

Cataract and chromatic expression in Monet's work

Catarata e a expressão cromática na obra de Monet

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ABSTRACT

Due to the ocular disease, Monet's work was analyzed by multiple facets, including the reflection of the deterioration of his vision in his works, reason for this work of revision. With reference to this panorama, it is proposed here to think, by means of some remarkable works of the biography of Monet, the ocular cataract disease and the paper of this in the history of this painter's life.

Keywords: Cataract; Color vision; Vision, ocular; Monet

RESUMO

Por conta de uma doença ocular, a obra de Monet foi analisada por múltiplas facetas, incluindo o reflexo da deterioração de sua visão nos seus trabalhos, motivo deste trabalho de revisão. Tendo como referência este panorama, propõe-se aqui pensar, por meio de algumas obras marcantes da biografia de Monet, a doença ocular catarata e o seu papel na história de vida deste pintor.

Descritores: Catarata; Visão de cores; Visão ocular; Monet

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INTRODUCTION

The term impressionism arose from one of Monet's earliest paintings "Impression, Sunrise" (Painting 1) from a critique of the painting made by painter and writer Louis Leroy: "Impression, Sunrise" - I was certain of it. I was just telling myself that, since I was impressed, there had to be some impression in it. End what freedom, what ease of workmanship! Wallpaper in its embryonic state is more finished than that seascape.⁽¹⁾



Painting 1: Impression: Sunrise. Claude Monet, 1872. Oil on canvas, 48x63cm.

The term impressionism arose from one of Monet's earliest paintings "Impression, Sunrise" (Painting 1) from a critique of the painting made by painter and writer Louis Leroy: "Impression, Sunrise" - I was certain of it. I was just telling myself that, since I was impressed, there had to be some impression in it. End what freedom, what ease of workmanship! Wallpaper in its embryonic state is more finished than that seascape.⁽¹⁾

The expression was originally used in a derogatory way, but Monet and his colleagues adopted the title, coining the term impressionism for an entirely new artistic movement, a revolution in painting.⁽²⁾

Painting in the second half of the nineteenth century (Impressionism) was able to capture new spatial perceptions very well, and therefore create other visual representations for this "new" world. Medieval artists had not yet acquired perspective, and in the second half of the nineteenth century painters began to refuse it, so the rules of perspective were somehow overturned, thereby creating spatial distortions.⁽³⁾

With the changes in the conception of space and time, these artists allowed people to start understanding space in a different way from what they knew so far. Without any scientific knowledge, artists had anticipated the reality notion that relativity would bring, and therefore were not understood by the public and critics. Many critics of the time admired the new style, but many others ridiculed the new ideas.⁽³⁾

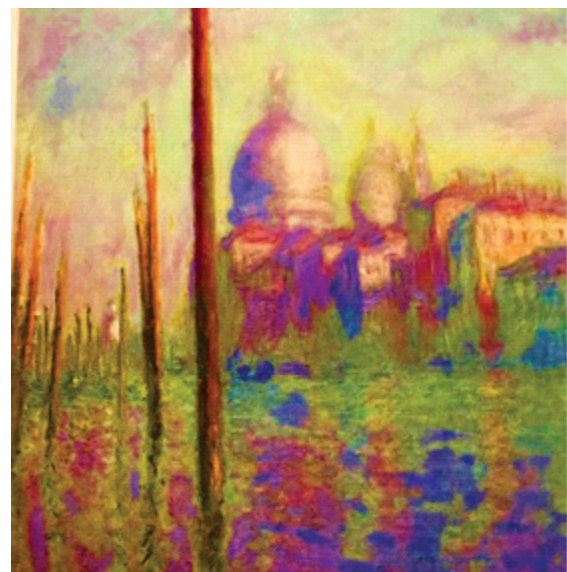
Following a different line, Claude Monet worked the diversity of time in his paintings. He believed that in order to recreate the essence of objects he could not paint them only in a static moment. It was necessary to show how the object would change in time.⁽³⁾

Monet's technique - later considered one of the most beautiful in the world - was quite peculiar. It was characterized by the representation of light and movement using loose brushstrokes, and the images formed on canvas seem to be only blurs at close range, but as the viewer moves away, they can clearly see the shapes.⁽⁴⁾

Monet had no idea that due to an eye disease the "impression" of style he created would faithfully reflect into his life.⁽⁴⁾

DISCUSSION

This is a literature review study in the narrative review modality. The search was conducted at BVS-BIREME (Biblioteca Virtual de Saúde), the electronic database LILACS (Literatura Latino-Americana e do Caribe em Ciências da Saúde), the portal of CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior), on Google Scholar, and books on the work of Claude Monet and the Impressionists. The literature review traditionally known as narrative review has a descriptive-discursive character, characterized by the wide presentation and discussion of topics of scientific interest. The search was carried out in the second semester of 2017. Most of the articles selected are indexed from PubMed, ScienceDirect, and SciELO databases, and in LILACS and CAPES from the descriptors "Monet" and "cataract" without temporal delimitation. As inclusion criteria, we considered full articles published in a national journal and blog, and part of the references is from books. From the previous reading of the titles and abstracts, we selected the articles addressing the study subject, and used the articles and books published in the English and Portuguese languages addressing Monet. The 36 publications identified were included according to the criteria adopted in the present study. After reading the results, we found that only 13 articles were of interest to the proposed study object.



Painting 2: Le Grand Canal et Santa Maria della Salute. Claude Monet, 1908.



Painting 3: Twilight in Venice, 1908.

The present narrative review paper addresses two important issues in understanding Monet's eye disease: the colors seen by sick eyes, and the shape alterations resulting from the disease.

In 1908 Monet realized that he could no longer see perfectly. The earliest signs of the disease are found in the Venetian paintings of the same year, where it is noted that he begins to paint predominantly ochre paintings (Paintings 2 and 3), with the colors blue and violet that he used to like so much being in the background.⁽⁵⁾

His dissatisfaction with these works caused him to destroy several of them.⁽⁶⁾

In 1912, at age 72, he sought out experts reporting a huge amount of problems with his sight. He complained predominantly of blurred vision and difficulty in color perception. Having found a visual acuity of 20/200 in the best eye, he was diagnosed with bilateral nuclear cataract.⁽⁴⁾

Cataract is the most common cause of reversible blindness in the world, accounting for 40% of the 45 million cases of this visual impairment. It is defined by the presence of crystalline opacity which may be congenital or acquired, thus being associated with senility. The prevalence increases by 50% in the age group of 65 to 74 years, and above 75 years it increases by 75%.⁽⁷⁾

Acquired "nuclear" cataract is the most associated with the loss of color differentiation in the early stages. As the crystalline becomes opaque, vision becomes slowly and progressively blurred, and a loss of definition of letters and objects arises. Over time, increased opalescence of the crystalline worsens the visual blurring, and the patient then has difficulty seeing near and far. In addition to changing color vision, images are often "cloudy and blurry".⁽⁷⁾

The illness may have affected Monet because of the many hours his eyes were exposed to the sun. Ultraviolet radiation (UVA and UVB) is known to be a classic risk factor for cataract due to photo-oxidative stress, only losing importance in advanced age.^(6,8,9)

Monet painted outdoors, preferably at noon, since representing the sunlight effect on nature is an important feature of impressionism. He painted the same scene over and over in the same position, but at different hours and brightness, so could vary from different hours on the same day to different times of the year. It is a new concept of a close connection between space and time, and the emergence of a broad dimension. Thanks to this feature, the progression of his disease could be studied.⁽³⁾

As a treatment, surgery for the worst eye was prescribed, but although the surgery was relatively safe at that time, Monet resisted due to fear of completely losing what he had left of his vision (something that happened to a friend who underwent the same surgery).⁽⁴⁾

One of the first symptoms of cataract is the feeling of progressive loss of visual quality. At times, the vision becomes blurred, and often people need more light to see better, but even with glasses the vision remains blurred. There is also chromatological alteration with change of refraction and progressive modification of contrasts, alteration of spatial and details perception. Cataract acts as a yellow filter to enhance soft colors such as ochre and brown, and also preventing seeing colors such as blue and violet. As the disease progresses, a white or yellowish spot may be noticed in the center of the pupil, the dark part of the eye. Despite the classic symptoms, it is very difficult for the layman to identify cataract in the early stages. The visual loss is progressive, and of variable speed. There is no way to stop this process. It can be detected with regular appointments with the ophthalmologist. Generally, the patient only begins to perceive it in later stages.^(5,10,11)

The only cure for cataract is surgery, which consists of replacing the opaque crystalline with a prosthesis called intraocular lens. Surgery will be indicated whenever the patient with cataract has altered their quality of life and has difficulty performing their usual daily tasks. Cataract surgery is called facemectomy, and can be performed by several techniques or methods, with the best known being phacoemulsification and programmed extracapsular extraction, and both techniques require the use of a surgical microscope. After technical evaluations, it was observed that phacoemulsification is safer, with fewer complications, and visual recovery is almost immediate, besides being early indicated.⁽¹²⁾



Painting 4: Japanese bridge from his garden in Giverny, 1889.



Painting 5: Japanese bridge from his garden in Giverny, 1918.



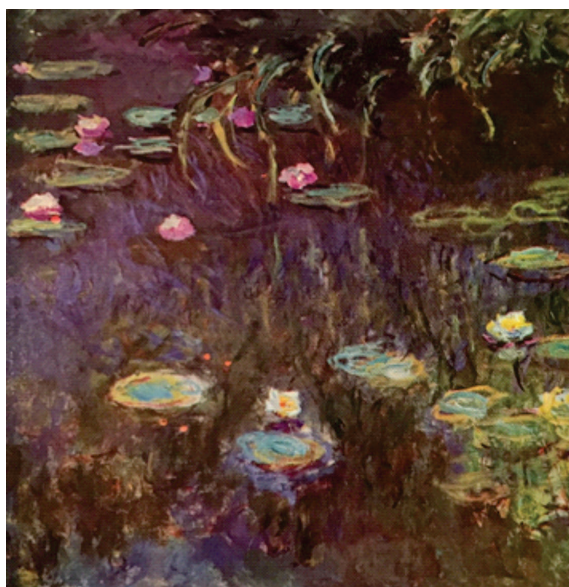
Painting 8: The Water Lilies in Giverny, 1917.



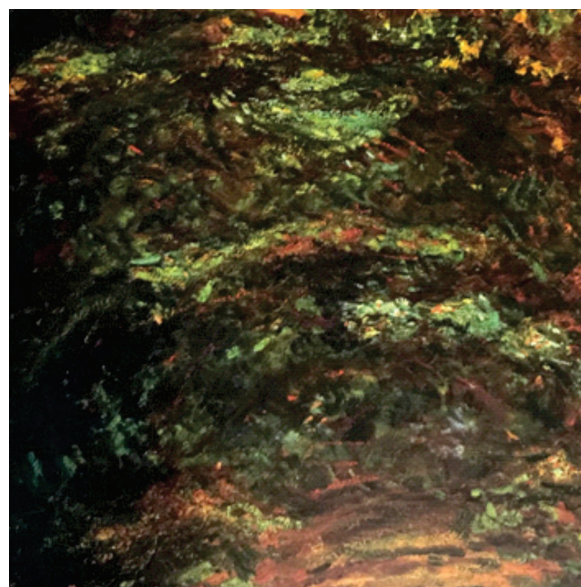
Painting 6: Water Lilies, Water Landscape, the Clouds, 1903.



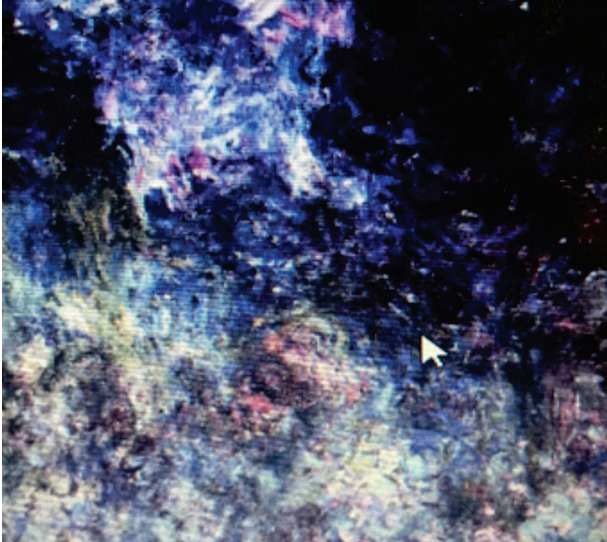
Painting 9: Path in the Artist's Garden, 1901.



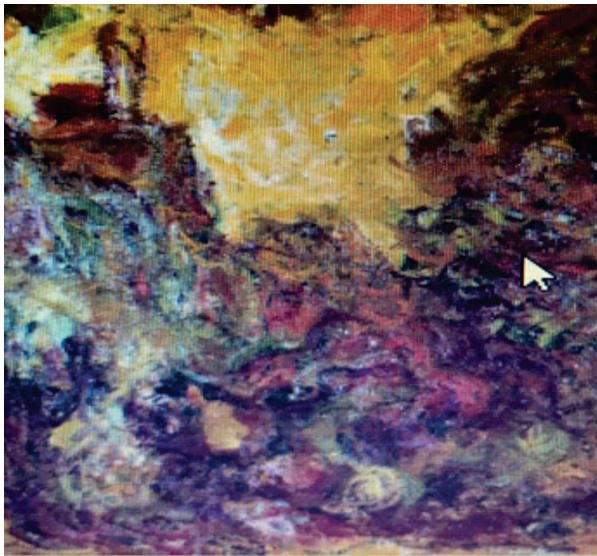
Painting 7: Water lilies, 1907.



Painting 10: The Rose Path in the Artist's Garden, 1920.



Painting 11: Painting of the Flower Garden with the right eye.



Painting 12: Painting of the Flower Garden with the left eye.

In 1918 Monet writes a letter to Georges Clemenceau, the Prime Minister of France at the time, explaining his difficulty in perceiving colors with the same intensity. He tells that the red color seems blurry, as if it were pink, and reports that he can't see intermediate shades. He describes that when he compares the current paintings with the old ones (Paintings 4 to 10), he wants to stab them with a razor.⁽⁵⁾

By 1920 his vision deteriorates severely and he is no longer able to distinguish shades, and in order to continue painting with no errors he creates a palette with a regular order of colors. He could only see traces, and painted the images he had in his memory.⁽¹³⁾

In September 1922, Monet is depressed and sees Dr. Carlos Coutela who prescribes surgical treatment of his right eye. However, Monet, Monet refuses to undergo surgery, although it was a relatively safe procedure at the time, for fear of losing all that was left of his sight, exactly as happened to a friend of him.

He only accepts one non-surgical solution: instill mydriatic eye drops to enlarge the pupil and improve opacity. However, this treatment was a failure.⁽⁶⁾

In January 1923, Clemenceau convinces him to operate his right eye, a surgery that is performed in two stages. On January 10 an iridectomy is performed, and on January 31 the extracapsular cataract is extracted. Postoperatively, Monet was in absolute rest for 10 days, and returned to Giverny with glasses prescription.⁽⁶⁾

After surgery, however, posterior capsule opacification occurred, a common complication after cataract surgery, which greatly disappointed Monet.⁽⁶⁾

Monet had great difficulty adapting. He could not see with both eyes at the same time and complained that the objects had acquired an abnormal curvature.

I feel like falling if I take a step. Near or far, everything is deformed and dubious. Seeing this way is intolerable. Persisting seems dangerous to me. If I were to see nature as I see it now, I would rather remain blind and keep the memories of the beauties I have always seen.⁽⁴⁾

Monet also complained about the marked difference between the color perception between the eyes, saying that everything he saw with his aphakic eye had turned a blue (cyanopsia), and with the unoperated eye he saw brownish-yellow. These visual alterations had a profound effect on Monet's late art color palette.⁽¹⁴⁾

Later, glasses with a green-yellow shade were prescribed to him, which relieved his despair. Monet did not want to operate the left eye.⁽²⁾

COMMENTS

Monet's art focused on capturing the effects of color and light on the environment. His visual deterioration was probably accelerated by his insistence on outdoor painting.

The works of Claude Monet after 1908, when cataract is definitively and devastatingly installed, have a predominance of yellow, brown, vibrant colors, and also a clear and continuous process of blurred vision, with blurry, misshapen paintings.

There is also a clear color change that occurred after the late surgical intervention, with a clear difference in color perception by the artist in both eyes, the operated right eye and the left one, which he refused to operate (Paintings 11 and 12).

There is no doubt about his diagnosis, nor that his work eternally portrays the visual effects of untreated cataract in the elderly patient.

The importance of the doctor/patient relation based on the trust and safety in the diagnosis and treatment proposed should be emphasized because this was an obstacle in the surgical treatment of Monet's cataract, bringing irreversible complications to his vision and deep marks to his work.

Monet died in December 1926 from chronic obstructive disease and lung cancer.

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