

## Aesthetics Appeal on Glass

**Dr Bijender Singh Chauhan**

Associate Professor Deptt. of Applied Art College of Art ( Delhi University)

20-22, Tilak Marg New Delhi-110001

[Bschauhan36@gmail.com](mailto:Bschauhan36@gmail.com)

Mobile: 9868230243

### ABSTRACT

*Glass is a magical material, adding comfort as well as beauty to our lives. It is available in the most wonderful diversity of colours and textures, is often something to behold in its own right even before being turned into a piece of Art. One of its great advantages is that when we heated, it becomes malleable and can take on varied sizes and shapes. Whether colourless or colourful, transparent, translucent or opaque, creativity on glass can be evolved into many decorative style as well as useful objects. The aim of this article is to provide various information related to the historic aspect of glass paintings and characteristic of glass since beginning this art.*

### KEY WORDS

Aesthetic; Biblical scenes; Opaque; Transparent; Translucent; Biblical scenes

### Introduction

Light and its meaning have preoccupied artists throughout time. The substance of glass has often been the vehicle for their studies- as a symbol, a tool, or the embodiment of luminosity. The aesthetics of glass is tied to both the inherent properties of the material and the stylistic and technological developments within the applied, industrial, and fine arts.

Glass is composed of silica and small amounts of other ingredients that are melted together at high temperature. As it cools, it thickens, then becomes rigid while still retaining a liquid molecular (rather than crystalline) structure. Glass is extremely strong under compression, but

brittle under tension. Although rapidly chilled molten rock (usually volcanic), can create

naturally occurring glasses, the history of glass is essentially a man-made material. There are three basic types of glass- soda glass, potash glass and lead glass. These glasses have its own characteristics.

Glass makes a powerful aesthetic statement before the intervention of the artist. It can be transparent, translucent, or almost completely opaque. It reflects, transmits, and absorbs light. As light bounces back and forth between polished surfaces, its brilliance is enhanced. Glass can be made in virtually any color or value, and it may be homogeneous, striated or layered. The hues of glass are often abnormally bright because light is transmitted through it rather than reflected solely off of the surface.

Because glass has often been used to produce merely pretty objects with little artistic or aesthetic merit, however contemporary, glass artists have had a difficult time in having their work taken seriously. When many thing of glass, they think only of what may be, purchased in gift stores rather than what is now beginning to be displayed in museums and contemporary galleries.

### History of Glass painting

Discovery of glass dates from over 4,000 years ago and was made in the near east in Mesopotamia and Egypt, where it rapidly became a cheaper substitute for gem and fashioned into beads other jewelry. Most early glass was opaque and coloured. It could be cut and polished more easily than precious or semi-precious stones. It was used as a less expensive alternative to gems, and glass pearls were made in Alexandria for the Roman market. The magical and protective



powers associated with certain stones were believed to be transmitted to glass that emit them. Rock crystal is a mineral that has long symbolized purity, harmony, and transformation. It inspired glassmakers to produce deliberately decolorized glass by removing or counteracting natural impurities such as Copper. The earliest manufactured glass of the sixteenth and fifteenth centuries was made to imitate the appearance of more valuable substances- a function that glass has maintained through the succeeding centuries. Glass, and especially coloured glass, was regarded as very precious during the middle ages. It was very expensive to make, used primarily in churches and secrets of production were guarded closely. By 12<sup>th</sup> century, new cathedrals were filled with stained-glass windows showing scenes from the lives of, or imaginary portraits of, Christ, the Virgin Mary and the Prophets and Saints.

### Quality of Glass

The ability to produce colorless glass was apparently lost during the Middle Ages, but rediscovered in the Sixteenth, Century, by the Venetians, Venetian glass was valued for its lightness and complexity of forms. During the second half of the 17<sup>th</sup> Century, the elaborate Venetian styles declined in popularity. At that time, the English glass industry developed a colorless composition that included lead. This increased both the clarity and the brilliance of glass. Lead glass has a high index of refraction, which gives it a “fiery” quality. The introduction of significant amounts of lead has the additional effect of rendering the glass relatively soft- a characteristic ideal for cutting and engraving. By breaking the surface with different facets, prisms are formed and even more widely divergent coloured light rays are produced.

Six particularly important capacities or characteristics of glass have been manipulated by artists to produce works of artistic and aesthetic merit. First, glass has the capacity to manipulate light. It can transmit light without distortion, it can refract and reflect light, and second, it can appear to capture or retain light (absorbed into

glass) by various chemical means, or it may be applied onto glass by enameling or painting. Third, glass may serve a medium of images. These images may be applied to the surface of the glass or placed within the glass. Surface images may be made by using techniques such as painting and enameling that are commonly employed by artists working in non-glass media. Surface images may also be produced by sandblasting, etching and engraving. Internal images may be constructed by using a wide variety of techniques ranging from gluing bits of glass. Moreover, a surface image may be turned into an internal image by covering up a surface image with an added layer of glass.

Fourth, because of glass’s transparency, it has the capacity to reveal internal form. The internal form may be real, illusory, or a combination of the two, Real internal form is produced by a variety of techniques ranging from gluing or fusing pieces of glass together, encasing glass within glass, forming internal surfaces by carving, drilling, sandblasting or blowing, injecting tiny air bubbles into molten glass to inserting nonglass materials into the glass. Illusory internal form is generated by the refractive and reflective qualities of glass. In such cases, the real internal form appears to change its shape because of the optical properties of the glass. Fifth, glass has the ability to freeze shapes. Glass cools to a rigid condition without crystallization. When it is heated it loses much of its rigidity. If its rigidity is entirely or almost entirely lost, it flows in response to gravitational forces and its shape may be, completely controlled or predicted by casting the glass into a mold, or less severely controlled by slumping the glass, in thermostatically controlled environments such as those provided by kilns and annealing ovens. If the glass is slightly more rigid, its shape may be altered by increasing the internal pressure within a piece of glass by blowing, and the blown object may be allowed to form freely producing a spherical bubble, or it may be forced into the other shapes by rolling, pinching, denting or blowing into a mold. Glass may also be lamp worked. Here the artist uses a torch to control the



rigidity of the glass. The glass's response to the prevailing forces while in a non-rigid condition is frozen or fossilized into the glass once it cools, and the response becomes a permanent feature of the resultant object. Thus glass flows in response to forces while in a non-rigid state, and fixes its response while in a rigid state.

Finally, the shape of glass can be manipulated even when it is in a rigid condition. Changes in shape may be brought to control decreasing by cutting, drilling and further decreasing the volume of glass that is accomplished by chipping and smashing. These techniques lead to constructivist sculptures.

### Conclusion

Glass painting was already a developed technique in the early middle ages in Europe, from which evolved the technique of the beautiful stained glass seen in medieval churches. The manufacture reached its height during the gothic period, after which it declined. The lowest point was apparently in the eighteenth century when oil painting on glass, meant to be seen as transparencies, imitated stained glass creations. The subjects of glass paintings were Biblical scenes, pictures of Saints, Virgin Mary and Christ etc.

### Bibliography:

- [1.]Fyson, Nance : Decorative Glass, David & Charles Publishers, P. 6-81
- [2.]Gupta, Samita : Glass Paintings- An Ephemeral Art in India, B R Publishing Corporation, Delhi, P. 2- 11
- [3.]Wrigley, Lynette : Stained Glass, New Holland, P. 56-62
- [4.]Dunsterville, Jane: The Glass Painting Book, London, P. 1-36
- [5.] Bottrel, Julia: Great New Ways to Paint on Glass,london, P.42-44
- [6.]Maurice, Drake : A History of English Glass-Painting, with Some Remarks Upon the Swiss Glass Miniatures of the Sixteenth and Seventeenth, Germany, P.26-111
- [7.]Eden, F. Sydney: Ancient stained and painted glass, Cambridge, University press, P.12-26
- [8.] Suffling, Ernest R.: A treatise on the art of glass painting, London, P. 237
- [9.]<https://www.youtube.com/watch?v=1XsQ7rQpbSk>
- [10.] <https://www.youtube.com/watch?v=0R6UZzaUuyk>