

SEURAT AND POINTILLISM

George Pierre Seurat (1859–1891) died at the age of 31. He lived during the height of the Impressionist movement. During his short lifetime, he completed four major works of art. His work greatly influenced the artistic community in Paris and beyond.

He had a shy, withdrawn personality. He lived simply, but bought very expensive books. He obtained a classical art education, but greatly augmented his artistic focus through intense self-study. His fascination with the science of color and light resulted in his development of a new technique, "Pointillism". This technique was highly controversial in his time.

Seurat's paintings required meticulous planning and extreme patience. "A Sunday in the Park on the Island of La Grande Jatte" is his most well known work in the Pointillist style and perhaps the painting which best expresses his theories. The painting took Seurat nearly two years to complete and was composed of over three million dots.

Pointillism (Seurat rejected this term, but it is used today) is a method of painting in which small distinct points of primary colors create the impression of a wide selection of secondary and intermediate colors. Aside from the color "mixing" phenomena, there is the simpler graphic phenomenon of depicted imagery emerging from disparate points. Historically, Pointillism has been a figurative mode of executing a painting, as opposed to an abstract modality of expression.

The technique relies on the perceptive ability of the eye and mind of the viewer to mix the color spots into a fuller range of tones and is related closely to Divisionism, a more technical variant of the method. Given its complexity and labor-intensive demands, it is a style with few serious practitioners. The term Pointillism was first coined by art critics in the late 1880s to ridicule the works of these artists and is now used without its earlier mocking connotation.

The practice of Pointillism is in sharp contrast to the more common methods of blending pigments on a palette or using the many commercially available premixed colors. Pointillism is analogous to the four-color CMYK printing process used by some color printers and large presses, Cyan (blue), Magenta (red), Yellow and Black (called "CMYK"). Televisions and computer monitors use a pointillist technique to represent images but with Red, Green, and Blue (RGB) colors. The primary color paint is applied to the canvas in small dots or "points" (actually small brush strokes). When viewed at a distance, the points of primary color blend to form a variety of non-primary colors. In effect, the colors in the painting are mixed in the viewer's mind and not physically on the canvas. Some say Pointillism had an influence on fauvism (associated with Matisse and characterized by the use of simple forms and vivid colors).

Neuroplasticity is a key element of observing a pointillistic image. While two individuals will observe the same photons reflecting off a photorealistic image and hitting their retinas, someone familiar with the theory of pointillism may see a different image as the image is interpreted in the visual cortex.

During the 19th century, several scientists published works on color theory and perception and these ideas were presented to the public in a way that was understandable to non-scientists and were particularly aimed at artists and art connoisseurs.

Seurat was particularly influenced by the book *Grammaire des arts du dessin* by Charles Blanc. In the book, Blanc discussed the theories of the French scientist Chevreul, whose most well-known contribution to the arts was the creation of the color wheel of primary, secondary and intermediary hues. Chevreul noted the importance of surrounding colors on the perception of individual colors and described the “halo effect” wherein an opposing color is seen after staring at a color for a length of time. Seurat seems to have taken Chevreul’s advice to artists to understand the role of colors and to consciously plan how to best imitate the harmony that is experienced in reality.

Also of great significance to Seurat was the work of Ogden Rood who also noted, like Chevreul, that if two colors are placed close to each other, the human mind would perceive the combination as a separate third color. Rood noted the difference between subtractive colors -- those that are mixed on the palette, and additive colors -- those that are mixed in the mind. Rood believed that additive colors were brighter and more “pure” as well as more pleasing to the eye.

Seurat also adopted some of the concepts described in an article entitled “The Phenomena of Vision,” written by theorist David Sutter. Sutter maintained that light was composed of three main elements: vertical, horizontal, and diagonal, and proposed emotional equivalents for certain colors and forms. Sutter’s analysis of light and line fed into the work of the mathematician Charles Henry. Henry attempted to define a method for artists to create harmony by coordinating line and color according to specific geometric and algebra formulas.

Using the aforementioned scientific theories, Seurat not only developed the painting technique of Pointillism but used line and color to create harmony in his paintings. For example, Seurat attempted to create gaiety through the use of warm and luminous colors and by the dominance of lines above the horizontal.

Seurat challenged the intuition and spontaneity of Impressionism and instead attempted to express emotion and harmony through the scientific use of line and color. He painted in his studio after careful experimentation and analyses. He attempted to select one moment and remove cluttering details in favor of simplicity and order. The proportion, optics and overall harmony were more critical than the subject or emotion. With his passion for construction, Seurat’s abstract method was a precursor to modern art and had a strong influence on the Cubists (Picasso). Other artists who adopted this style of painting were Paul Signac, Henri-Edmond Cross and Vlaho Bukovac.