



ORIGINAL RESEARCH PAPER

Arts

STUDY OF ADVANCE SILK SCREEN PRINTING STUDIO: CONTEXTUALIZING THE CONTEMPORARY PRINTING PROCESS.

KEY WORDS: Silk Screen, Screen Prong, Silk Print Studio, Advance Silk Screen Process

Dr Ranjan Kumar Mallik

HOD/ Asst. Professor Amity School of Fine Arts Amity University Haryana

ABSTRACT

This research paper is based on the Advance Silk Screen Printing Process also methodology and discovery of Screen-Printing. A goal of the research is to examine the management process, history and content of serigraphy-printing and to apply that new knowledge to practical. Grounded theory as the researcher making art, data and content analysis, which entails the study of Screen -printing lessons and a advance studio. Screen-printing as it is sometimes known can be traced back as far as the 18th century when it was used in Japanese woodblock prints. The subject of screen-printing ties modern art, to advertising, graphic design and art history. Now it also same important to setup an advance screen printing studio.

Introduction

Silk Screen is the fine art aspect of printing. The term was used "first in 1938 to produce limited editions of creative color prints under the administration of the Federal Arts Project" (Landon, 1964) Books and manuals as early as the 1940's including, Silk Screen Stenciling as a Fine Art introduced the serious artist to Silk Screen/ Serigraphy. Screen printing is a technique suitable both for artistic and industrial printing, as the same printing method can be used on a variety of materials and with a large number of inks. The method has been widely used among activists as it enables swift production of small-edition posters.

Silk Screen:

A print produced using the process of serigraphy generally referred to as silkscreen printing, one of the four major divisions of printmaking. Since the beginning of serigraphy the process changed several times, due to several factors: paint, paper, light exposure, machinery, etc. but the process is still the same: pushing the ink through a screen with a squeegee. There are few steps of how to make a Silk Screen:

Step 1: The printer uses a piece of silk, nylon or polyester stretched tightly across a wood or a metal frame to form a screen. The fine mesh that is stretched across the frame could be anywhere from 120 to 600 holes per inch.

Step 2: Both sides of the screen are coated with a liquid photo emulsion and allowed to dry completely.

Step 3: A color separation is created by laying a sheet of transparent acetate over the painting and using a brush or a pen with opaque ink by copying the color that will be printed. For larger area of colors the color separator will use a ruby litho laid over the painting and will cut and the shape of the color creating an exact positive image of the color. A separate color separation is usually made for each color.

Step 4: The coated screen is place on a vacuum table with the color separation in front of the screen. The screen is exposed to light for a specific period of time to create the stencil

Step 5: The screen is washed with water pressure to remove the photo emulsion from the areas that will be printed and where the color separation blocked the exposure light. The emulsion will remain in non print areas so the ink will not pass through. The image of the color separation will appear ghostlike in the screen.

Step 6: After the screen has dried, the screen is hinged to the press. The flat bed of the printing press has 3 registration marks that will not move and will guide the printer where to put the paper so the registration will be the same on each print. During printing is very critical that the position of the paper, the registration guides and the screen do not move. The printing table has an air vacuum which helps to hold the paper during printing, and all sheets will go on the same position

Step 7: The paint that will be printed is mixed to match the color that is in the original painting.

Step 8: The printer will put the ink on the screen and with a squeegee made of rubber will flood the paint over the screen.

Step 9: The screen is set down to make a contact with the table and the printer will push the ink through the screen with the squeegee.

Step 10: The screen is raised up, then the printer will remove the paper from the table and inspected carefully, then it is put on a rack to dry.

Step 11: The printer puts another sheet on the table in the same position using the registration marks and repeats the process on all the sheets of paper that he was decide to print

To print the next color the printer will repeat the steps from 1 to 10 for each color.

Step 11: Usually the serigraphs are coated with one or two coats of varnish. Since 1991 the serigraphs are coated with UV paint. This will protect the image from scratches.

Step 12: The edition will be signed and numbered after a thoroughly check for scratches, dents or major imperfections.

It is an expensive and labor intensive process of layering colors to accurately reproduce an original.

Silk Screen Printing Studio:

One room already had a sink and ceramic tile floor. The adjacent room had a wooden floor. We decided the washout and wet processes would take place in the tiled floor room and the dry in the wooden floored room.

Utilizing any left over hardware and materials can also cut down on cost for the build. Be creative with what you have and take comfort in knowing that every print shop has its own quirks and traits.

The first project was to acquire a washout sink and install it into the wet room. It was enlarged and modified to accommodate large (30 x40) screens.

Drying rack:

There is nothing worse than a wet screen. Screens that sit in improper storage after being cleaned will start to develop a certain smell, and if the frames are made from wood than one can expect some warping and rotting to occur. To save your screens, and nose, from any issues its important to have an effective drying station which is easier to set up than you may think.

For this build we started with a simple blueprint which consisted of a basic frame set up with lengths of rope spanning from the floor

to wall at an angle. Since the floor was ceramic tile we could not drill directly into the floor so we had to build a frame reaching out from the wall. The purpose of this was to have a surface into which the eye hooks could drill. After this frame was completed we measured out the spacing between each length of rope and how far the screens would have to protrude from the wall.

By using eye hooks and rope we created a sort of shelving for the screens to reside in. The reason for using rope and not a sturdier material was air flow. Its important to allow air to travel openly throughout the screens. The final step was setting up a box fan facing the screens to speed up the drying time.

We started with tackling the issue of screen storage. Zea Mays had limited space for the varying sizes of member and studio screens, while the fragile nature of the screen's mesh demands proper storage. We found that storing the screens vertically fit better with the floor plan, and allowed ample space for a printing station on the opposite side of the room. Having a few spare boards left over from previous screen printing boards allowed us to make the bulk of the shelving for no cost. Hardware, much like many things built, was scavenged from various sources. Some bought and others on hand.

The design was simple, we adhered triangle slats to the floor and wall using screws and right angle brackets. Then cut sections of the vertical shelving, which originated from the screen printing boards, to make the best use of our materials. For support and the sake of the entire structure being level, we built the shelving on lengths of 1 x 4 .

Washout booth:

As we know, is all about greener and safer processes so the "spray and pray" method was not needed here. This did not solve the issue of water pooling up and adhering a fine mist to every surface in the studio. Much like the shelving, our solution was simple yet effective. We created a structure to encapsulate the booth in a shower curtain. Using leftover boards of 2 x4 wood we constructed the beams on which the rod and curtain would hang. We went with a clear vinyl curtain (the tropical fish design was our second choice) to allow the user to see what was being cleaned if they wished to remain outside the booth. Weight and structural integrity became an issue early on so right angle brackets were used to hold the rods, and beams were used to bear the weight. The finishing touches included applying more clear vinyl sheets to the sides to prevent any overspray, and a sweet paint job.

Since we had various sizes of squeegees to work with it was important to measure out the various lengths of the squeegee handles and plan accordingly. One section was dedicated to the larger squeegees that are used for the professional press, and the other section handled the smaller squeegees for hand printing. With a coat of a very beautiful red ochre color and some sealer, our squeegee rack was ready to go. This final build made the room a great place to (hang) out.

In Contemporary art time, anything goes. Artists can take inspiration and techniques from processes and movements they like or feel a link to and ignore the rest. The line has been blurred between screen-printing and serigraphy. Printmaking has often been associated with commercial use in posters, advertisements and political movements throughout history.

The most important room is dark Serigraphy Printing Photo exposure room

Conclusion:

From the above points we conclude that - Silk Screened image. With a Screen Print the original oil painting is scanned and separated digitally into each and every color found in the original. A separate silk screen is created for each and every color that was scanned. There are usually from 80 to 130 individual colors in the majority of some Serigraphs.

Screen Prints are also produced in much smaller numbers than

Lithographs, and they are as costly to produce, and as close to the actual original painting as you can possibly get. There is a very noticeable difference in the high quality of a Serigraph (technically original art) when compared to a Lithograph (reproduction).

So for the good Silk Screen Printing result we need a good studio, in which there are proper space division, proper machine installed and press inks and squeegees are in proper racks.

Reference:

1. <http://www.peopleofprint.com/studio/interview-with-peckham-print-studio/>
2. <http://www.zeamaysprintmaking.com/research/technical-research/setting-up-a-screen-printing-studio/>
3. file:///C:/Users/jaspreet/Downloads/cfaar890_14.2_kamlonesmith%20final%20.pdf
4. https://www.google.co.in/search?q=screen+printing+studio+space&source=lnms&tbm=isch&sa=X&ved=0ahUKEwj37omHjdzUAhWBKo8KHT20AvMQ_AUIB_igB&biw=1366&bih=591#imgrc=53xm3E88x6wIMM
5. https://www.google.co.in/search?q=screen+printing+studio+space&source=lnms&tbm=isch&sa=X&ved=0ahUKEwippY6pkdzUAhUEs48KHUIZDAw4ChD8BQgGkAE&biw=1366&bih=591#tbm=isch&q=advance+screen+printing+studio+space&imgrc=_
6. <http://www.evindearle.com/glossary.aspx>
7. <http://www.funtrivia.com/askft/Question18844.html>