, more than its usage in spreading religious teachings alone, since the beginning of the seventeenth century.

At the beginning of the era of the capital (Edo) In 1603 a popular literature got up in the business community and crashed for the first time in the history of Japan shackles of religious and some books began to emerge, such as folk tales and songs and sexual books and these books included several sheets of illustrations, which was carried out by unknown specializes, for the purpose of distribution on a large scale.

After an ominous fire in 1657 AD, which destroyed the Japanese city: Aidoo, which was the capital in this period, the re-formation of the city with the building of places of entertainment and pleasure in Japan occurred Alaoshiora.

Rebuilding was the cause of the wealthiest of sellers and lifting to increase their influence in the community and they are the first buyers of artwork printed, after their stability and security of the scourge of internal wars they have begun in the construction of their homes with large and big sizes and they wish in making decorated curtain with the art of their own that reflect their lives and their interest such as famous beautiful pictures of girls or known dancers or representatives of the theater of kabuki. These traders were able to afford what they want to implement it.

Some of the scribal decoration artists who specialize in printing arts of trader's layer are the artist (Aaoisamatanaby), who was a painter court to the family (Fukui) it is one of the technical business families, the works of this artist are multiple decorated motifs in different colors. With the increase in business deals and its prosperity in the city (Aidoo) and the change in the form of life and sellers and makers and the formation of this rapidly escalating new layer and their direction to places of entertainment from Alaoshiora and kabuki, cafes and public toilets has led to the emergence of Ukiyo-e schools, that depicting different works of art which recorded this new life in Japan.

The concept of Ukiyo-e originally a Buddhist concept in the origin and refers to a particular kind of deceptive life, cross-secular life and also carries another meaning, a sad world, this change was a result of the chaotic life of a series of civil wars.

With the continued sedentary life and during the period of Momoaama (1568 -1600 AD) the economic life of Japan's population was improved and their

admiration and interest seemed in images (Ukiyo-e) and these images began to include dancer images that was present in the early eighteenth century and nineteenth centuries and showing modern life in all its aspects and landmarks were these pictures and notes and books printed in a way of wooden templates and most applications are pictures of Alyoshiuara which were more common images to the art, which was printed with templates wooden that meet the needs of buyers of these images and distributed them widely, some considered them as souvenir images for visitors who visit these places to afford the title of the cafe and dancers and artists forms and also as a form of advertising, and also representatives of the images of kabuki theater and multiple posters and advertisements.

The history of printing began with wooden templates prints of the group of artists called them eshi yamato (or Japanese typographical style) who appeared in the era of Heian (794-1185 AD) and specifically in 797 AD, they were the pioneers of printing templates of wood and who have established the characteristics of local Japanese to print (Ukiyo-e), which was the second phase of this method, which was evidenced by the impact of Western art and the tendency towards the realism and then the final stage, that reflects the decline in the art (Ukiyo-e), this stage will be described later in detail.

The black color was the dominant color in the phase of the pioneers and the most famous artists in this stage is the artist Hahikawa Mureanubo, it is worth mentioning that in the era of Hean, one of the most fertile eras of Japanese art, the direction was strongly directed towards elimination of Chinese traditions and repeated themes, which was based on ancient Chinese mythology and fantasy landscapes of high coarse mountains and deep valleys and also images of Buddhist clergy.

The early pioneers of Japanese are looking for different and new themes such as quietly rolling hills and various plants, birds, animals, insects or images of everyday life and traditional Japanese forests and also pay attention to poetry topics, which was of particular importance, and were printed on silk or paper, which was to take a different form from the rest of threads where the text and image were placed in a single sheet and write sometimes in the form of chapters are issued on a regular basis.

The Yamato-e artist was one of the most important artists who were interested in Hand scrolls print and in particular depicting the Tale of Genji, a famous love story wrote by a woman who was in a footnote of the empress and were printed in black and called Sumizuri-e. These drilled paintings were hand printed in the first up until the year 1660, when Hahikawa Mureanubo, the photographer of finishes on

fabrics in the city of Kyoto first Elechihat paintings made it the first books to be printed in an explanation of its article.

Thereafter it is used to be in the printing of paintings and sell them to people as sold picture cards we have today. At around in 1687 Toro Kojo Moto, a photographer of landscapes in theaters of Osaka moved to the city of Edo for the teaching in Ukiyo-e school, which was confined in the capital alone how they can benefit from the technical and printing data methods of printed business representatives scenes of



P.2: Model of typographical printed work with TON-E style

Afterwards, another types of printing inks known as Beni-e was discovered (Photos with crimson color), this color used primarily instead of yellowish brown (P.4).

In 1720 AD, Photos of Urushi-e was discovered (which is printed by Allkr) (P. 5).

This way was a resembling to the Ton-e with a slight difference in the technique, where the artist added colors less than used in Ton-e with the addition of Japanese Allkr to important areas of pictures, but its use was rare in black ink replacement mixed with the thick glue to get the same effect.

In 1765 AD, the artist (Suzuki Harnopu) commissioned to double the production of technical pages of these annual calendars as advised by the poet Kikozn Kqosen who wanted to use these prints as exchanged gifts among members of the Technical Ocean to which he was belonged.

But it was soon that aroused public's imagination once published and won mass reputable and have been

that era, and then the new artists of the theater moved to the pistes in Alaoshiora supplementing with their arts a tinge of immortality on many beauty obsolescent housewives.

At the beginning of the year 1700 AD artists began using other colors such as orange, red and named Ton-e, due to frequent use of a paste of the red color (P.2).

During this stage, some additional colors were added such as light green, yellow, blue, crimson reddened (P.3).



P.3: Model of typographical work after the addition of scarlet color

used with maximum skill with printers for richer colors and the use of the best raw materials and available colors of luxury and cherry wood with high quality, and paper that is characterized by gravity to resist repeated colors this type of editions called Nishiki-e.

The solid paper of Alehoshu were used, which replaced papers of Alsanka or diamonds, which was used by some of the printers due to the cheap price, the Nishiki-e, in fact, is the final shape of the ukiyo-e, since attention began wooden printing templates and identified improvements occurred ensuing final depending on the different in raw materials or the use of small and few machines. Popular publications of the Nishiki have led to intense competition between publishers, raising the skill level of printers to a new level, so this time considered the Golden Age of art Ukiyo-e.



P.4: Model of typographical printed work with Beni-e style



P.5: Model of typographical printed work, printed by Allkr

Iotammaru and Kjonaja, have worked in this field during this period, we can not mention others among many professors made the high tide of this art.

It was not the original picture that needed to print by an artist of this method as a color image, but they just draw the pace-making in order to affix above the surface of the wood, it is used during this period some new methods for the effects of stereoscopic and enamel printed to obtain an effect of a silver and the Gold in the Edition, and the use of gold foil and copper powder and the like.

The Professional Edition arrived for a high degree of skill and quality and complexity of field of wood print and produced the printing editions reached more than 200 copies.

In the last decade of the eighteenth century and during the golden age (for Ukiyo-e) many artists such as (Iotammaru, Kjonaja, Hokusai and Hiroshaj) accomplished many works of Japanese printing art and they were interested in the natural scenery in particular and the beautiful Japanese sites in the form of a series of printed artwork very carefully luxurious colors and expensive.

During the first years of the period of Meiji and specifically from the beginning of 1848, Ukiyo - e works began in landing to the so-called era of decay and the artwork lacked to the charm and elegance such as acts of the generation prior to the kings of technical printing and became a superficial artistic expressions and exaggerated fixtures, on the other hand, was the cause of decline is the deficit of means of hand printing to meet the needs of distribution, resulting in

to the emergence of new groups marched along the lines of skilled artists, including ex-group Sozuko Hanga and Shin Hanga, who followed the same old traditional ways in themes and artistic spirit.

Here we must point out to the technical aspects of the print production process of the Woodblock were a result of a long history of experimentation and gradual improvement, which was divided into 4 stages of history: -

1- Early Printing Stage:-

A period in which the idea of wooden printing templates was emerged, which was sourced from China, in the eighth century the idea of printing templates appeared to produce the religious Buddhism works, which include images and texts together and are likely to Japanese Buddhist monks are the ones who have made this technique in the period between the eleventh century and the sixteenth century till the evolution of this invention and it is spread despite the high cost and lack of educated population.

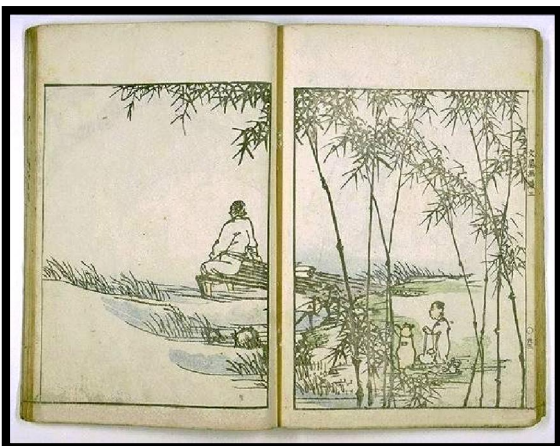
2 -Hand Coloring Stage: -

It is the stage that has been used for coloring books illustrations with hand-colored ways and the black color made from soot bulbs and the red color of sulfur and yellow color of malachite green were called orange and green books (P. 6) and the technique devised by the artists for the manufacture of those Books are the main entrance to artists of Ukiyo - e and which added to other colors with chemical materials these give stability and consistently for a longer period These were the first attempts of Ukiyo - e artists,

which called it Urushi-e or paint pictures that Allkr was used in it in the red and yellow colors and the golden color of gold powder to produce wonderful hand-colored prints. This technique has continued since 1660 until the year 1750.

3-Mechanical Coloring Stage: -

At this stage, Cojan commissioned some artists to meet the needs of new classes of Japanese society in the search for alternative ways of coloring handwork this was a major step in the available evolution for editions (Ukiyo - e), a multiple wooden templates method for each color. The Okoiyomura artist-1646 1764 and the Nichbmra Hininaja artist (1697 - 1756) has an important role in the preparation of preliminary experiments of this method, which prepared the editions of three or four blocks, a red, green, blue and black in the separate templates and not colored manually as it was before it.



P.6: A model of one of the pages of Green Orange book

4-Technical Purity Stage (Technical Refinement Stage):-

Is the stage of the second half of the eighteenth century and which has evolved for the better printing methods, which was supervised by experts and poets who produced special editions have a value as high as Surimono and Goyomi-e, these editions and renovations technique followed by the artists in the industry have raised and provided for artists of Ukiyo - e a wider welcome to use the types of luxury cherry wood and fixed colors and multiple high-value and are made from the finest natural materials and also a variety of special papers. This was the stage in which 10 templates ten different colors was used.

This technique has helped on the use of different types of prints such as Karazuri and Kirazuri and Shomenzuri and also helped many of the artists on the creativity of works of such brilliant arts e.g., Iotammarua, Hokusai, Hiroshaj and Yoshitoshy, these lead to innovate astonishing art form contributed to the world of Professional Edition.

It is worth mentioning that, the traditional Japanese wooden printing templates began to emerge and spread in the mid-seventeenth century after a century of civil and feudal wars, to reach to a period where it can enjoy peace and prosperity.

After the arrival of the middle class to have a big economic status and search for their own art.

It should be noted that, the production of Japanese traditions of Woodblock editions was a complex process and involves many steps, which relies on a system of collective implementation (Team Work) so that they carry out each stage of by a specialized one and qualified in his performance and often relied on woodblock printing on four different people, the publisher, the artist, the cutter and the character.

1- The Publisher:-

The relationship between the artist and the publisher is semi-permanent relationship, where the publisher was throw a topic on the artist or contracting with him to produce a series of works issued in the form of a regular and systematic, and the publisher has been contracted with the artist and pay him the submitted amount by each design, the publisher's imposition could have been a particular topic on the artist with the demand of Commercial Market, in addition; he was working on the artist's fame, in respect to the sale of publications, he worked either as a wholesaler or a government official.

2- The Artist:-

The artist is the processing of his artistic printing work idea in the form of a diagram or a preparatory and called it as Gako in Japanese on semitransparent paper and is very thin and the forces of Mino or (Gami) and traces the general steps of the diagram in black color and called this stage Hanshita, then this Sketch displays the censors for their approval to print a normally be a summary of the work of black-and-white and next to the proposed colors for printing.

3- The cutter (The Block Carvers):-

The rig is one of the group carried out the works of print art that affect the subject to be printed was Digger takes 10 years to become well digger and overall, it was artist in itself skillful rigs, an example of this, the Hokusai artist, who spent several years to teach cutting in wood.

When a driller receives the first drawing (Hanshita), he was expanded and refined it on a block of white cherry wood, a choosen wood very carefully and shine well for typographical copies with uneven edges, then Digger paste it in a mirrored shape by adhesive paste made of rice paste after commuting then it processes with preparatory drawing with oil to become more transparent.

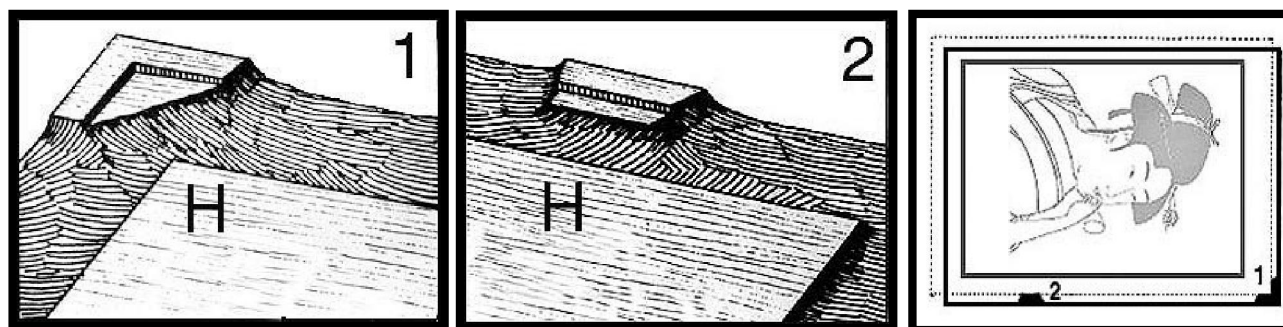
Then he digging unwanted areas in the print with a sharp knife and chisels with different shapes and

sizes, and knives were used for complex areas in the design and concave chisels and squared for large areas. Thereafter the rig has finished drilling the main area of the regions that contain black lines and then complete the rest of the spaces which contain a variety of other colors.

Then the rig print a test version in a red color for each template and is sent back to the artist, who is sign it or modified it after the stability, it sent back to the qualified rig who make the required adjustments and then giving it to assistant drillers to guide them to print the rest of the other blocs.

It is worth mentioning that, some of the works of art contained 5 or 10 different colors and it seems that

the medium-sized space businesses was cut in the range of three days, while large areas of complex detail was digging in the long-standing two weeks only (areas were complex burrow of digger witty and called Atama bori or head of the sculptors, while the easy large areas easy was given to beginners digger and called Bori-e small driller. It is worth mentioning that, the process of matching color scheme for these colors were carried through the registration marks was called Kent in Japanese, which is a letter L Aodaaly by the bloc Home called Kagi in Japanese language and another sign was put on the service longitudinally, the other is linear and called Hikitsuke in Japanese (P. 7).



P.7: Model shows signs of congruence in the Japanese printing arts in a manner known as Kent.

Here must refer to the importance of these markers to produce a match in the color artwork, which helped to characterize the Japanese Professional Edition.

4- The Character -The Printer:-

The fourth and final group in this fantastic team consisting of the character, which is characterized by skill in the formation of mineral and vegetable inks and applied it, especially in getting the shading and Bokashi gradient in Japanese and which is characterized by Japanese artwork, these pigments are one of the important steps in the printing, which had to be of that nature roles can performed with sufficient quality.

Then puts these pigments in a casserole pot and develops drops of water (most Japanese printing inks with water media), which will be calculated very accurately to produce editions with softly certain degree of melt are known, then it is tested firstly on Kozo paper dampened somewhat to get ready for use . Then the character of the distribution of ink on the block timber through especial brushes made of horse or lion hairs and then starch rice was added to the bodies of wood even stick their colors better and given deeper special chromatically and is developing a handmade paper on the block and then push or scrubs from behind with severe Cyrenaica and in a circular motion while maintaining the percentage of moisture

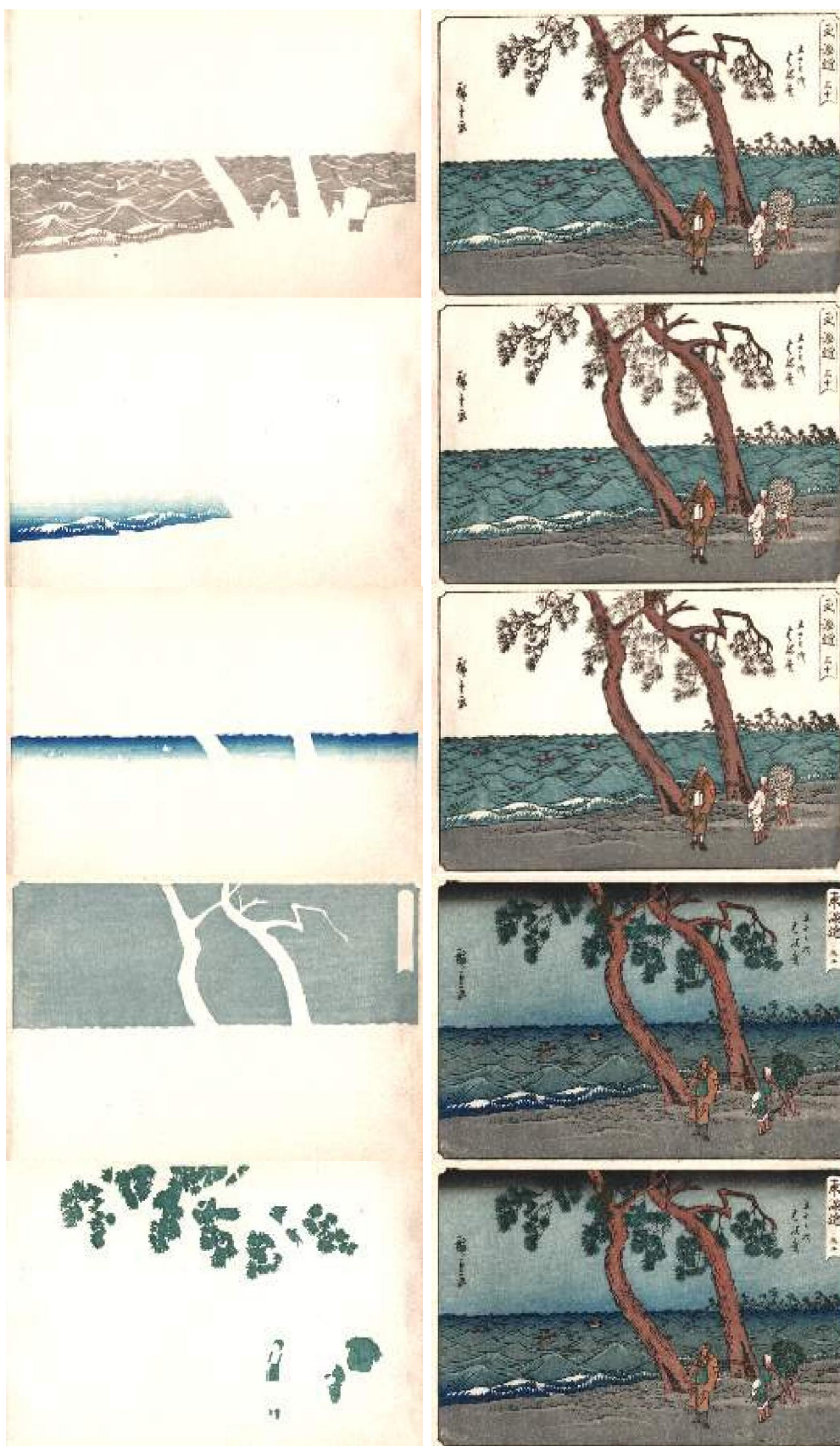
in the workplace and in the wet paper to ensure that colors match.

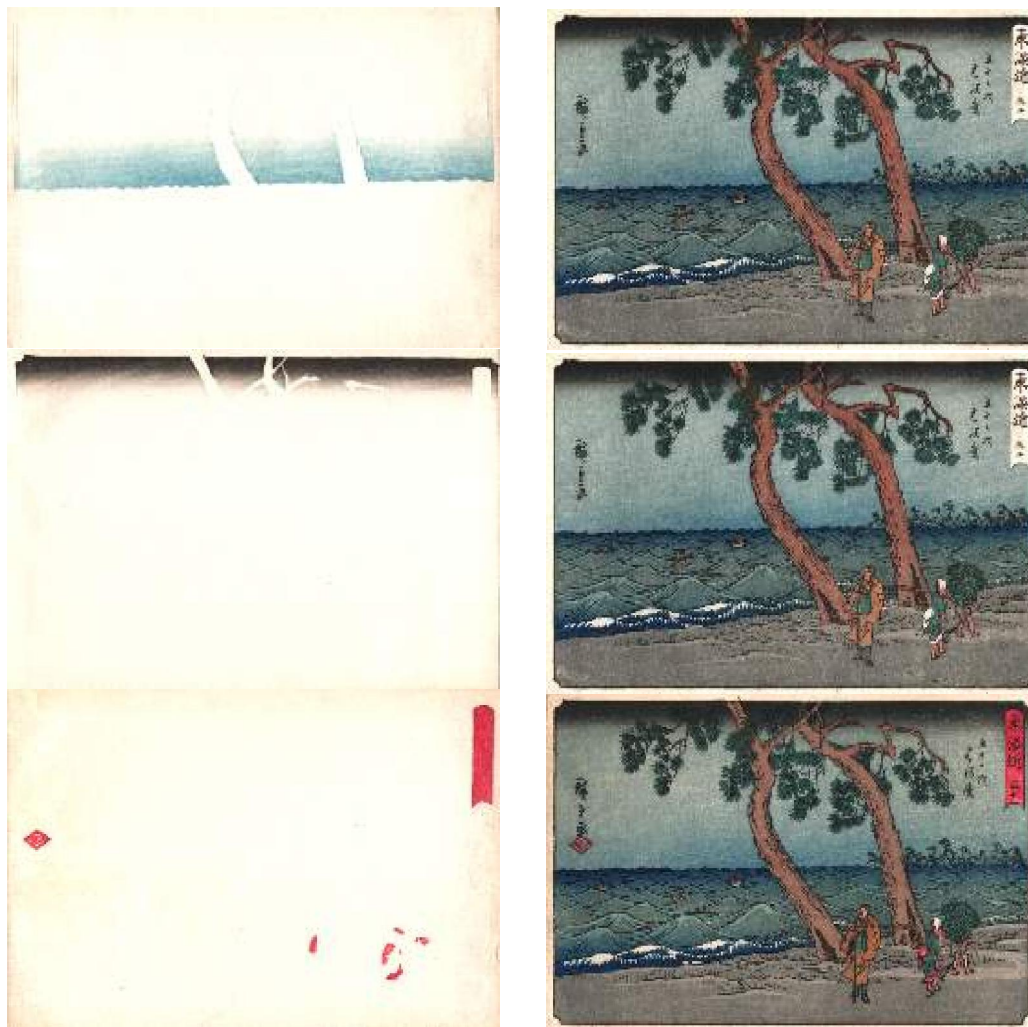
Then the character scrubs continuously through a tool made of bamboo fiber and take the form of straight and large circular called Baren until the adhesion of color paper completely and then removed and leaves dry up and then repeat this work with each color individually taking into consideration the use of light colors first then to staging the most darker colors until it reaches to the end of the technical work after the separation of each color separately, even if the template contains a single touch, some of the work was up to more than 10 colors, more than 10 wooden molds and the process of color gradient (Shading) produced with different styles (P.8):

- 1 - The wood bloc was clear after inking it by a piece of cloth or a cotton pad.
- 2 - The wooden block was clear with a damp cloth before inking.
- 3 - Use the brush with varying color density for a variety of different densities per color.

It is noticeable that, by repeating the shaded printing processes varies in the amount and form of the gradient, can be seen easily in the Japanese works of art, as it is rare to be repeated in the same gradient specifications in each work of art.







P.8: Model shows the methods of printing using color gradient in Japanese Publications

نموذج يوضح الخطوات الطباعة لأسلوب التدرج اللوني في المطبوعات اليابانية

And what looks like the average number of editions of works of art was up to 200 copies or more, especially in the business that contain a smooth regular period of popular business, which was printed over and over again to meet the needs of the growing demand in this case was wooden templates perish from the large print is given uneven colors character who is shall re-produced and rugged again and again.

At other times, the main mass was inked more than once as a partial inking, especially in areas that are intended to shading and gradient coloring this method was unacceptable and certified by Cojan editions which depends on the deployment, promotion and determines the number of blocks that are used for editions and can notice it easily in many editions, especially in areas where the sky or water in the middle or the edge of the water, which is the light blue color, generally we will find a difference in the dark

blue water, because this area was printed in full color, dark blue color increased and subsequently part printed in dark blue, and here we note the complexity in printing color, for example in the print color of the sky theme and be blue or light gray is printed twice after the initial printing the first time, then add a darker blue color on the upper edges to make the color gradient.

With the end of the technical work, the technical printer goes to nature of the artist, once again to the signing of it as it was some of the artists who studied at the hands of this artist and earned him the status of a professional artist assigning with his signature as an appreciation of him.

For example:

Tuyucany Students: Kjonasada and Kjonyoshy those used the same name as their teacher called Tuyucany to sign, and also of having this name

for themselves when he died, like Hiroshaj second and Tuyucoany III and other artists and these methods and technical schools have been attributed to the founders of the artists such as: Tokugawa, and Toure and others, and here we find that the old traditional art editions shown as a result of cooperation between the publisher and the artist and the cutter and character, which produced thousands of pieces of art in Japan during the sixteenth century until the nineteenth century, which was distributed by publishers and sellers through an extensive network of dealers and vendors and hawkers in the streets and through the European export markets, which was poised to receive their business through many ports such as: Najaskyo, sometimes the publisher is developing his profile on the edition of the same year, after 1790 and this seal had accompanied by a stamped Sergeant to maintain the instructions (which determine the spread edition of forbidden topics) and in most cases, this sergeant had working as a government administrator.

Hence, we can observe the superior efficiency of this process which is done by 4 different people, despite the existence of the signing of the artist on the final version but that did not diminish the importance of the role of the rigger and printer in the process, the role of the rigger was not limited to the implementation of the requirements of the artist and tracing the painted lines and drilling it only, but rather it was trying to add a kind of vitality and sparkle on the edition and maintaining the same painted sensations by the artist and looking after the same psychological condition of his artistic work.

And also the printer had a role no less important than the role of the rigger, this has required the high course skills in blending and mixing colors and the extent of consistency with each other and also to prepare the required documents for printing and shape and the rate of absorption of the inks and also the amount of pressure required to obtain typographical flat copies and equal to the entire sheet and also maintaining the process of matching color scheme in all colors without vibration or distortion of the printing process. For different technical Ages and artists from one era to another, we can find the same flowing situation of works of art and the same strong coupling between the elements of the technical work and achieving the same characteristics of the works of art.

However, if there are controls in the form of the laid and bound instructions by oversight bodies mentioned above are as follows:

- Identification of editions
- Determination of the number of clusters
- The prohibition of sexual topics, but they were not frustrating for technical working group.

Traditional Japanese technical methods of printing and special effects:

Japanese used a large number of methods and ways to produce different unusual and special effects, the longitudinal list is so difficult to fully covered, but we will refer to the most famous to identify the most important of these methods.

1. Karazuri method: which is known in the West in a Gaufrage method and where wooden printing templates are carved directly without Inking. This will take all prominent hewn effects on the surface of the paper by scrubs with a piece of ivory or Albaran (pillow scrubs) to produce 3D effects in the paper were used to obtain degrees such as blades of white such as: clouds Abu Guerdane, this method is still used until now and known as Inkless.

2. Shomenzuri method: which literally means Front-printing, a method similar to the method of the western polishing Gaufrage with the Karazuroi method, but in this methods scrubs occurred in front of the edition on the black areas even till shininess, to give the impression of paint or silk and often it were scrubs and polishing after putting a paper on the edition and then the pig's tusk was used for scrubbing to complete this task.

3. Kirazuri method: this method was adopted to use the powder of the ground Balkans stone or mica powder and it is dispersed on the edition while the soaking ink was wet produces the effect of quiet on the ground or the sky and this method was used in most backgrounds print and gum was placed with mica powder. This gum is obtained from eggs whiteness or rice paste, especially in large areas.

4. Mokumezuri method: This method is used to give the impression of the impact of Wood grain and the clear impact of wooden templates was used due to the nature of the wood fibers after being soaked in water to confirm the fiber style, then it is printing, especially in areas that are intended to show these textures, were it is sometimes called Itama mokuhan.

5. Numomezuri method: which literally means "fabric print" a print by pressing on a piece of silk or fabric Amosalin after the roll on the inkless block and then the edition was wetted and the mass and then it is strongly scrubbed so the effect of fabric pattern on the paper was left.

6. Ukaiyo-e method: in this way a mass of hot (to a suitable degree) was used then it is passed on the paper placed on the inker template for giving brown color, instead when inking, the use of some sort of chemical ink may be used as alternative to get the same effect, which turns into a brown color by heating.

7. Rosen method: which use a ball of wax then the back of the paper was scrubbed to give the light-density granular effect.

8. Fuki-e method: which uses a stencil over the printed works of art, where the ink was sprayed, then it is spread through the open areas in the stencil to the surface of the paper thereby creating a shadow of printed forms. A wooden printing templates have included several important topics addressed to all aspects of life and did not leave any aspect of life, but it has recorded and printed.

Important subjects related to Japanese prints:

Aragoto: which literally means "violence" it was a form of kabuki publications and associated always with bright colors engineering designs and also they show expressions on the faces of actors like Yakusha-e publications, representatives special publications of theater kabuki can be found in (P. 9).

Bijin: a picture of beautiful girls as we talked about it earlier (P. 10).

Genji: is a great novel of classical Japanese novels and represents "the story of Genji," along and large and complex love adventure between Prince Genji and his lover Mrasaky Hikyu in the era of Heian and the subject is favored by artists of the nineteenth Ukiyo-e artists in general and it was a clarification to this story in the form of a simulation of the original novel in the satirical and public style.

Geisha: it represents Japanese dancer's photos in special places, especially when they are using Samisen (the famous musician instruments (P.11).



P.9: Model shows the Japanese Publication represents artists of Kabuki theater which is called Aragoto

نموذج يوضح الخطوات الطباعية لأسلوب التدرج اللوني في المطبوعات اليابانية

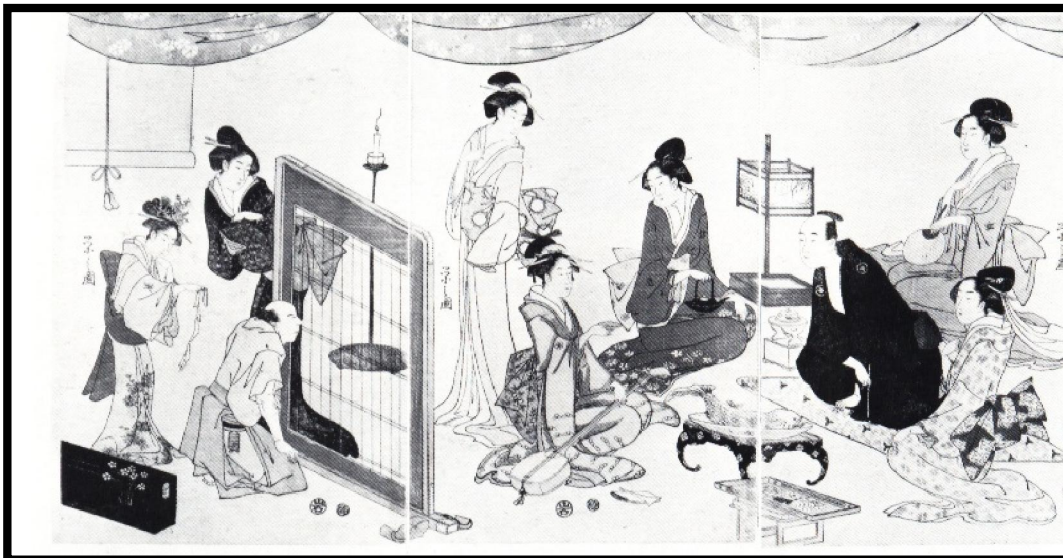


P.10: Model shows the Japanese Publication represents beautiful girls which is called Bijin

نموذج يوضح الخطوات الطباعية لأسلوب التدرج اللوني في المطبوعات اليابانية

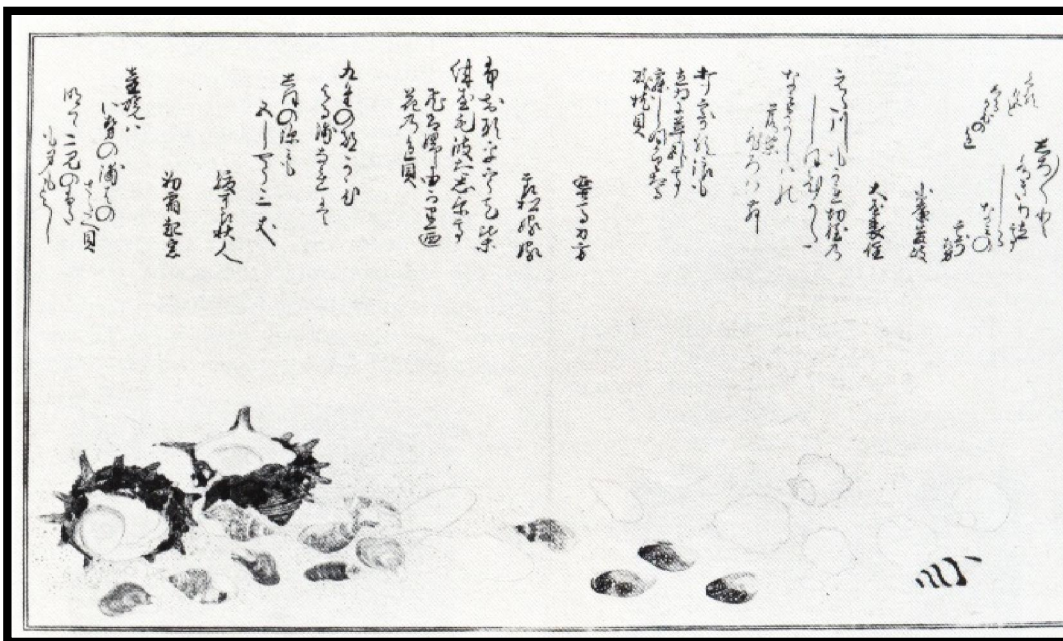
Kabuki: The research has been talking about them in detail earlier.

Haiku: It is a short poem in 17 parts, they tried to control feelings, it is a delayed form of Japanese romantic poetry called Waka or Tanka (P.12).



P.11: Model shows the Japanese Publication represents Japanese dancers which is called Geisha

نموذج يوضح الخطوات الطباعية لأسلوب التدرج اللوني في المطبوعات اليابانية



P.12: Model shows the Japanese Publication represents poetry poems which is called Haiku

نموذج يوضح الخطوات الطباعية لأسلوب التدرج اللوني في المطبوعات اليابانية

Kgoka: It is a laughed poem, which often includes poetry (P.13).

Surimono: Which refers to photos related to poetry units, it was printed with high quality materials (P.14).



P.13: Model shows the Japanese Publication
represents laughed poems which is called **Kgoka**

نموذج يوضح الخطوات الطباعة لأسلوب التدرج اللوني في المطبوعات اليابانية



P.14: Model shows the Japanese Publication
represents photos related to poetry units, it was printed
with high quality materials which is called **Surimono**

نموذج يوضح الخطوات الطباعة لأسلوب التدرج اللوني في المطبوعات اليابانية

Onmagata: It represents photos of men resembles with women in Kapuki Theater (P.15).

This is in addition to publications that reflect the new cultural life, which was the result of an increase in learning among bourgeois traders and intellectuals, which lead to proliferation of books that were provided with printed and colorful photographs and illustrations and those books have taken several topics such as popular novels, poems, pamphlets on tourist areas, and booklets include guidance on the bars. In the seventeenth century a wonderful book was printed with wooden template describes this life and makes us feel like we live in the moment, which depicts the joy that sends from the moon, the sun, and Alkarz fruit, and maple trees leaves, and the songs, drinking wine, this world looks like the fruit of pumpkin, which float long carried by river streams and this so-called the floating world (Ukyoi-e), where Japanese printed most of their photographs called by that name, for example, the poets are keen to make the forms of books, which includes poetry in the best form, because it was traded between the high layers of the society, so it was decorated by publications.

In the seventeenth century, Japan saw popular in the carried out work by a wooden template as a result of increasing literacy among civilians, however, there was a group of books supplied drawings illustrations those are prohibited from distribution among the general public, and those books were published as a commission from wealthy merchants, as they were produced in a limited copies, and it is printed in black only, or in some cases editions coated in red, orange or green or yellow colors. One of the best who has worked in the field of printed illustrations is the Hishikawa Moronobu artist:

Hishikawa Moronobu (1618-1694) is considered to be one of the most book makers, which includes pictures of illustrations, his first book appeared during the years (1658 - 1660) it contained a collection of independent designs, then he produced a book known as Monojitary stories the (Tales Of Les Monogatari) it includes wooden templates printed boards with black and white colors, then produced several books a signed by his name, and characterized by its ability to express a good script and analysis of areas of light and shadow in strong analysis.



P.15: Model shows the Japanese Publication represents photos of men resembles with women in Kapuki theater, which is called Onmagata

نموذج يوضح الخطوات الطباعة لأسلوب التدرج اللوني في المطبوعات اليابانية

Mureanubo was also tended to works, which describes the life of Alyoshiuara, in addition to shoot some trips, and Demonstration expression of some

poems and heroic stories, and many of the landscapes which entertained the Japanese people, in spite of his highly functional skill and his ability to control the design and production of editions good but his works considered to be simple when compared to the works of other artists follow him (P.16).

Mureanubo assessed as the founder of Ukoyi -e Print, despite the presence of artists before him have used a similar method, he published the first color edition in the late seventeenth century, Mureanubo was not preferred coloring his manually printed artwork - his artwork is printed in black just before the discovery of a way to match the printing and then the resulting Edition was colored manually in one color or two colors and the colors were dominant at the time of the pink and green colors.

It is also the most important issues, which dealt with Japanese woodblock printing artists throughout the ages is the landscapes.

Landscapes:

Even in 1820 and the subsequent, topics Ukoyi - e editions have become supplemented with scenes of bustling city life; especially those combine the representative dramatist and concubine with elements of the landscapes of nature, which was the background only of the main theme to fit the shape and design, and during the first half of the nineteenth century a new type of editions began to emerge and all were consistent in a certain form, where the landscape was the right of the prevails printed image; were subhuman forms was included, so appropriate somehow interact with the rear view occurred.



P.16: Model shows the Japanese Publication represents printed work of Moronobu using wooden templates called the two young in love

Artists were then headed to landscape photography after it became taboo for them to use it as backgrounds for subhuman forms, making them give their attention to the study of plants, fields, mountains, trees, rivers and bridges, and a mental input to understand the traditional Japanese landscape photographs; find that the typists began to increase in the integration of some perspective Western forms in their formations after that they were using a bird's eye perspective or the perspective of high visibility, and an artist of Ukyo – e expressed the landscape with a reference to a specific season of the weather, or even to daylight or darkness.

Landscape publications were mostly produced in conditions focused on the famous places, we find that Katsushika Hokusai produced what is known as 36 scenes of Mount Fuji, also Ando Hiroshige produced series of prints known as 53 A view of the stations Mount Tokaido (and depicting places of basic rest. The Tokaido - one of the upper main ways between Aido and Kyoto also it is considered graphic records for travel routes, even some of the topics were based on a common theme, such as rare landscapes of the famous bridges in the regions. Many of the Ukyo-e artist's have numbered the landscape editions through their work; The greatest proof of this is the artists Hokusai and Hiroshaj.

It is worth mentioning that, the beginning of the numbering of technical publications began in 1698 as mentioned in some of the references, it began in 1702 AD.

Also images of birds, flowers and animals, fishes and insects, formed an important class of Japanese printing, which achieved a great degree of popularity across the designer Ukyo- e editions that is, one of the famous provided technical editions related to Hiroshaj and Hokusai landscapes.

Additional important topics in Japanese printing arts:

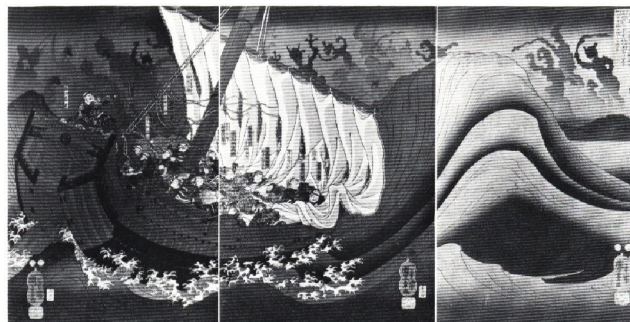
Legends and myths:

It is known that, Japan's rich history is full of tens of thousands of myths and legends, and thus a Japanese edition artists supplying them with a scale a tnill topics, for example, they photographed what is known as the seven gods of good luck, and bloodthirsty fighter. This kind of print came gradually alone during the year of 1840; partly as a result of the search for new posts after the re-formation of theatrical activity that become concubines prints and representatives those are prohibited from publishing.

In addition to the myths and legends, there are many works of print art those depicting the fighters, battles, habits, sayings, traditions and folk tales aphorisms, the best ones expressed were these issues were Kjonjoshy

Kuniyoshi Utagawa (1797 - 1861) (P. 17) and his disciples Tsukioka Yoshitoshi (1839 - 1892).

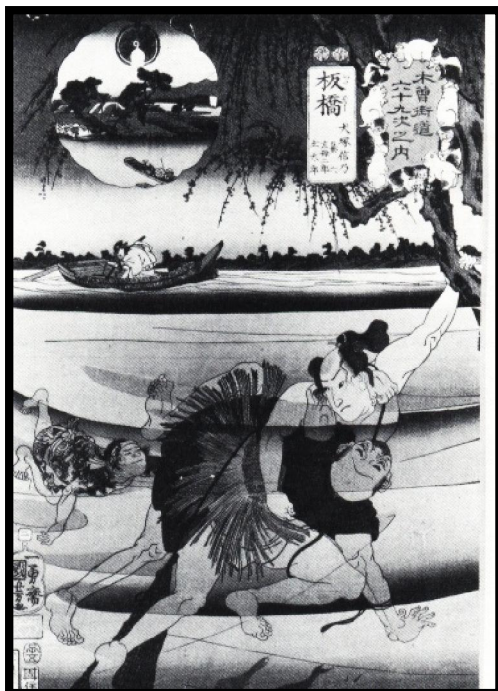
Before trading newspapers photographs widely that equipped with war messages; wooden printing templates was the method that is used; so until the last moment from filming wars that took place during the Sino-Japanese (1894 - 1895) and Russo - Japanese (1904 - 1905).



P.17: Model shows the Japanese Publication represents printed work of Kuniyoshi Utagawa using wooden templates called the ushtisin fighter

Utagawa Kuniyoshi artist:

The Kuniyoshi (1797 - 1861) is one of the best who have specialized in illustrations of the series of heroic events in Japanese history, including a series of works known as the 69 Stations of the Kisokaido Road including Sumo wrestlers, and smooth business known as the landscape of the capital of the Eastern capital fighter photographer, battles, habits, and sayings, traditions, and folk tales aphorisms and poems. All his drama themes are characterized by confused fixtures, but his famously topics scenes of military vessels and battles with huge sea monsters and scenes of fiction creatures, and his famous editions, Nichiren Stilling a Stromat Sea, this edition is one of the illustrations that depicting the life of a single Buddhist doctrine pastors, which was carried out between 1882 and 1883 which is characterized by the simplicity and the power of expression, it is a perception of great wave that threatening with immersing the boat, and the edition was printed in two colors with touches of white at the top, and it is characterized by its simplicity and graceful lines performance, they are not less beautiful than the famous great wave printed by Hokusai which looks Academic when compared with it, and the mountains that look at the back as well as withdraw the non-stereoscopic storm, and the passengers in the boat, they represent elements of confused and mixed raging with their arms, which motioning movement during the speech, and faces twisted, while fluttering the priest robe in blown, it is seemed that it is facing the water mass nearby destroying the front which appears the work end (P.18).



P.18: Model shows the Japanese Publication represents printed work of the Utagawa Kuniyoshi artist using wooden templates called the beach facing water streams and slowing them down

Japanese Sumo Wrestlings:

Japanese Sumo Wrestlings: is a favorite sport in Japan - has always been the subject of artists printing who showed Sumo wrestlers with their strength of their natural size, and it was one of the most artists depiction in this area is the artist Konisada and Hokusai before using wooden printing templates were filming themes on rolls that put over the wall, it is considered the dominant subject in this time (P.19).

Forms of professional Japanese editions:

In the seventeenth century, Japan experienced a renaissance in vogue of wooden template, which was largely a result of the growth of literacy among civilians, and of course taken Publications at the beginning of the command-book format, and Ukiyo-e printed designs featured first, followed by editions of separate business that evolved in the late of 1680th, during the reign of Aidoo more artists importance focused in printing (Ukiyo-e) such as Iotammaru and Hokusai in the production of designs for each of the book board and single edition, which was designed this type of prints to be pasted on walls in Japanese houses, and it was characterized by its relatively cheapness and high quality and thus it was the ideal replacement of painting.

Some of the early examples manufactured in the first simulator of the relative length of painted scroll hand color paper, which was attached to the walls before the advent of Japanese printing.

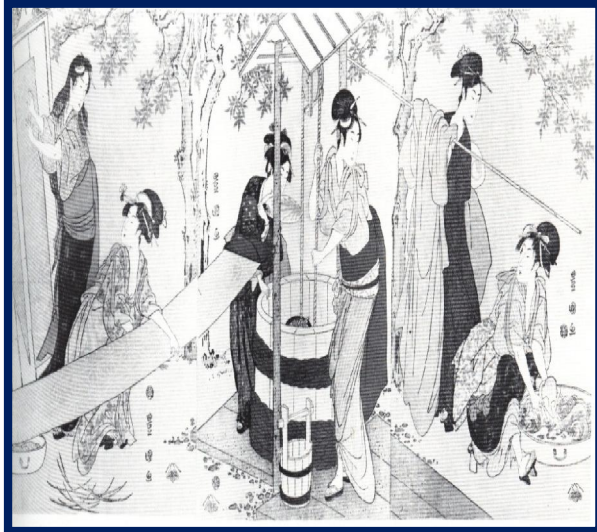


P.19: Model shows the Japanese Publication represents printed work using wooden templates called Wrestlings between Daklamar artist and the emperor Sakilorahim

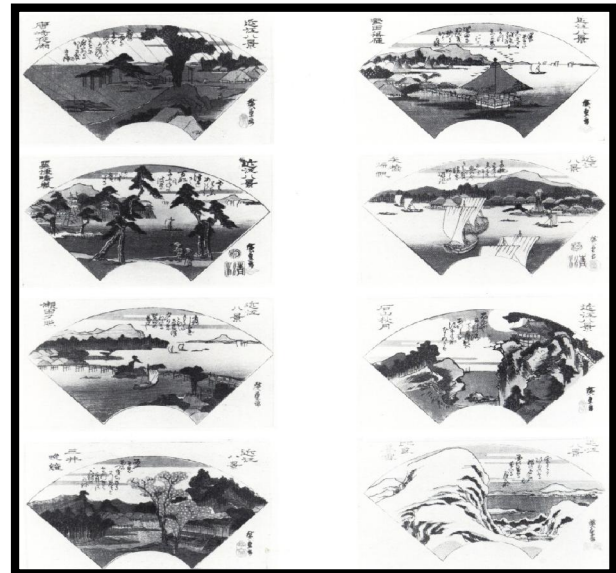
Japanese artists has produced a also fragmented designs, that stretched into two parts known as Diptik or three parts known as Triptik, thus, it is possible that one part represents the complete picture as it was set parts you can see it as the whole spectacle and as one offline (P.20). The sizes of editions were a reflection of its role, e.g., vertical editions which takes the form of souvenir columns, it was performed to be shown in the home column (P.21) and produced another kind of publications that take the form of fan is of two types; folded fan, which was known as Ogi (P. 22), and the non-foldable or solid fan, known as Uchiwa which is the most common (P. 23), and this fan was cheap and in line with fashion, so they are an alternative to fan paper hand-colored, and all of the folded and solid fans consisted of two paper fans, one in front and the other in the back with some of the supporting elements between them, in the case of Alaoshioa generally a piece of bamboo that form the handle was found in one ends of the fan, it is splited and expanded at its ends, at the other end of the expansion seems as a multiple segments, artists who were specialized in this type of editions are Hiroshige, Kuniyoshi, Kunisada, and Sadahide.

Printed works were also used in decorating moving curtains and called Byobu, and sometimes they integrate with each other by pasting one of the parties of the editions to the other party of the next

edition; thus even be formed by taking the final form of the accordion. Publications of annual calendar appeared also as a result of interest in the study of astronomy and time measurement, including those produced by Harunobo, in 1765 AD.



P.20: Model shows the Japanese Publication represents printed work using wooden templates called Triptik, which is divided to three parts



P.22: Model shows the Japanese Publication represents the printed work, using wooden templates known as foldable fans of the Hiroshige artist



P.21: Model shows the Japanese Publication represents the printed work using vertical edition

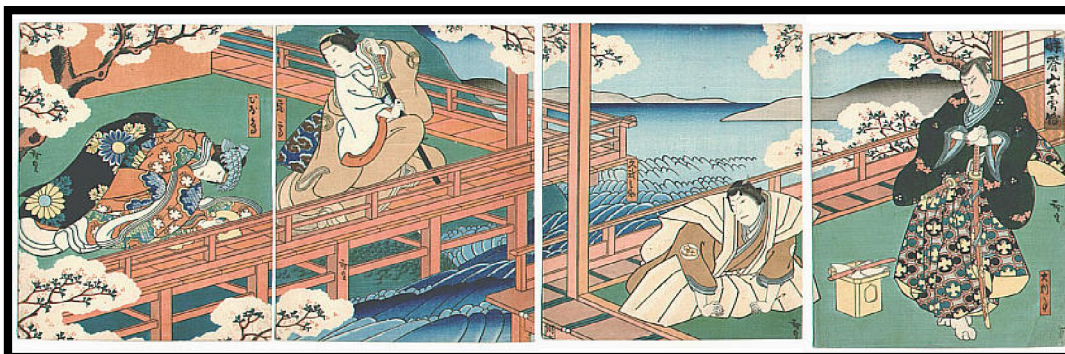


P.23: Model shows the Japanese Publication represents the printed work using wooden templates known as non- foldable fans (Uchiwa) of the Kunisada artist

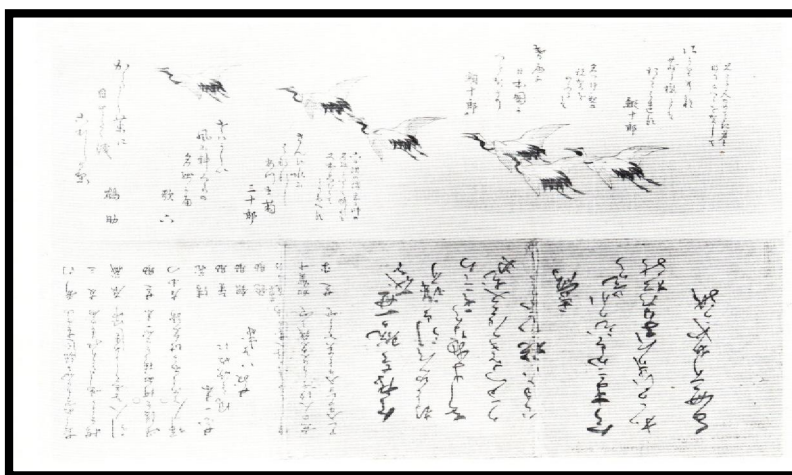
The last type of printing produced in limited additional types to the previousis Surimono, it means something printed, and it is intended generally to spin continuously between groups of friends, courses and clubs, poetry and often it was designed to fit the shape of greeting cards of holidays celebration such as New Year's Eve, and the Surimono publications generally at the maximum degree of quality and in small quantities it was produced by powdered metal and special

printing techniques, for example non-printing inks which include the development of a dry paper template to get the effect of prominent output obtained by pressing on Baren.

Harimaza publications also appeared often in three to five visualized parts on a single page (P. 24) It is foldable and also the editions of Hashira-e is a very long and thin and it is placed on the columns in homes for decoration (P. 25).



P.24: Model shows the Japanese Publication represents the Harimaza publications of the Hiroshige artist which is divided to 3-5 pieces



P.26: Model shows the Japanese Publication represents the editions of Goyami-e



P.25: Model shows the Japanese Publication represents the editions of Hashira-e

Other editions took the form of a long and thin roll hanging and takes the horizontal form and are called Emakemono and the other that takes the vertical shape called Kakemono and also Uchiwa-e printers is a horizontal rectangular shape and the corners of printing is rounded.

As well as Tateban publications, those take the vertical form and allocated to other views of the landscape and another horizontal one called Yokoban-e.

The Japanese editions were classified into:

1. **Goym-e**, which literally means calendar editions or editions of the sunimono which gives the occasion of the new year and in which months and days were written, these calendars are subject to a government monopoly or accredited publishers monopoly and with them always different designs were placed to increase popular commercial. (P. 26).
2. **kacho-ga or Kacho-e**, a bird and flower prints.
3. **Mitate-e**, a wooden publications that reflect the famous scenes from history and mythology, which was carried out in a satirical manner.
4. **Musha-e**, which originally prints that depicting important fighters or warriors in Japanese history and also include the views of normal wrestlers (P.27).



P.27: Model shows the Japanese Publication represents the editions of Musha-e

5. **Okubi-e**, are the printings containing people in a great size, they shown till their shoulders (P.28).

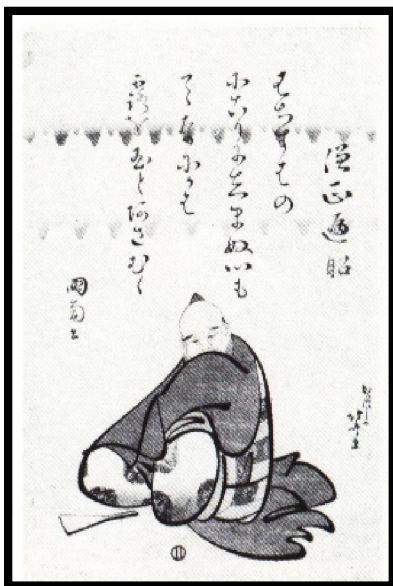


P.28: Model shows the Japanese Publication represents the editions of Okubi-e

6. **Sansui-ga**, special publications that reflect the images of landscapes that contain mountains, water and land and also called Sansui-ga.

7. **Shin Hanga**, which literally means new publications which is an extension of the traditional Japanese in their subjects and their methods and this movement was started in 1912 and it is initiated by a group of artists of Japan who have been affected by Western methods for the purpose of reviving the traditional Woodblock printing.

8. **Shimi-e**, a dedicated publication to the commemoration or glorification of the dead which literally means "voice of death" were printed for the important people in the world, such as senior photographers and senior representatives of kabuki and artists of the Woodblock and sometimes musicians and the Dead was filming usually wearing light blue color robes it is related to death and it is also includes a history of the person's life and age, relative to the Buddha or the location of his grave and poems or poems which written in the ceremony of his written eulogy by his friends or his clan (P. 29).



P.29: Model shows the Japanese Publication represents the editions of Shimi-e



P.30: Model shows the Japanese Publication represents the editions of Shun-ga

9. **Shun-ga**, which is translated into human subjects prints a form of classic print (P. 30).

10. **Sosaku Hanga**, which literally means creative publications, it is a movement which began in the early twentieth century to specialists Japanese artists in wooden printing templates, they used some West methods of printings, which rely on a single artist to perform the printing process completely without anyone that sharing him.

11. **Surimono**, which literally means "printed things" a famous Japanese publications, it has been published and distributed in particular and produced in very small numbers and it was circulated among poets in the special poet clubs considered as an annual calendar and it is used also as calls, notes, alerts, and official holidays, greeting cards and it is qualified in a special and elaborately manner of printing with special materials such as powdered metals.

12. **Uki-e**, which means publications that contain three-dimensional scenes and in other words it is printed in a perspective style of modern Western art unlike the Chinese classic way to express the depth and distance, which was not used the perspective.

13. **Ukiyo-e**, it is literally means "pictures of the floating world", a term originally used to describe editions of courtesans and actors, which depicts the lives of people in this floating world especially in the Edo period and now this term is used to describe the Woodblock Print in general (P.31).

14. **Yakusha-e**, technical publications represent scenes of colorful kabuki theater representatives and is considered one of the most important main types of Japanese Woodblock printing.



P.31: Model shows the Japanese Publication represents the editions of Ukiyo-e (Edo period)



P.32: Model shows the Japanese Publication represents the editions of Benizuri-e

Types of publications:

1. **Aizuri**, which literally means "blue publications" is the technical impact in which a Albroasia blue was appeared and which is called also Berlin blue, therefore it is called Berorin buroun, this color was a long-term dye, it is more brighter than local old vegetable blue, these editions were commercially successful and became modern due to its Japan's special magic.
2. **Benizuri-e**, It literally means "Rosary printed images ", It is an advanced technique of wooden molds print styles, in which both light green and red colors were used (P. 32).
3. **Mizu-e**, which literally means "pictures of the water," a type of woodblock printing, with a pale blue vegetarian color since 1760, it is a very rare images.
4. **Nishiki-e**, which literally means "Photos of embroidered cloth", it is a wooden printing templates with multiple colors up to 15 colors (P. 33).
5. **SumiZuri-e**, which literally means "pictures of printed photos with black ink" also called Sumi-e in relative to the name of Chinese black inks which were

printed in black and white and sometimes shades of gray was used, as in the famous work of Hokusai " 100 scenes of Mount Fiji ".

For further clarification, we will shed the light on one of the most popular types of traditional Japanese editions, It is a Surimono that clarify the extent of the suffering experienced by the artist during the technical implementation of his work.

Surimono:

The word is composed of two syllables (Suri) means a thing and mono and means printing the thing, Surimono printing form substantially different froms of other types of other Japanese printers, it has manufactured for special occasions as ID of the New Year or the announcement of a specific event or celebration season, religious or folk festival, when the artist changed his name and title as the Kjonasada artist when he took the name of his professor Tuyucany on the seventh day in 1844 he distributed his images among his friends, and Surimono has been also distributed in poet clubs between poets when poets left their poets on a small paper in a satirical

manner executing on special paper in a special size and decorated with the method of Gauffrage or mineral pigments or gold or silver or bronze or handmade touches subjects.

Surimono dates back to the twelfth century, but we consider the first half of the nineteenth century is a golden period where prominent artists produced this product, such as Hiroshaj and Hokusai artists and his students Hockey, Gacotta and some other artists also has produced Surimono publications.

Hiroshaj has produced Surimono publications of the New Year in two parts, part of months between 29 and 30 days, it is called "sho" and a section for year of the works called the "Dai" and he added to each part a special tower for each month by adding an appropriate animal for this month.

Example: 1841 Thor, 1844 Dragon, 1845 Snake, 1846 Horse, 1847 Sheep, 1849 Rooster, 1851 Pigs, 1858 Horse.

Surimono publications sizes was ranging from 19 x 21.5 cm, and they also include a variety of topics including historical events or scenes from nature, kabuki theater, or more topics which increases commercial demand.

Surimono publications have many complex stages (P.34):

1. The design and choosing the suitable printing colors.
2. Processing the brushes and pens and transferring the design on transparent Gampi paper in black ink.
3. Tracing the design lines very carefully.
4. The Japanese Alkrz wood or processing wood funds as an alternative to it in the form of small pieces are assembled from behind.
5. Pasting the Hanshita design in the reversed face on a wooden template.
6. Preparation of cutting tools that are used to cut public lines, which have special characteristics.
7. The use of different cutting tools that fit every part of the design.
8. Cleaning the wood mass of the excess wood parts.
9. Inking wooden block through solid brushes and then distributing the toner evenly through the cushions of the skin.
10. Inking all typographical templates for each color separately and following the same earlier steps of processing.
11. Printing with thick paper for special effects which is prominent in some places, taking into account that the paper must be wet.

12. Scrubbing by Baran in a circular shape and gently so as not the paper is destroyed.

13. The rest of the relay templates and colors was used.

14. The use of the different ways of effects such as polishing and the addition of the final touches.

After this historical tract about the beginnings of printing by wood paneling in Japan, we find that it is supposed to clarify the tools that are used in the implementation of the printing process from its beginnings the extraction of the edition either black and white or colored, because each of these tools play an important role in enriching the drilling technology of Japan since the beginning of Japanese printing and even after its improvement.



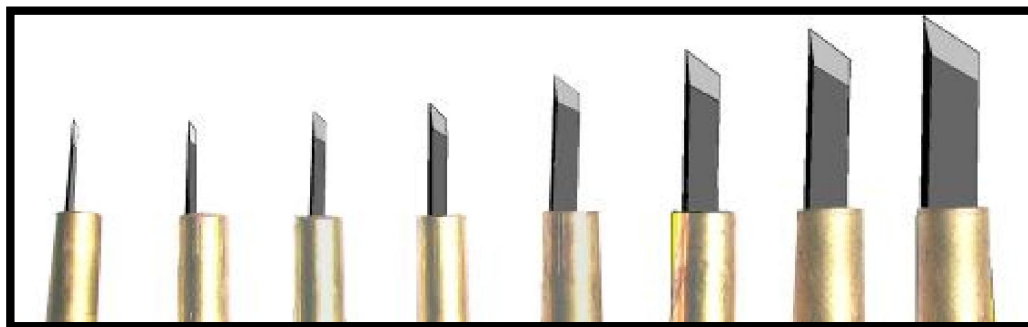
**P.33: Model shows the Japanese Publication
represents the editions of Nishiki-e**



P.34: Model shows the Japanese Publication represents the stages of Surimono publications using colored wooden templates

Raw materials used in the Japanese printing:**A. The tools used in print:****1. Knives:**

It was used in cutting and determining the basic guidelines of the design and characterized by a very sharp and tapered blade to make a sharp break in the wood after the passage of knife blade on a piece of skin and it is rubbed with a saffron paste and profiled handles were manufactured from solid wood of cherry or ebony trees and it was called Hangi in Japanese. They are used for basic lines and ranging their size from 3 mm, 4.5 mm, 6 mm (P. 35).



P.35: Knives used in the printing process

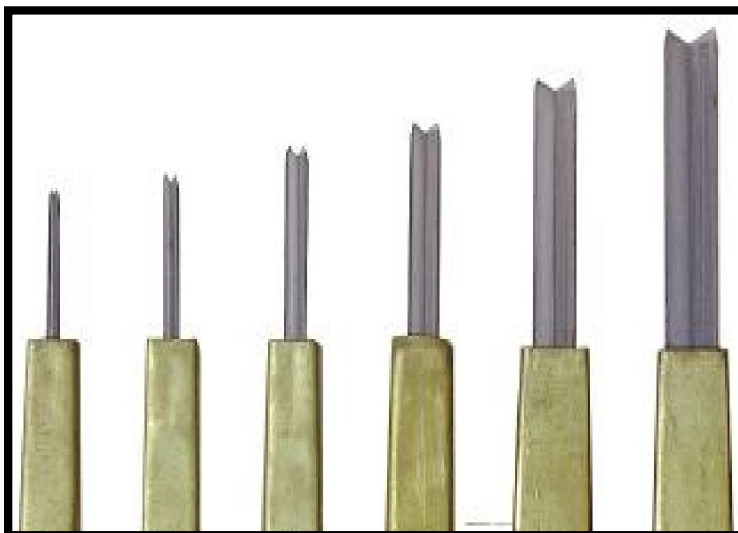
There are other knife called Suki-e used in Japanese printing arts, a straight blade and slightly rounded nose is also used to remove the basic guidelines and cleaned, their sizes ranging between 1- 6 millimeters, the handles were made of bamboo (P. 36).



P.36: Special Knives used in the printing process called Suki-e

2. Concave Chisels (Gouges):

They are used to remove the broad wooden spaces and humor was used in addition to it, their sizes ranged between 6 millimeters (for deep places) and 15 millimeters (for surface places), it is called in Japan Mrunomi (P. 37).



**P.37: Concave Chisels (Gouges)
used in the printing process**

3. Straight Chiseles:

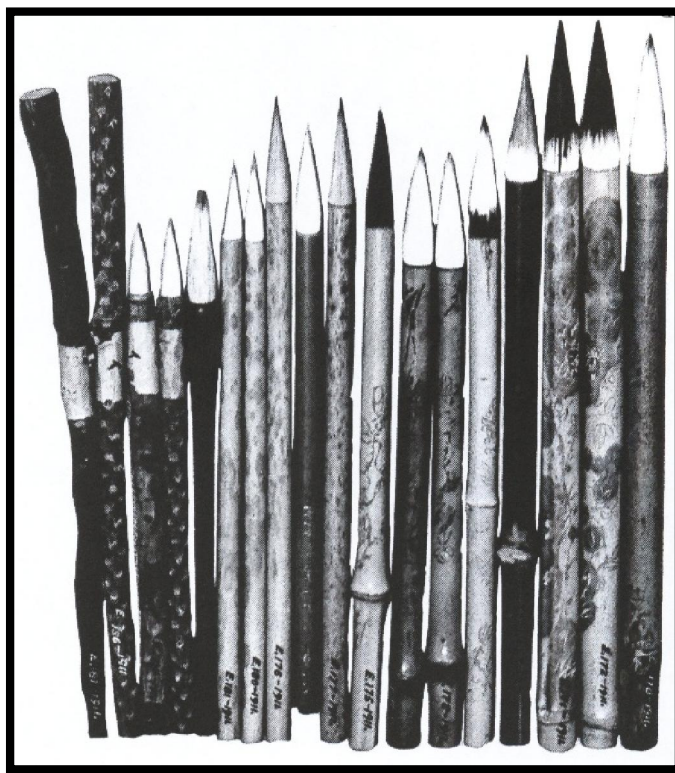
They are used for the settlement of the places that have been dugged in advance, using a concave chisels ranging from what is used for wide spaces and what is used for tight spaces. Measuring ranges from 9 mm to 30 mm and it is called Japanese Soai-nomi (P. 38) In addition, to a tool called Japanese kento-nomi (P.39) is meant by making Registermark, a tool with a straight-sided blade and very steep and ranges between 15, 20 millimeters, it is worth mentioning that these tools ranging in use from largest to smallest i.e., from open areas first to the minute areas and the clean-up operations followed by special way in cutting and engraving.



**P.38: Straight Chiseles used
in the printing process called Soai-nomi**



**P.39: Straight Chiseles used
in the printing process called kento-nomi**



P.40: Bamboo Pencils

4. Bamboo Pencils:

They are used to limit the thin places and fine lines, it is of Japanese made, it has not any similar European ones, but it has a similar one in Arab countries in the form of hollow Arab lines pencils, while in Japan it is tapered and present in different sizes (P.40).

5. Color Distribution Brushes:

They are used in the distribution of color on the wooden template layout (P. 41) and are characterized by this tool to give harmonious chromatically; it can not be obtained by using the European inking roll. Color are added in circular movements until whole surface was inked and in the case of black editions inks only, while in colored editions color layout was inking using this tool objective after filling the brush ink in average amount (not heavy) starting from the outside and then access to the inside with the brush width, taking into account that the second strike for Inking does not affect the first and does not interfere with inking the same place twice and often these brushes are thick with coarse hair, its long ranged between 6 inches to 8 inches in width and sizes of different areas were different, brushes were manufactured from horse hair and bamboo, most of the Japanese artists softening the brush hairs by scrubbing on a piece of shark skin with the addition of a little water for half an hour or more to soften the ends of the brush and nick of the capillaries parties.

It is worth mentioning that, to ensure equal and regularity ink while printing leather cushions were used to soften the intensity of ink to regulate its distribution.



P.41:Color Distribution Brushes



P.42: Traditional Baren

6. Baren:

It is a tool of pressure and scrubs used in printing (P. 42) and it is used to transfer the engraved and inker (by the inking brush) design, it is a cleverly designed to be used on Japanese porous paper. It consists of a compressor surface made of wrapped filler ropes made of bamboo and assistant disks these wrapped cords was hold by the interior pillars made from the bark of bamboo.

Baren was available in different forms depending on the thickness of the ropes, the more the thickness of the ropes needs a strong pressure in print, it is known that, a little craftsmen typists only can made suitable Baren but all Japanese artists can be covered them.

The inside Baren can remain for years and can be re-rolled, the cover of bamboo must be changed from time to time so as to equal the pressure and Baren that made perfectly can cost hundreds of dollars, but are available in grades with lower quality at lower prices, it is noticeable that traditional Baren was called Honbaren, it was composed of three main parts:

1. Baren is braided bamboo which is placed at an angle to force the dye on the adhesion of the paper.
2. At egawa a round disk which supports Baren.
3. Takenokawa pillars from the bark of the bamboo carried all these parts.

The traditional Baren (Honbaren) passed with a very complex stages in its industry and required special potential and skill in the industry, and they were made of braided bamboo and kind of so-called Shiradake, a white

bamboo and then strips were cut along the 15 centimeters, 10 millimeters width and then it was left to dry, then the outer areas of the skin of bamboo were removed and the inland areas were taken, the manufacturer shall compile tapes, which amounted to (15 mm × 1 mm) and it was wrapped with a wet cloth and then the process of curling through in a wooden board was began then the four bars are grouped and connected then separated into two bands together and the tape strip was replaced with another at the end, and so this process will continue until the manufacturer rope-making braided bamboo of a length of 30 meters and it can also make the rope in 8 or 12 pairs of straps and this is according to the thickness of the rope made or to the manufacture of 3 mm wide tapes.

Then the manufacturer shall make Ategawa, a disk which supports Baren made from a particular type of bamboo and taken from the outside bark of Bamboo and which is characterized by force and flexibility are placed upon layer of tonic paper (Washi) is very tight, after the midst of the Persimmon juice and then paste them carefully on the hard drive made from bamboo and left for 24 hours to dry and then put a layer of this tight cardboard in different directions for a period of two months until 50-sheet is integrated and when it reached to the required thickness needed by the manufacturer, it is covered with a layer of tight silk stuck to the face as a final class and the exposed surface was leaving to the completion of drought and then painted with Japanese varnish (Urushi), then it is removed carefully from the wooden template and become ready for use and this gave it a multi-layered construction with strength and flexibility to a large extent.

Then a stage of supporting the body pillow pressure is began, it is used where the pillars are taken from certain trees which are planted on hillsides in Japan and linking these props neatly inside a pressure pillow above the template paper and then a pillow pressure is ready for use and this stage in Japanese is called Takenokawa (P.43).

It is worth mentioning that, the pillow pressure of traditional Honbaren is expensive and up price to about 60,000 yen, this reflects the high cost of Honbaren large amount of time needed to build them and manufacturers tended currently to try to produce cheap alternatives and perform the same purpose, such as **Maraski Baren**. It is made from a disk of wood Flexible and internal file is made from braided rope of a flexible material and is very strong instead of braided tapes.

Maraski is means a purple from Japanese language, which refers to the color of mountain used in its manufacture (P.44).

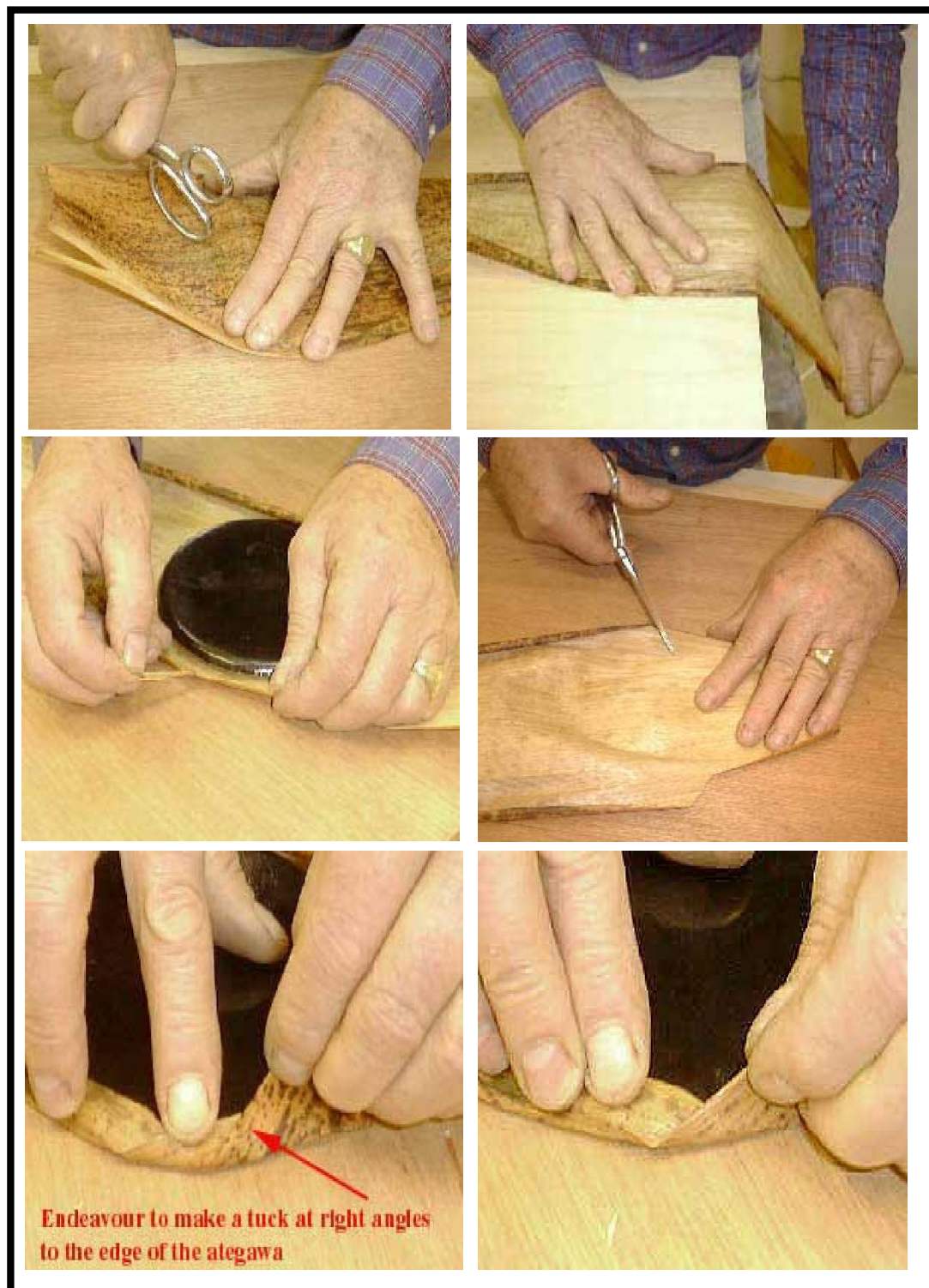
Baren holder balls, which are manufactured in Tokyo, a surface carrying small balls of perforated metal, where each ball wrapped in place across the paper and this tool is providing efforts, to force balls in scrubs and the flawed handle was made of plastic, which impedes the process of scrubs in the level of which is found in different forms of ball differs in its size, in addition to another types manufactured from plastic discs and plastic supports and rolls of strikes (P.45).

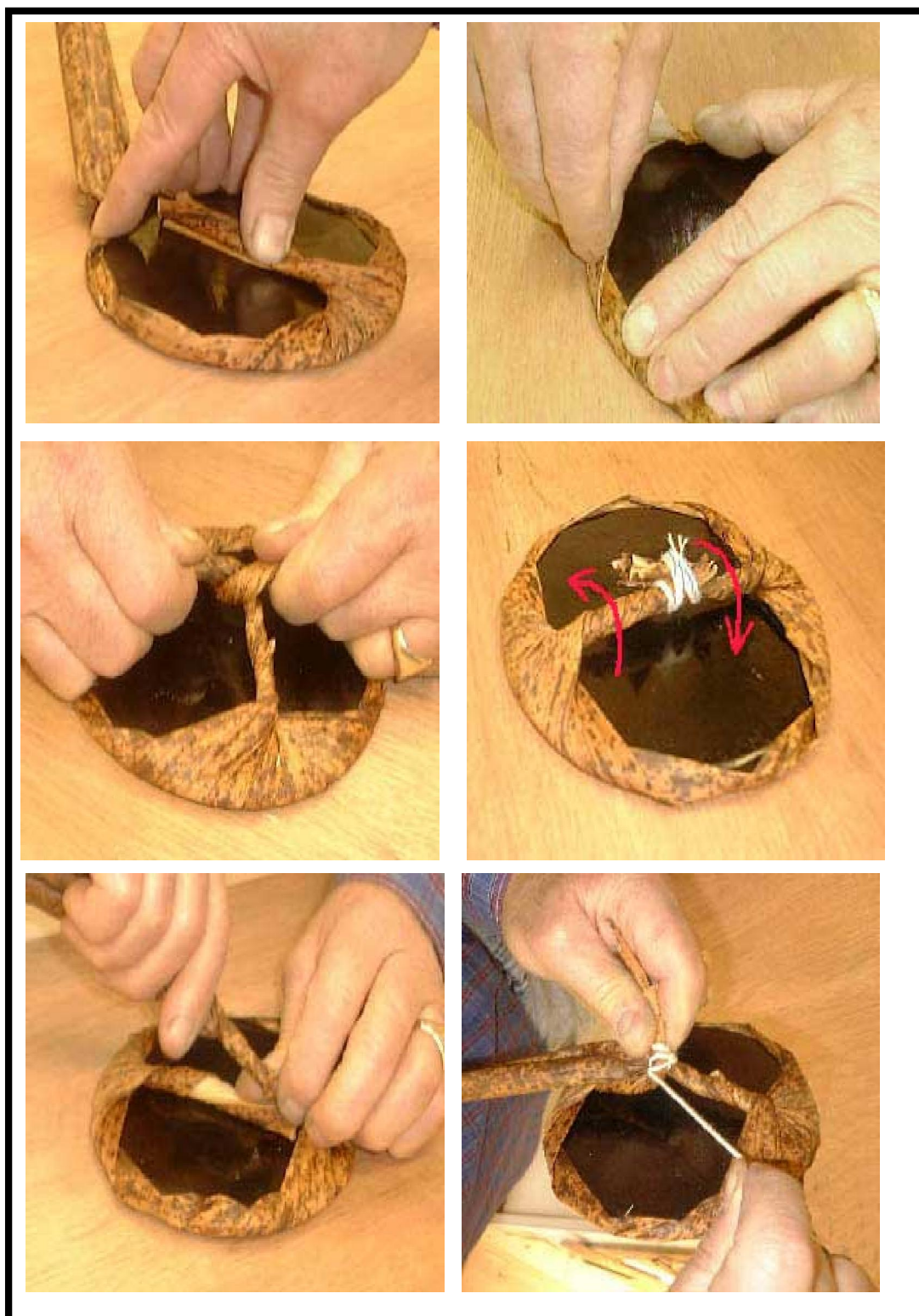
It must be taken into account that Baren requires special rules in usage of which are:

Usage of the four fingers in constipation with Baran handle and the thumb is placed on the handle and it needs pressing on Baran by hand, where scrubs are obtained not only from strong wrist, but of the entire arm, it is stirring in a circular motion to tighten the paper template.

It must also used the weight of the whole body during the scrubs, they are starting from the corner, which is located at the right hand near the existing print and then it is continued to move forward in a circular motion and reaching the top of chick paper it is starting from the bottom again until you let alone the entire sheet, Baran is used in short strikes, and the quality is getting unwanted printing when the dye permeates nearly half of the sheet thickness before removing the paper, it is well scrubbed edges and counterclockwise until the fiber emphasis on the homogeneity of the printed image.

Using the left hand, carefully edition is raised from the right corner and placed gently on a wooden board and it can be examined in terms of printing quality and interdependence of colors.





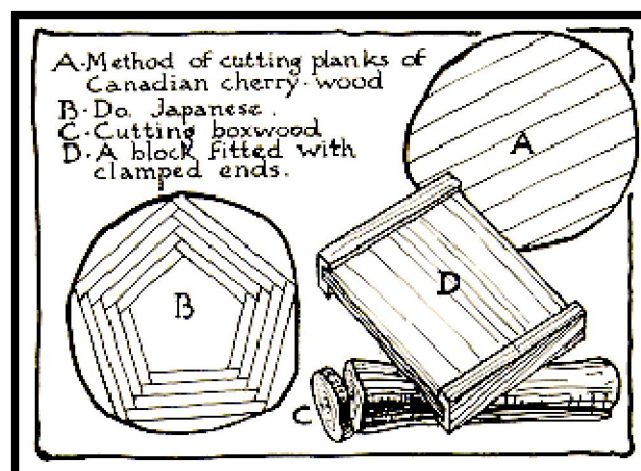
P.43: Stages of traditional Baren



P.44: Maraski Baren



P.45: Baren ball holder which is made of plastic



P.46: Shapes of wooden fibers used in printing colored templates

B- The raw materials used in printing:

1. Print panels:

Wood panels used in the Japanese printing consist of colored cherry wood or Aliamazakura wood (a species of wild cherry) was almost the only type of wood used in the traditional wooden templates (Ukyio - e) method, cherry wood is very solid but easy cutting, necessary for fine lines and many common details in Ukyio-e editions - which was printed in large numbers, wooden molds were made from Korean pear or plum trees, from which copies of up to 16,000 copies could be obtained without destroying the wooden molds.

Traditional wooden templates of Ukiyo-e print has always been cut off in the direction of fiber and templates with regular fiber is a favorite more than that full with nodes and scars (P. 46), the appearance of the wood itself is important to choose the template and often the wood had cut from the center of the tree between the pulp and bark and the templates leave to dry completely for two years and then refine and blessed to be able to drink water-based dyes during printing.

Sometimes Japanese artist used wooden templates background with economical costs, and Japanese artists generally loving any quality of wood that bound to what they want to say in the Professional editions and now a Japanese artist uses thick plywood wood which is more commonly wood used for its low price and it can be cut easy and it is found in large sizes with lightweight fibers and also American timber with different thickness in addition to the pine wood.

2. Papers:

Paper plays an important role in the field of original Japanese Professional editions, especially using prominent typography method that is still raises a lot of controversy both in terms of its place among the rest of the printing methods that include manual techniques procedures that have earned it originality or in terms of technical quality of the paper used in the printing process, specially if we bear in mind that the inks used is water-based inks.

The paper does not represent a material which is formed by all the fantasies and perceptions of the artist in the form of lines and spaces effects and typographical texture. , But also, it shares and merges, also its texture and appearance and the nature and characteristics of the fibers with different fantasies and perceptions that are reflected on its coherent surface tissue reflects all embodies and feelings and sensations of the artist.

It is worth mentioning that, the paper, which is synthesized by manual means (called in Japanese Washi) became a cast of some Japanese artists and others interested in the production of works of art with the special nature of increasing interest due to the whole artistic excellence, especially the history of paper handmade attributed to the Far East country's, since paper Japan reached Japan after its movement from China to Korea in the sixth century AD in 593 AD, where there were good relations between them due to the presence of a military alliance between the Tang family in China and the family (Silla) in Korea from 512 m to 756 m and thus printing moved from China to Korea. The work known as the pure light is the oldest work printed with wooden templates in the world, yet it is existed in Korea till now which is a Buddhism roll from slavery published under the auspices of a family of Ceylon in 751 almost, was discovered in the Temple [Bolgok safi Kioonju].

Then the paper industry moved to Japan in the seventh century in 610 AD, where invented their own ways in the paper industry Japanese were made paper industry in handy ways using fibers extracted from vegetables and the inner bark of some cultivated trees is spread in Japan.

The Japanese paper took in the development starting from the (fire), which was made from Japanese paper of cannabis plant as well as interior fibers of the Kozo and Gampi plants (P. 47) and kozo paper is a tree of the family of berries its subsidiaries up to 3 meters during the full development of a crop, it is an easy annual cultivation and greenery. The length of the inner core of the plant is 7.3 mm which is relatively thick and sturdy. The Gampi plant is two-meters-high bushes and its planting is difficult and its growth is slow, generally it is a wild plant, the length of the inner core has reached 5 mm which is fluffy and shiny fiber which produces papers characterized by a certain glitter, therefore it is the most expensive stock price in relative to its rarity.

The paper used in the era of nara only is restricted to government securities and Empire and religious copies of sutras, between 764 and 770 as a reaction of Buddhism religion Empress Shutoku printed million mantra using these papers.

The Heian period, is the golden age due to the variety in the formation of its industry, where culture flourished in the era of (Heian) and official newspapers and decorated sheets of poems and thinkers spread. This was the reason for the increased demand for leaf paper, making the central government established a factory for the production of paper has produced the annual 20,000-sheet, prompting the 42 local area for paper production to meet the needs of the market, especially after the difficulty of obtaining wood in the preparation of the raw material of paper and became a total dependence on Kozo and Gampi plants.

In periods of the (Kamakura, Miromacy and Momoyama) a strength of Samurai was raised and the power of the empire was declined, this reduced the demand for regular papers and the demand for powerful decorated leaves increased, especially after the development of the use of paper in Altazana use of both houses in the sliding screens (Shoji). Or sliding doors (Fusuma) which helped in the development of the paper, whether in the form of paper or the raw material used in processing operations e.g., polishing and smoothing paper and paper nutrition to withstand various climates.

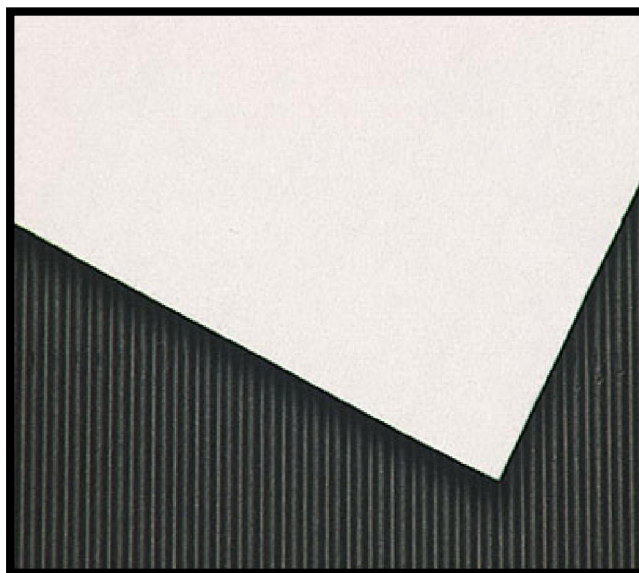
During the period (Aidoo) rich Cojan Lords encouraged the establishment of centers for making paper as a permanent source for multiple uses of paper, which helped to provide the paper industry and to improve its quality.

Japanese papers featuring generally by their strongly fiber made from them, the length of the Kozo plant reached up to 7.3 millimeters and 5 millimeters of the Gampi while the length of the wood pulp fibers used in the normal papers is much less so, such as pine wood fiber reached the length of the fiber reached 2.3 mm in its internal and fir 1.2 and beech and oak reached 1.0 mm or less, they are also characterized by abundant cellulosic fibers and moderate proportion of lignin, which gives the structure power to connect the fibers, but the presence of a large amount of it in other plants that are used in the normal papers lead to the adhesion of hydrogen fibers leading to a weakening of the paper and adverse effect on the quality and the external shape.

The Alehoshu and Altorinoko papers are the most important Japanese handmade papers used in printing.



P.47: Interior fibers of the Kozo and Gampi plants used in papers manufacture



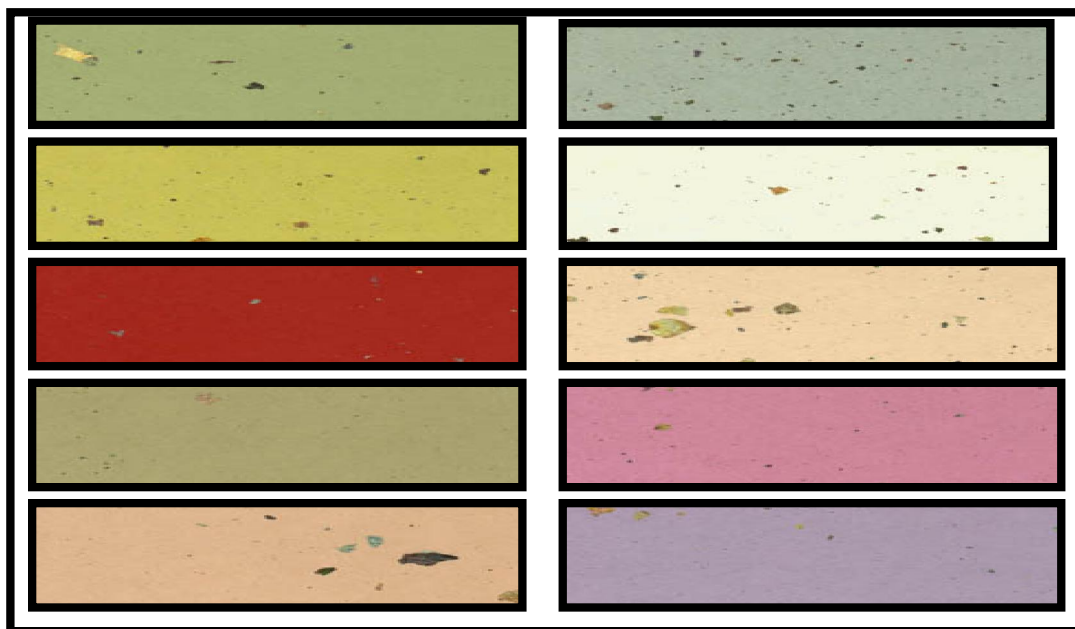
P.48: A sample of Hosho paper

• **Hosho paper:**

A polished white Paper, is derived from interior fiber of the mulberry tree; after removing the outer dark coasts; then these fibers fluid were mixed with a Colloidal extracted from the trunks of special types of bushes; then the mixture was put in the basin (rectangular in shape); then it was jolted from side to side until unite fibers with complete straightness with an non-mucilaginous liquid; then the vibration was stopped and the liquid mixture was left to run slowly, the wet paper was checked on the bottom of the filter, then the sheet of paper was turned on a heavy flat wooden board, then it is drained till water was left to dry sunshine which earns it a white color, This was the type of papers used widely in Ukiyo -e editions, which features by its soft fibers and ability to absorb to receive the ink on the surface of the board layout, as it is characterized by its severe flexibility that fit with the ripples of the wooden template resulting from different directions of wood fibers, regarding the thickness it is distinguished by its severe tenderness that allows the transfer of all the features of printing version to its surface, but this tenderness does not prevent it from being strong enough to make it bears all of the harsh printing especially the pressure, but it has an important disadvantage; like the severe absorption of the ink layout which makes the features of printing version appear in the background and non- printed paper (P. 48).

• **Torinoko paper:**

A species of the luxury types, is available in colors ranging from white to gloomy grades of ivory, which is extracted from the inner bark of Mitsuma, Gampi trees, and this paper is characterized by its softness, which does not allow sometimes the absorption of the ink layout, it consists of multiple layers as a result of fibers pressure (used during its manufacture), this makes this paper is relatively thicker compared with the other types of Japanese printing papers, this thickness increases its ability to endure the printing pressure, specially the repeated pressure in case of color printing (P.49).



P.49: Samples of Torinoko paper

• **Colloidal substance:**

Which is known in Japanese as (dosa), which is prepared by boiling animal gum in water and the addition of alum after the degradation of gum, in amounts: A gallon of water and eight ounces of animal glue and three to four ounces of alum.

Methods of preparation:

1. Water is placed in pots or kettle which is big enough to fit the brush with ten inches long, which is used to add gum.
2. Gum was cut into pieces and these pieces were placed in the water.
3. Gum was softening a little; gum vessels were placed on medium heat, then stirring regularly using a wooden stick or spoon, then heating slowly till the gum was degraded.
4. Alum was added as glue and it was mixed well.
5. The mixture was poured through cloth to filtrate it from the sediment.

Usage methods:

Broad and flat brush is used called Dosbak, for the addition of the hot gum.

1. The paper is placed on a flat drawing or large wooden table.
2. The brush is dipped in the glue and then pulled to the surface of the paper in one fell swoop every time, the work to start with one of the endings at full power, then the movement was slowed when directing as to the other end to get regular coverage.
3. The paper is suspended in a linear mode using clamps to dry it.
4. After completely or partially dry, the process was repeated on the other side.

Sizes have varied and differed from one form to another, we can find Oban size, for example, prints varied from Benizuni-e, Nishiki-E publications and soon.

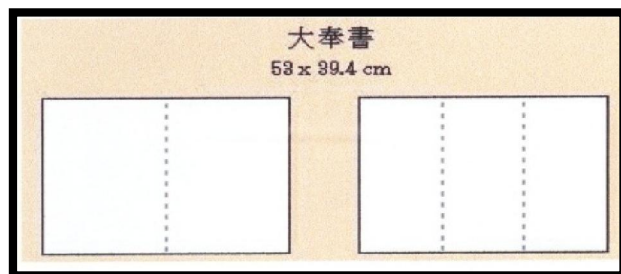
Most of these papers were made in the Echizen area (Modern Fukui State) and it was called Echizon Hosho, which is still called this name yet, Hosho paper was commonly used in the size of 39.4×35 cm and it is called Boshō-e, i.e., the large size (P. 50). It was cut into two or three equal vertical pieces and is used in the printing works e.g., Iotammarua vertical works and the horizontal work of Hiroshaj such as birds and flowers.

The 44X57.6 size is one of the famous Husho papers, as in Haranobo famous works in this size which is known as Chu-ban (P.51).

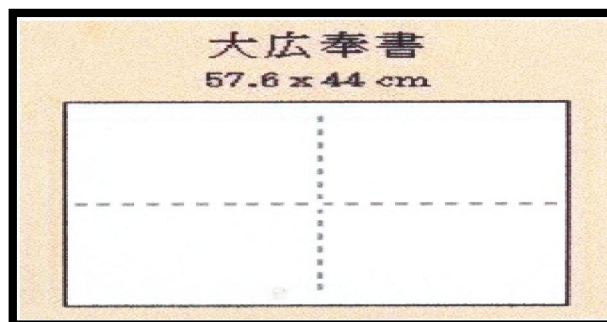
Hosho paper was also produced in size 51.5×75.7 cm, which was cut into four equal sections and was used horizontally in Hashirae publications, which was used in decorating the old Japanese vertical columns of houses (P. 52), that along with the size of 36.4×50 cm and it was cut into three equal pieces, known as the Naka-Boshō and also in the size of 33×47 cm and it is called Ko-Boshō and cut into two parts (P. 53). The traditions Japanese

printers were using other types of paper and call it Hosokawa or Mino or Hodomura were it is found in the size of 23 × 85 cm and cut in different ways depending on usage and it was known as Hosokawa or Mino-ban or Hodomura-Ban and we should know that the Japanese artist was using these sizes in this way in order to reduce the rumbling of paper as closely as possible and also to get the perfect size to show the beauty of the print.

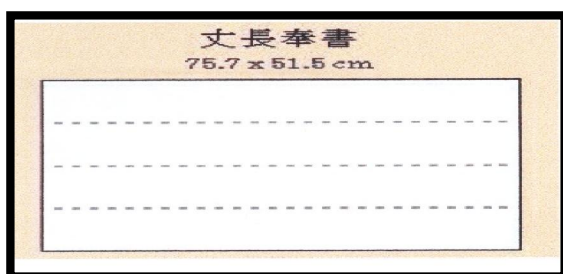
Handmade Japanese papers still so far characterized by world-renowned as the nature of the specifications and multiple refractory production to include all the different methods of printing from a prominent and flat, porous and recessed.



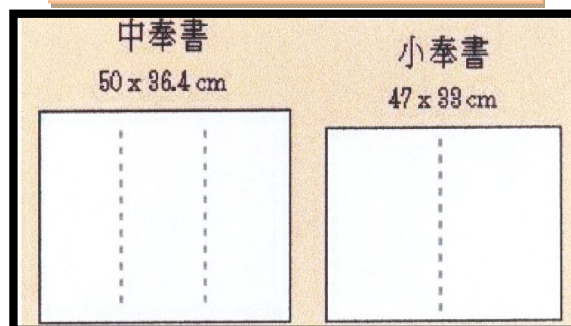
P.50: A sample representing paper division using Boshō-e method



P.52: A sample representing paper division using Hashirae method



P.51: A sample representing paper division using Chu-ban method



P.53: A sample representing paper division using Ko-Boshō method

C: Printing Inks:

Basic color inks used in the preparation of Japanese water-based inks were extracted from vegetables and plants, and inks did not use alone in addition to some substances were used those give special effects that will mention later in detail.

The colors used in printing were five colors: white, red, yellow, blue, brown, and the brown color powder was made from oyster powder or the ashes of the dead bodies of sea oyster after grinding and mixing it with glue. The red color was extracted in the past using many ways such as: melting the extract of saffron (saffron false) in the juice of half dry Japanese plum and its color will be a faint transparent color, or in a manner of Chinese Faramleon, which was made by treating mercury chemically with sulfuric acid and its color is very persistent.

The yellow color was prepared in three ways, the first is from a plant powder imported from East India, the second way from the mixing of arsenic and sulfa with certain proportions to obtain a chemical element with a metallic sheen and the color is opaque and the third is made from gum - extracted from the bark of trees and bright yellow - this type is toxic and harmful to the skin but it has steadily color.

The blue color was obtained in three ways which include: Indigo i.e., boiling originally old dyed rags and the second is Aigami, which consists of a solution of pure juice of blue dice leaves which is fast fading and Gunja, prepared from the emerald blue stone and the output ink color was dark blue with varying degrees.

The brown color is obtained from the bark and leaves of the trees, left for a long time in order to gain the strength and features - although it was characterized with its lucidity, then it is mixed with glue to give it a thick texture.

The liquid vegetable colors can be dried by leaving them before usage and then water, starch and gum were added to it when it is ready to use; while mineral colors are in the form of powder where it also blended with glue before its usage to acquire it the required liquidity and viscosity in print.

It must here be noted that there is a difference between the Japanese way and Western-style in the professional printing, is the use of Japanese pigments with water base and the use of Western artists to oily based pigments, paints often blended with water base rice starch paste which makes ink coherent, it can be sold ready or made from rice flour and water). It must be experimenting with colors that are soluble in water before being purchased to determine the best image to show the colors, it can be purchased in the form of powder and then mixing it with water to make a paste that can be used easily.

D: Polishing and Sharpening stones:

They are stones of refining and sharpening tools and equipments for woodcarving to make it categorically material and called Touoshi. It is made from sintered natural stone or raw ceramic, material that made of natural stone tends to use in the formation of irregular impact resulting from the grinding process and also it can prevent these irregular effects by moving the tool around the stone.

The stones made of ceramic are available in the form of molded and it helps to refine and sharpen the corners and curves, and there are small stones specially made for removing burrs from inside chisels in V-shaped or hollow form, these stones are available in three types 1- Soft (Hiajito) in Japanese 2- Medium (Heodo) in Japanese and 3- Rough (Aratu) in Japanese, stone sand can be used to keep the sharp edges during normal cutting if it was used regularly, the coarse stone removes the rough edges of the knife which is formatted to harsh changes in the deep corners or polishing.

The stone must down in the water not in oil for several minutes before usage, because the fatty dough that will consist can help in a cutting motion. A knife angle must maintain sharp or rotating the angle of the knife sharp or rotating the angle pieces.

The rough edges can be removed from the top of the knife by sharpening the upper side of the knife by a few strikes the cutting edges of the tools can be protected by placing them in the cylinder of fabric or in a box. After the completion of various stages of printing remains only the artist signature on edition. The stage of Signature Edition is the last stage after printing.

The seals used since the ancient ages and during the time of censorship printing. Seals were used only to control the government, they were not allowed to put the name of the artist or designer, till at the end of the seventeenth century and during this period artists work diligently until they get artistic reputation for themselves and though this seal was important for an artist who was put in mind the location and position of the seal when it begins the implementation of the design on the template provided that they have a role in the control and poise of the Professional Edition.

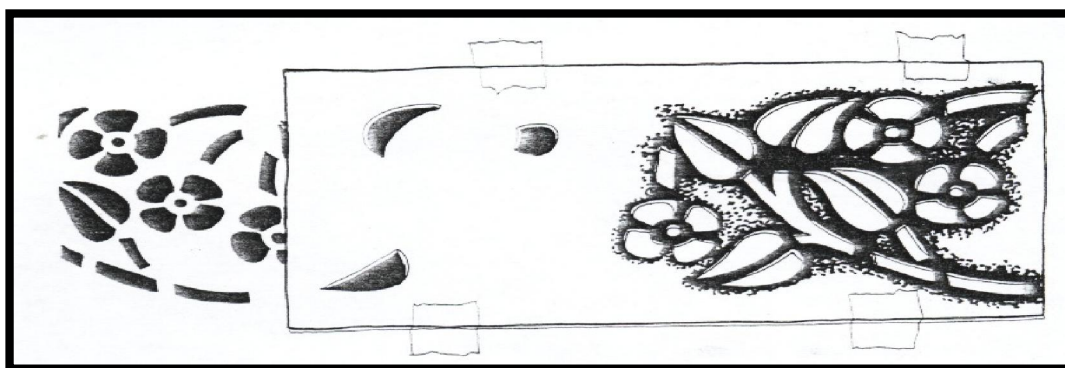
The number of seals on the Professional Edition are 4 seals. Seal of the artist and publisher whose stamp was sometimes containing in his name, with or without his address or trademark which constitute an acronym for his trade name and third seal is used for editions observer, is an official government - and the latter seal featuring the astronomical slogan year and the date of edition. We are now after this detail aware of the difference between wooden templates printing with Japanese and Europeans technologies, which is based in the choice of subjects that require new techniques, Japanese artist was not restricted to a specific technical school in any period of his work, but he was in front of many of the topics and techniques to choose from then it was mostly needs to imagine a wide range such as Alaoshiora and kabuki topics and superstitious legends and landscapes, and in contrast to the European artist, on which his work was associated with old classical or religious school of art, this group only has a few of the artists who unleashed the imagination and this appeared in their artist works.

It is worth mentioning that, beside the prominent printing way both on wood or stone, a method of insulation (stencil) was used. Stencil, which became a famous and elaborate Japanese craft the idea of the stencil depend on forcing the entry of the color through holes in the metal, paper or wood or leather and passing the color by rough brush to have an impact on cloth or paper (P. 54) and a Japanese artist has been prepared special designs of print and stencil print with meticulously designs with fine and accurate lines. Stencil was used in the silk print, and then became used in printing silk cotton and fabrics and as well as used in print custom cards to decorate the walls. This was receiving special attention from the artists for its easy printing and cheap price compared to printed fabrics.

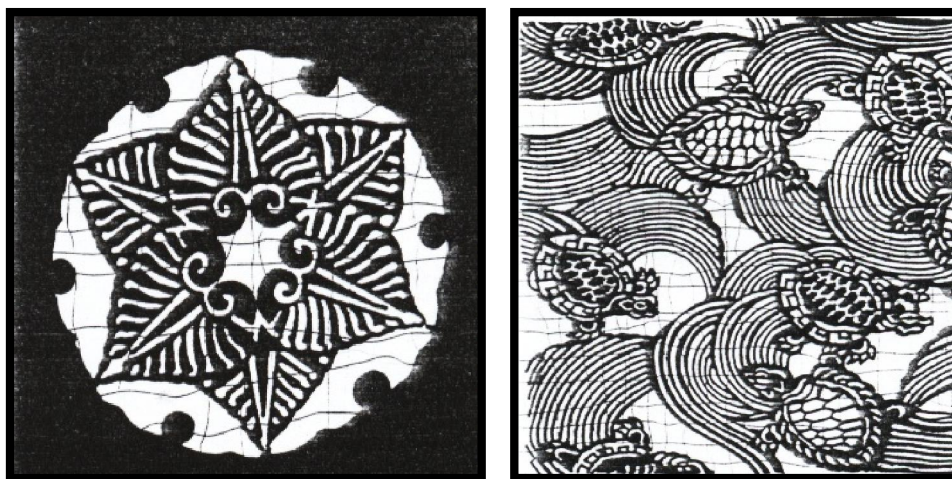
Stencil print has flourished also at the end of the seventeenth century as a result of economic prosperity in Japan and the popularity of wearing kimono patterned with various forms after the control Cojan, which was imposed on clothing and identifying people who wear private suits and also to identify motifs that are printed on these fabrics, but when Japanese get rid of these turned to stencil printing to satisfy their desires in wearing clothes rich with motifs and colors, whether these clothes cotton or silk.

It was these decorations are printed on double-sided fabrics from different colors to show the design differently and it was in Japan, entire villages based on the printing of cotton kimono in the traditional way. Stencil prints was passed through several stages from design which carried out by the artist deliberately, such as the work of Kjonasada artist then the artist giving the design to the cutter, which empty the places (to be an effective color) with a sharp object and was done it was done on a very solid paper composed of 2, 3 layers of White mulberry paper which features by its long, strong and flexible fibers.

Then the paper was soaked in a substance called tannin to aquesit hardness and then hold at home wall and the wood was ignited underneath till gaining brown color and become similar to the skin and then the cutter using this paper as a primary evidence or as a designing key (similar to Key Block in woodblock printing) and then extracted from it multiple models per group of colors in the design and then the cutter produced these models each model reflects the custom color of printing, and then the cutter delivered his work to the stainer that is using a rough and strong bamboo brush to push the color in the open spaces in the buffer paper to cloth. There have been two ways of Sencil print 1- which is known the way of the cut-stencil and in which the artist overcomes the work links and motifs units using hair from the human head or horse hair for the linking of these units with each this method is characterized by the ease and speed (P. 55).

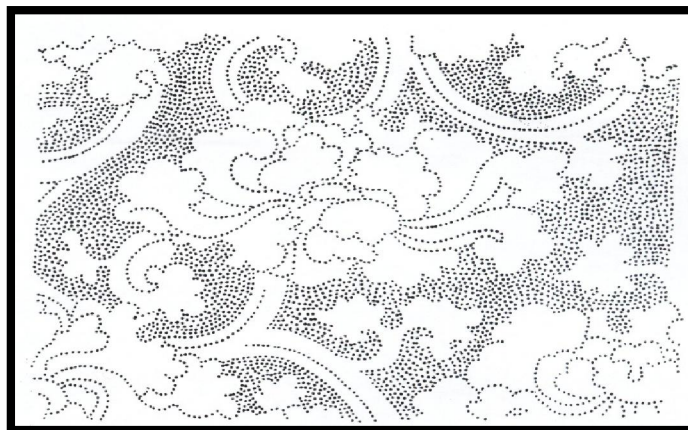


P.54: A sample representing Stencil printing



P.55: A sample representing cut Stencil printing, in which horse hairs were used

The other way is called Punch-Stencil and where the artist using his special paste with a permeability property through cloth to keep the non-entry of color into the cloth and then the artist print cloth and then leave it to dry and then peeling the putty places that painted then the cloth washed in a pot and it is left to dry, and this process was Fabrics made on dark or white color and this method was characterized by difficult and wasted time (P.56).



P.56: A sample representing Punch-Stencil

Yurakusai Nagahide; Japanese artist has used to merge these two methods together in his work was one of the most famous artists who has used the method to print stencil artist in wooden molds.

Yurakusai Nagahide (1799-1842): This artist is qualified in Stencil printing besides printing using wooden templates and he is an important artist in printing multiple colors of motifs cloths in Kamegata region (P.57).



P.57: A sample representing a series of the Nagahid artist, showing a stencil effect on his artistic work



P.58: Another sample representing a series of the Nagahid artist, showing a stencil effect on his artistic work

It is worth mentioning that, Stencil printing was used since 1740 in descriptive paintings and theater albums and a collection called hoskoban has been published in 1840 in which the stencil was used instead of wooden templates blocks and the effects of dyes metal was used and they include pictures of Japanese dancers who are viewing the in the annual peoples event held in the cafe of Giuon area, this series of publications involving 16 different publisher from Kyoto some like artists Sikuku - Huta Harosada - Hedymard - Cacho - Pkinaja - Guchich Harosada - Hedrimard - Cacho - Pkinaja - Nmoshistn - Harukawa - Hasegawa Tuyucany and Nagahid (P. 58) explains a work represents one of this series of the Nagahid artist, showing a stencil effect on his artistic work, especially in the areas contain white spaces as a result of mismatches.

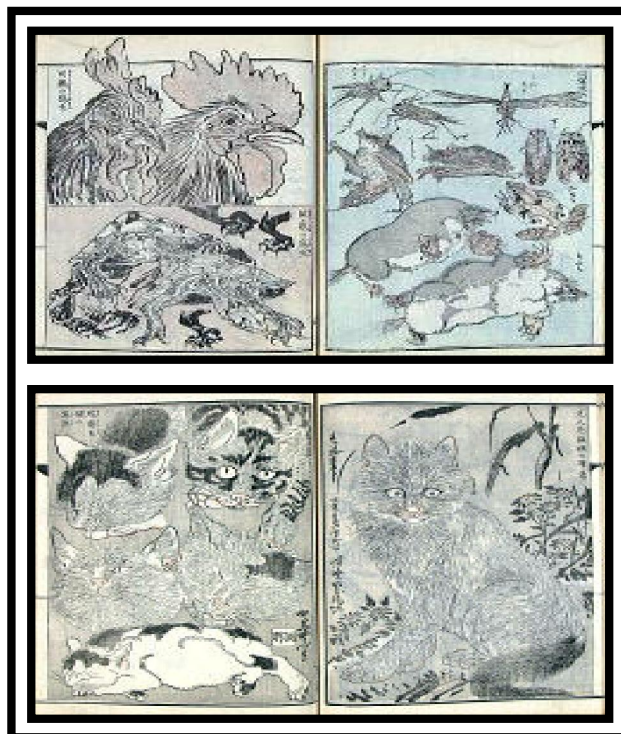
The Japanese artists continued to practice Stencil work, however ages variations, e.g., Mori Yosho Toshi (1898-1992), he is one of the best performers (Sozoku Hanga) of creative works and they were follow the traditional way of stencil printing that was called Kappazuri i.e., stencil printing or Katazome i.e., stencil dying, this print has arisen in Oukitawa which is called Bingata, in which several layers of Kozo paper was used (which is soaked in khaki fruit juice and then smoke-dried and processed to become rigid and flexible treatment against water) and then each color was separated separately by design then the printing process was began from light to dark or textile dyeing after isolating with paste-resistant dye called Mizumoto called and then it was dried on wood.

The artist has participated in many technical experiences in 40, 1941 and produced mimeographed images dyed with Stencil under the auspices of (Sizawkyuk) the master of comic books and the leader of the popular art and its impact has been on this artist was large and has also contributed to him in calling for an honest look to traditional methods and old material. Murray types of Kozo paper was used which is called Momigami in Japanese, this gave a thickness, more expressive strength and deeper impact of soft leaves to the edition.

Mori was started as a designer textile, then directed to Stencil printing in 1945, he was focused on Kappa Zuni-e art, which includes scenes of Kabuki Theater, festivals, traditional stories and printing them on colored backgrounds (P.59).



P.59: A model representing a work of Mori et al., showing their way in Stencil printing



P.60: A model representing the first attempts of book illustration printing

Regarding the Illustrations, it has begun in China for the production of thousands of books in various fields of medicine, agriculture, botany, poetry and literature and the story, especially skits stories and mythological stories, they have been printed at the beginning of the seventeenth century as books composed of this type contains panels such as booklets "Do It Yourself". And a book on how to draw birds, fruits and flowers, and later these books brought to Japan affected on the development of types of printing there, yet it is of less interest in Chinese with this type of print after several years, there has been no

development in it, even though they had arrived in it to a very high level of skill and beauty. When these books have got to Japan, followed by attempts to prepare the books and illustrations that were commissioned from a wealthy merchants or government publishers and a limited number of print copies and deprive these books was deprived to the public (P. 60).

Until the fateful of fire broke out in 1657, which destroyed most parts of the city of Saga and other cities, prompting artists to get themes of humor and it was printed in black, and represents street

views, the saints and it is an inexpensive souvenirs attached to the house as a compensation for the treasures destroyed by fire.

After the emergence of school Ukiyo - e which means images of the floating world, illustrations was flourished again with aesthetic aspects and become implemented with high accuracy at different levels of printing with multiple colors in their implementation to reflect the popular taste and feelings of the people and their emotions in this period and there were many art themes such as pornographic images and landscapes and other humor skits and mythological themes (P.61).

Many arts have excelled in this type of art, Hokusai and Hiroshaj were two of the most artists who



P.61: A model representing book illustration printing after the addition of colors

Conclusion and Recommendations:

At the end of this study it can be concluded that:

- 1- The beginning of Japanese professional printing with wooden templates dating back to the sixth century AD, with the advent of Buddhism.
- 2- The most important reason of the spread of printing is a service of Buddhism and the expansion of the spread of its principles and teachings of Buddhism among the Japanese people, which was done by Buddhist monks.

3- The development of the Japanese printing stages extended from the sixth century AD to the sixteenth century AD.

4- This study is an attempt to shed light on manual materials for Japanese prints art.

So we can recommend that:

- 1- There is a need to paying attention to the Japanese technical publications and trying to re-produce our own works as surimono printings.
- 2- There is a need to the use of water inks in traditional printing art processes and which is characterized greatly from oily inks.
- 3- There is a need to study Japanese subjects and the production of publications series featuring by locality.
- 4- There is a need to exchange specialists artists in the field of Professional Edition between the countries of the Far East and all of the Arab countries as well as researchers and students.

References:

1. Takihashi, S.: Traditional Woodblock Prints of Japan. New York and Tokyo: Weatherhill/Heibonsha, 1972. P.13,18, 24, 58, 66-71, 123.
2. Gabriele Fahr- Becker: Japanese Prints. Italy 1994. P.8, 9, 32, 57,69, 79.
3. <http://users.exis.net/~inc/nontech/prints/process.html>
4. Richard Lane, "Images from the Floating World", Chartwell Books, Secaucus, 1978. P.11-13, 29,67,87.
5. Ibid.
6. Jenkins, D.: The Floating World Revisited . Portland Art Museum, 1993. P.42.
7. http://www.woodblock.com/surimono/process_2.html.
8. Mary, A Ainsworth: Japanese Woodblock Prints.library of Congress 1984. P.33-48.
9. Salter, Rebecca. Japanese Woodblock Printing. London, 2001. P.27,33, 39, 55, 89.
10. http://opometry.berkeley.edu/~fiorillo/texts/artists_varia_topics/kento7.html.
11. Matthi Forrer, " The Baur Collection: Japanese Prints", Collections Baur, Geneva, 1994. P. 12-18,22, 82-86.
12. <http://woodblock.com/encyclopedia/entries/014-01/014-01-frame.htm>
13. Amy Newland, Chris Uhlenbeck, Ukiyo-E to Shin hanga, Mallard Press, 1990. P., 90, 96-110.
14. Keyes, R.: The Art of Surimono: Privately Published Japanese Woodblock Prints and Books in the Chester Beatty Library, Dublin. London: Sothebys Publications, 1985. P.12, 39.
15. Feller, R., Curran, M. and Bailie, C.: "Identification of traditional organic colorants employed in Japanese prints and determination of their rates of fading, " in : Keyes, R.: Japanese Woodblock Prints: A catalogue of the Mary A. Ainsworth Collection. Oberlin: Allen Memorial Art Museum, 1984.
16. <http://www.woodblock.com/surimono/beaty.htm>.
17. Edward, F. Strange Tools and Materials Illustrating the Japanese Method of Colour Printing, London, 1924, P.11, 18.
18. Yoshida, T. and Yuki, R.: Japanese Print-Marketing: Handbook of Traditional and Modern Techniques. Rutland VT: Tuttle, 1966, P.24-59, 64, 81, 83.
19. Petit, G. and Arboleda, A.: Evolving Techniques in Japanese Woodblock Prints. Tokyo and New York: Kodansha, 1977. P.101, 138.
20. <http://www.sharecom.ca/phillips/technique2.htm>.
21. <http://www.supercrawler.com/pages/washi.html>.
22. Allan and Gill Bridgewater-printing with woodblocks, stencil and engraving- New York- 1983. P.193.
23. Abe, Setsuko and Matsouka: Mori Yoshitoshi Kappa-ban. Tokyo: Mori Exhibition Organizing Committee, 1985. P.57.