

WIPO MAGAZINE

The Art of Binocular Perspective

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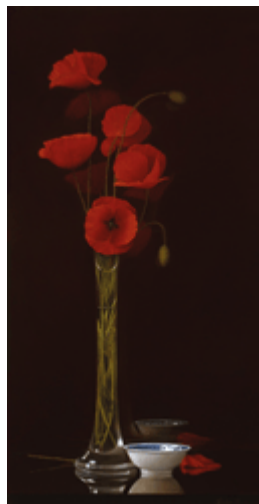
Every year artists from around the world display their works at the headquarters of the World Intellectual Property Organization (WIPO) in Geneva, Switzerland. These colorful and varied exhibitions offer a glimpse of the depth and breadth of creative talent that exists within WIPO's 184 member states. Earlier this year, the program featured the striking still life paintings of Swiss artist Albert Sauteur. WIPO Magazine met with the artist to find out more about his novel technique.

Mr. Sauteur's art reveals a remarkable realism that invites the viewer to take a fresh look at the objects he presents – a bowl and a withered leaf, a juicy apple and a violin, a clove of garlic beside a cooking pot. Far from "still", his works emit a singular energy and capture the life and quintessential character of the objects he paints.

A hallmark of the artist's work is the juxtaposition of organic and inorganic objects, bringing each object into relief and infusing it with an arresting and palpable physicality. "By using contrasting quantities and colors, it is possible to create an interesting interplay between the objects and to give life to my paintings," he notes.

What is so different about Albert Sauteur's approach? His technique is revolutionary and sheds new light on our understanding of how the human eye perceives and reconstitutes three-dimensional visual space. In his work, he strives to capture on canvas the world as seen through human eyes.

Binocular vision



Poppies and Porcelaine,
2004. Oil on canvas.

Since the discovery of perspective over 500 years ago, artists seeking to capture a model or a scene typically close one eye to reconstitute an image and proportion the elements of the painting appropriately. The resulting image, so the theory goes, presents a single vanishing point towards which the lines of the work converge on the horizon – something along the lines of two parallel train tracks converging in the distance.

Mr. Sauteur's keen eye, unflinching tenacity and perfectionism, however, led him to call this received wisdom into question. He observed that what an artist sees with one eye differs greatly from that seen with both. "When you close one eye you lose the richness of reality," he notes. He also realized that the established rules of linear perspective did not take into account the fact that works of art and the models and scenes they depict are, in fact, perceived with both eyes. He concluded that the accepted understanding of linear perspective is an oversimplification of reality.

Mr. Sauteur realized that the vanishing points in works of art are not unidirectional but multidirectional – convergent, divergent, cross-cutting and parallel. “I paint things as I see them with both eyes open, but when I come across an anomaly – a line that does not follow the traditional theory, then I have to explain it. This enables me to refine the technique,” he notes. “This involves many sleepless nights, and a great deal of research; it is a painstaking process that calls for a lot of energy and concentration,” he confided. On the basis of his observations, Albert Sauteur has developed a new geometry that enables him to capture on canvas the three-dimensional nature of space.

By breaking with tradition and taking a fresh look at life, Mr. Sauteur has found a way to produce works of still life brimming with energy.

Binocular vision explained

Healthy binocular vision is part of normal human vision, contrary to a camera which has just one lens. Binocular vision produces important perceptual visual effects that reveal an object’s volume and depth.

When both eyes work together and focus simultaneously on the same target, each takes a unique view of the object from its own perspective. These two images are sent to the brain where they are superimposed to become three-dimensional with added depth.

Mr. Sauteur noticed that each eye has its own vanishing point but that blurring occurs when an image is viewed by both eyes simultaneously. This, he notes, engenders a third vanishing point that is common to both eyes and fluctuates according to the depth of vision. This is what Mr. Sauteur paints with such precision. “What fascinates me and what I want to reveal to the world is this infinitely rich depth,” he said.

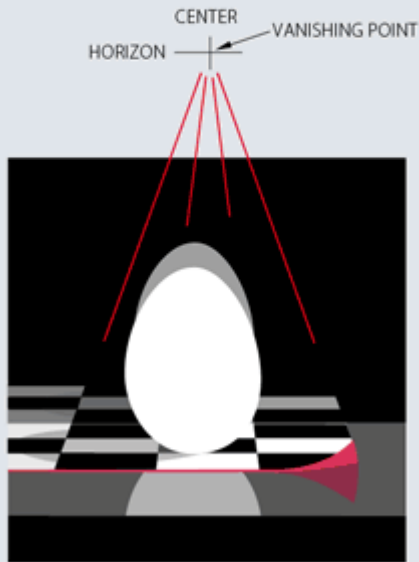
The effects of this revelation are quite surprising – straight lines appear broken, billiard balls which are rigorously spherical become oval, and so on.

In his quest to capture objects as they really are, Mr. Sauteur has found a way to represent artistically what humans actually see.

In sum, he represents on canvas the process the brain automatically undertakes in someone with healthy binocular vision. In the same painting, he portrays the object each eye perceives before their fusion into a unique image. By creating a mirror effect and through careful use of shading he harnesses the visual depth of things as they appear in reality.

Traditional perspective

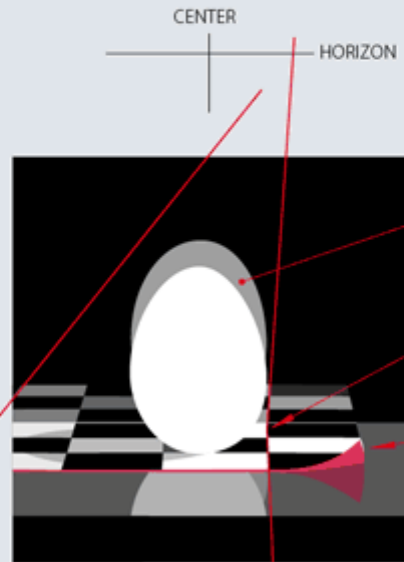
In the silence of his studio, Mr. Sauteur realized that the image constructed in this way does not correspond to the way people visualize it



The vanishing point at the edge of the square, which does not appear when using one eye, crosses the center of the canvas.

Binocular perspective

Mr. Sauteur's approach produces some surprising effects



The egg's reflection does not have the same form as the egg that creates it.

The line is broken

The overlap of the white square, which does not appear when using one eye, creates a specific blurring.

This line, after it is broken, diverges from the center.

The artist recounted the story of a young diplomat who was visibly moved when she realized she suffered from a binocular visual impairment and observed, "looking at this picture, I am seeing for the first time what my friends see."

What Mr. Sauteur has achieved on canvas is akin to what filmmakers accomplish when making a 3-D movie. If you take off your glasses during a 3-D movie, you will have noticed that the images on the screen are somewhat blurred. This is because these movies use binocular vision by forcing the viewer to see two images created from slightly different positions or points of view.



Madeleine and Steinway. While working on this canvas the artist identified for the first time, thanks to its network of lines, the third vanishing

point which characterizes the binocular perspective the at has progressively adopted.

Painting and drawing have been Mr. Sauteur's lifelong passion, although it was not until later in life that he became a full-time artist. He began life as a farm boy and then, more by necessity than choice, he became an apprentice precision engineer – training which, given the painstaking detail of his work, stood him in good stead for the future. He then turned to teaching, but still had a burning passion for art. He knew he had to paint. Sorely disappointed with his formal arts course, he decided to pursue his own path in search of perfection and beauty. He set about understanding the mechanics of painting and sought to resolve the many questions that filled his mind. An exhibition at WIPO which works to support artists' rights was, in Mr. Sauteur's opinion, a fitting venue to celebrate his work and everything it represents.

His untiring efforts produced dividends and brought with them a revolutionary new insight, namely, that "if you want to fix reality, you need to adopt the binocular perspective." "This is the only way to represent reality artistically; it's the only way to breathe life into a work," he mused. "When you close an eye you lose the richness of reality."

"The more you paint the image of life the more emotional a work becomes," he explained, referring to the story of Proust and the Madeleine, which inspired the canvas that was to reveal the secret of binocular perspective to him.

Such is the mastery of Mr. Sauteur's technique, and his attention to detail, that a violin-maker was able to view his works and spot the difference between the depiction of an instrument costing CHF3,000 and another valued at CHF300,000.

In his quest to understand and subsequently explain the binocular perspective – each of his works is, in fact, an explanation of his theory - Mr. Sauteur has built a series of apparatus that travel with him and his roving studio. "It is hard to go against an established idea" he sighed, "and it is very difficult for people to understand that the established wisdom of the last 500 years is false. That is why I use different apparatus so that members of the public can experience firsthand what I am talking about."

For Mr. Sauteur, his art is a "tainted pleasure". He notes, "thought flies but words move slowly. It's fascinating to have a model in place, but executing it is very hard." He adds, "every painting has a life of its own, each still life model has infinite possibilities and the process of fixing these in a painting reveals some amazing and fascinating details". By the time it is completed, I know it by heart, and this gives me the freedom to redirect my energy to refining the work to bring out its full richness and depth.

Albert Sauteur's paintings not only capture the physical reality of objects as seen by humans, they also harness their spirit and essence. As one commentator wrote, "he puts daily objects side by side in a way that destabilizes the conventional images of reality." The apparent lack of connection between the objects represented calls out, drawing us into a different universe.

Quietly provocative, Albert Sauteur's work offers a "lightly transformed vision" of the familiar, infusing it with a powerful and seductive energy that is fascinating