

Expressing Gestures and Emotions: Use of Lines in Georges Seurat's Paintings

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Abstract

This study is an attempt to prove whether it is possible to express and perceive emotions by analyzing patterns and styles through the use of lines in drawing. Despite an unquestionable presence of colors in measuring emotional response, lines predominantly affect visual perception as a fundamental element of information transfer. In visual perception, lines not only convey information, but also derive emotional responses. From such a perspective, this study, as a fundamental analysis for measuring emotional responses to drawings, aims to concentrate on investigating lines rather than simultaneously coping with them. Earnestly interested in researching how various disciplines including science could help further awaken an artistic instinct, Georges Seurat (1859-1891), by employing lines, initiated an interdisciplinary experiment aimed at revealing emotion and gesticulation. Inspired by his strenuous attempt, this study strives to analyze the effective and rhythmical use of lines in Seurat's paintings, and compare the relationship between visual perception of lines and corresponding emotions.

Keywords: Line, Emotion, Gesture, Georges Seurat, Visual Perception

1. Introduction

Until the nineteenth century, artists mainly relied on lines to capture reality, and tried to transfer emotions revealed in facial expressions to canvas. Excluding the observer's subjective impression, artists put forth an earnest effort to reach reality per se and portray the 'undistorted' representation of the object. As a member of the Royal Academy, Charles Le Brun (1619-1690) established the canon of art, and set forth an inventory of 24 emotions in his *Expressions of the Passions of the Soul* in order for members of the academy to more precisely describe emotions and transfer knowledge thereof. With the emergence of modernism in the twentieth century however, new research trends—interests in individuality, a relentless tendency towards deconstruction of any previously held notions, and the advancement of diverse modes of artistic expression—dominantly evolved. For example, an attitude towards giving more emphasis to innovation in art education, instead of conventional classicism, exemplifies modernist aesthetics. Tracing the history of such artistic movements, this study aims to investigate Seurat's works and rediscover his pioneering role and significance to modern art.

Reputed as a talented neo-impressionist artist, Seurat, devising a new painting technique that integrated art and science, focused on the use of rhythmic lines in his three famous paintings: *Invitation to the Sideshow* (1888), *Le Chabut* (1889-1890), and his last audacious work titled *The Circus* (1890-1891). As opposed to the artistic conventions of his day, Seurat suggested that paintings be more than a visual media through which artists would express their emotions.

2. Georges Pierre Seurat and his Investigation of Theories of Lines

Pioneering the employment of scientific and aesthetic theories to artistic works, Georges Seurat investigated the relationship between visual perception and composition in drawing and painting.

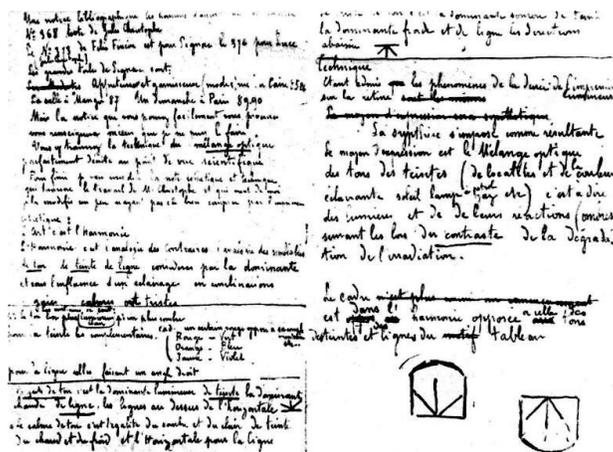
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Through his training at the academy where he studied classical principles and embraced new color theories, Seurat experimented in creating new effects and made himself the embodiment of neo-impressionism. His first work *A Sunday on La Grande Jatte* (1884-1886), which immediately captivated the attention of viewing audience, reveals his experimental spirit with a bold attempt at the use of pointillism, which presents an infinite number of colorful dots that create optical illusion effects.

After accepting physiological, psychological, and aesthetical views of lines, he focused on expressing gestures and emotions in his later work. Regarding the historical context in which the rising importance of viewers increasingly inspired and influenced artists in the latter half of the nineteenth century, Crary explains as follows:

“Much of the importance of Seurat’s neoimpressionism turns on the question of perceptual organization. With the collapse of the camera obscura model of vision and the emergence of physiological optics, it became increasingly clear that perception was not a matter of a relatively passive reception of an image of an exterior world, but that the makeup and capacities of an observer contributed to the making of perception (Crary, 2001, 155).”

Reflecting this context, Seurat explored the concepts of ‘dynamogeny’ and ‘inhibition.’ In addition, he investigated theories concerning directions, angles, and numbers of lines, and contrived three-line schemes with their corresponding emotions. In his 1890 letter to M. Beaubourg, Seurat, while presenting lines drawn in various directions, expounded that different angles of lines may have evoked specific emotions thereof (Figure 1).



Such efforts that he made to explore new concepts and theories materialized in the three paintings: *Invitation to the Sideshow* (1887-1888), *Le Chabut*(1889-1890), and his last yet unfinished work *The Circus* (1890-1891).

Figure 1 A Letter written by Georges Seurat to M. Beaubourg., Rewald, 1943.p.61.

3. Dynamogeny and Inhibition

As such, Seurat, with the aid of new concepts and theories of line, strived to establish the relationship between reception and perception of visual images and concocted new methods for transferring various forms of images to viewers. In the nineteenth century, physiological research invented the concepts of dynamogeny and inhibition, of which scientists, psychologists, and research theorists would extensively adapt to their respective field of study. Researching “the connection between sensation and reflex movements” in the nervous system, Charles-Edouard Brown-Sequard (1817-1894) disseminated the terms dynamogeny and inhibition, and mentioned that these two terms were “transformation or displacement of forces” (Crary, 2001, p.164). He considered dynamogeny as a type of “excitement,” while promoting inhibition to the rank of “privileged outside of any duality as an integrative force that prevented the dissolution of higher, organized mental functions by ‘inhibiting’ lower and instinctual processes.”

In his optical experiments using these concepts, Charles Fere (1852-1907) cast light on the physiological effects of dynamogenic and inhibitory power in relation to color. In the 1850s, the relationship between “sensation and motor behavior” was conceptualized through the notion that “sensory stimuli will produce a motor expression in a perceiver” (Crary, 2001, p.169).

After it became known that changing pressures and variables induce a wide range of reactions, psychological, aesthetic studies on dynamogeny and inhibition evolved in the 1870s. In *Aesthetics*, Eugene Veron (1825-1889) argued that “conditions of aesthetic pleasure” constitute movement of muscles, repetition, unity, and particular types of lines and colors (Veron, 1879, pp.37-43). William James—American philosopher, psychologist and physician—also indicated that dynamogenic forces are reciprocal, and interconnections are important parts of the nervous system (James, 1890, p.379). As such, distinguished scholars in the fields of physiology, psychology, and aesthetics advanced the concepts of dynamogeny and inhibition in the late nineteenth century. As “psychobiological principles,” dynamogeny and inhibition are in close relation with directions of lines (Kuehni, 1986, p.209). From this viewpoint, Charles Henry (1859-1926) argued that “upward-moving lines” present dynamogenic effects arousing such an emotion as joy, while “downwards-moving lines” tends to cause inhibitory effects strengthening such an emotion as sadness (Smith, 1977, p.144). In other words, Seurat understood the concept that directional changes of lines may elicit different feelings from perceivers accordingly.

4. Angles and Numbers

Charles Henry (1859-1926) proposed that directions as well as the numbers and angles of lines form a relation with perception and emotion. He believed that lines can be “rhythmic” according to the numbers of lines in use. According to his idea, even numbers of lines placed in an upward direction would signify a rhythmic or dynamic emotional state (Dutching, 2000). More specifically, using angles of 24, 30, 45, 60 and 72 degrees may contribute to arouse dynamogenic effects representing energetic and joyful atmosphere (Smith, 1997, p.143).

5. The Three Schemes and Corresponding Emotions

David Pierre Giottino Humbert de Superville (1770-1849) was an artist who studied art theories on the principles on and relationship between lines and corresponding emotions, devising his own three line schemes—expansive, horizontal, and convergent—that affect the fundamental emotions. He presented that these three schemes could express a certain type of emotions respectively, and employed them to sketching facial expressions in his drawings (De Superville, 1827, p.6). According to De Superville, the expansive diagonals signify a smile, while the convergent diagonals indicate sadness and shedding tears. Yet he did not give the horizontal lines a significance that the other two schemes had (De Superville, 1827, p.6). Elaborating his own ideas, De Superville included drawings and diagrams in *Essai sur les signes inconditionnels dans l'art*, heavily influencing Seurat's paintings (Figure 2).

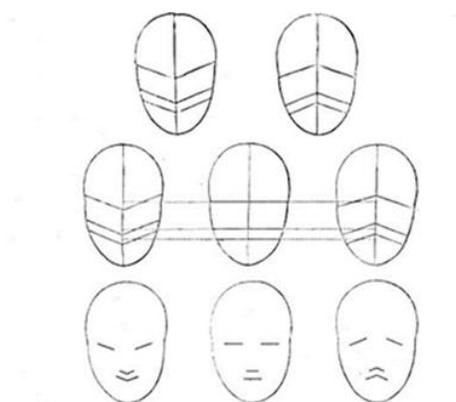


Figure 2 Three schemes of lines and emotions in facial expressions, De Superville, 1827, p. 6.

Including relevant colors to the three schemes, De Superville expanded the categories of each emotion. For example, the expansive lines express a sense of vacillation, agitation, and dispersion, and designate red as their analogous color; the exchange of horizontal and vertical lines represent a sense of balance, calmness, lightness, lucidity and order, and assign white as their analogous color; the convergent lines signify a sense of concentration, depth, meditation, darkness and ceremony, and has black as their analogous color (De Superville, 1827, p.23).

As such, he organized and theorized his ideas (Figure 3) of the three schemes, laying the foundation for expressing gestures and emotions not only in paintings and sculpture, but also in architecture (Figure 4).

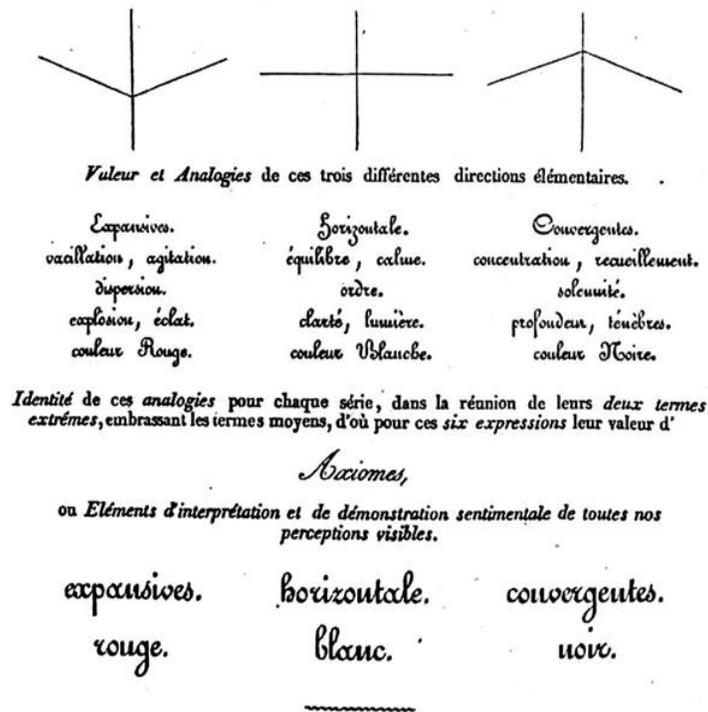


Figure 3 Three schemes of lines and corresponding emotions and colors, De Superville 1827.p.23.

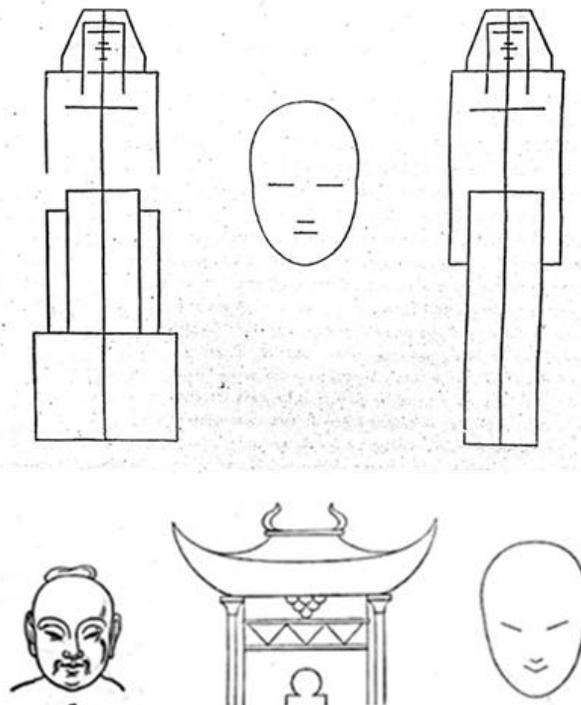


Figure 4 Application of three schemes in sculpture and architecture, De Superville,1827,p.34, p.47.

6. Seurat's Painting

In nineteenth-century Europe, the circus became the most popular form of entertainment, and attracted many painters seeking to portray the everyday lives around them. In a bustling city like Paris, people found new places to spend their leisure time such as fairgrounds, dance hall, and cinemas.

Reflecting these social-cultural transformations, *The Invitation to the Sideshow* presents a lively scene, full of music performances (Figure 5).



Figure 5 'Invitation to the Sideshow' by Georges Seurat, 1887-88, oil on canvas, 99.7cm by 149.9 cm, The Metropolitan Museum.

Despite the vibrant, sensational nature of the scene, its atmosphere exudes a sense of restriction. One of the reasons for this ambivalent coexistence of contrasting sensations may be found in the rigidity of geometrical composition, which makes the scene appear flat and two-dimensional. More specifically, the vertical lines in the painting divide the scene into three sections, with the right one being subdivided into three smaller parts; the same vertical line reveals the shape of the trombone; the horizontal lines in the middle, on the other hand, stretch themselves through the music stand, balustrade, and platform on which the trombone player stands. This overall composition, by and large, imposes "striated" psychological constraints on viewers (Crary 2001, 209). Such an approach reminds us of De Superville's theory that the exchange between vertical and horizontal lines begets order and creates a hard, solemn, and rigid ambience.

Compared to straight lines adopted in *Invitation to the Sideshow*, *Le Chabut* (1880-1890) employs curved lines and expansive diagonals that boldly project the dancers and contrabass player (Figure 6). With the upward-moving lines forming musical instruments, the short expansive diagonals drawn parallel to one another rivet the viewer's attention to the dancers' right legs. From a different angle, other pairs of upward diagonals allow viewers' eyes to travel from decorations on shoes, to leaves on the flower, and to the ceiling lights. Together, these lines express the gestures and actions presented in the scene, which convey lively, festive moods. According to Charles Henry's theoretical framework, expansive diagonals, when "correspond[ing] to even numbers" promote a dynamic, bustling atmosphere, given that even numbers themselves are "rhythmic" (Dutching, 2000, p.63). In the same vein, Seurat's adoption of lines at various angles embodies brisk gestures and animated emotions.

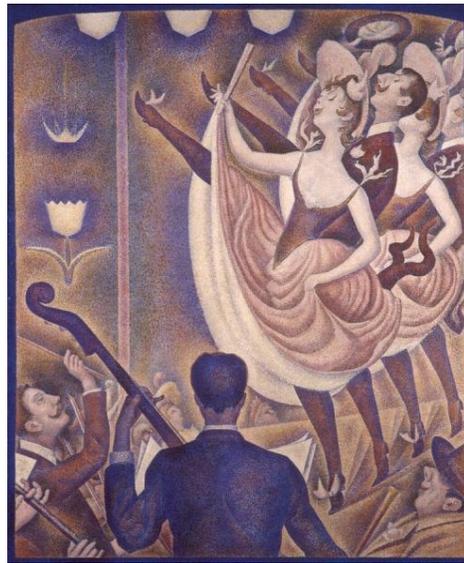


Figure 6 'Le Chahut' by Georges Seurat, 1889-90, oil on canvas, 170cm by 141cm, Kröller-Müller Museum.

As Henry and De Superville discussed, Seurat's attempt to use upward-moving lines aimed at promoting dynamogenic effects. Yet, what a viewer perceives is not a "natural pleasure" but "artificially heightened thrill of performances" (Dutching 2000, 63). With the aid of artificially heightened lines, the painted scene renders unnatural, man-made features such as thick lips, sharp eyes, and exaggerated mustaches. Moreover, the extent to which the dancers lift their skirts and right leg reveals the same artificiality.

In his last but unfinished work, Seurat mingled previously held concepts and eclectically used several line theories (Figure 7). Unlike his two previous paintings, the viewing audience could easily sense the liveliness that dominates the atmosphere and pleasantly uplifts emotions on the scene, due to the presence of rhythmical—upward-moving and curved—lines, which recalls viewers' past experience of watching circus performances. Accustomed to the Parisian culture of his day, Seurat detailed the clown, dancers, and ring masters' movement usually seen through the favorite pastime to people.

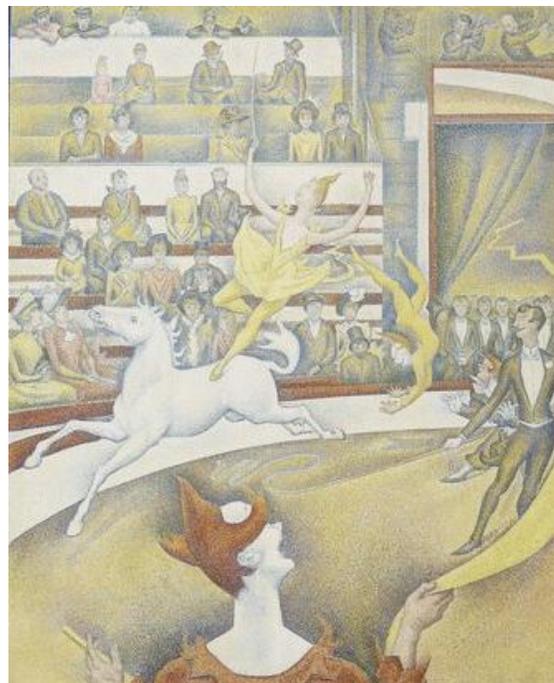


Figure 7 'The Circus' by Georges Seurat, 1890-91, oil on canvas, 185cm by 152cm, Musée d'Orsay.

With a division between the seating areas and the stage, the configuration of the scene exudes a sense of spatial depth. In describing the audience with respect to different social classes, Seurat mostly relied on horizontal lines in order to establish a divisive compositional structure of the seats in which class distinctions manifested themselves. As De Superville argues, such a repetitive use of horizontal lines enhances the spatial rigidity and strengthens the orderliness of the scene.

Contrarily to the prevalent rigidity and orderliness, curves and upward-moving lines, in addition to dynamic tensions created by the stylized arabesques, set the circus stage in the opposite senses with the objects as follows: “zigzag lines for a yellow ribbon fluttering behind the dancer, a band which looks like lighting at the entrance to the ring, and the trainer’s snaking whip emphasizing the speed, rhythms, and dynamic gesture”(Dutching, 2000, p.70). Consequently, a variety of lines arouse a sense of excitement and give vitality to people’s movements on the scene, drawing jubilation from viewers through dynamogenic effects.

7. Conclusion

Answering whether lines can convey and express emotions, this study has analyzed Seurat’s effective use of three different schematic lines—straight or curved—as part of his attempts to create rhythmic lines with which to express various emotions and gesticulations. Through exploring various conceptual and theoretical frameworks in relation to the use of line and its physical, psychological, and emotional effects in painting, this study has illustrated how lines convey a wide range of emotional atmosphere.

As an initiative that lays the foundation for research of visual perception and corresponding emotions, this study considers lines as the most fundamental part of visual and emotional information. Yet, since elements of a painting may include not only line but also many others—such as color, tone, texture, space, form, and shape—future studies should take them into consideration and accordingly prove the relationship between visual perception and emotional responses. Broadening the scope of research beyond Seurat’s works, future studies also need to trace the origin, birth, and development of emotional expressions and gesticulations that reveal themselves through lines. Thus, they need to expand the chronological frameworks to include the earlier periods in the nineteenth century or the modernist era.

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