

Out of Hours

Munch's visions from within the eye

The Norwegian artist Edvard Munch (1863–1944) has become synonymous with *The Scream*, one of the most famous and haunting paintings of expressionist art. Munch owed much of his success to the German ophthalmologist Dr Max Linde, who came from a family of artists and who also befriended the sculptor Auguste Rodin and Max Liebermann, the German impressionist. Linde had a great interest in art and in 1896 published an article on the advantages of myopia in painters in the art magazine *Das Atelier*.¹ His wife's fortune meant that he was in a position to indulge his passion and ultimately accumulated one of Europe's most important private collections of contemporary art.

When Munch was still a novice in 1902, Linde was one of the first to recognise his extraordinary talent. As soon as the two had met, Linde published a pamphlet with the title *Edvard Munch und die Kunst der Zukunft* ('Edvard Munch and the Art of the Future'). According to Linde, French Impressionism had run its course and it was time for art to delve deeper to reflect man's inner conflict in modern times. He would describe Munch as 'a fine interpreter of the human soul, a Hamlet figure who likes to brood and ponder'.¹

There is little documentation regarding Munch's general health, but we know that he abused alcohol and was prone to severe mood swings. He suffered from poor vision in his left eye, which may have resulted from amblyopia or injuries he had sustained in a fight in 1904.² In any event, the weakness of the left eye did not interfere with his work until 1930, when, aged 67, he suffered from a right vitreous haemorrhage.³⁻⁴

Strangely, Munch never corresponded with his patron and friend Linde about his visual problems, but instead sought advice from Professor Johan Raeder,¹ an eminent Norwegian ophthalmologist, who later described Raeder's paratrigeminal syndrome.⁵ Although all medical records are lost, we still have Raeder's note that he gave to his patient to ward off potential visitors:

'Herr painter Edvard Munch suffers from an acute eye disease caused by a long-standing over-exertion. He needs complete bodily and mental rest for a long period of time. Any disturbance, oral, written, by

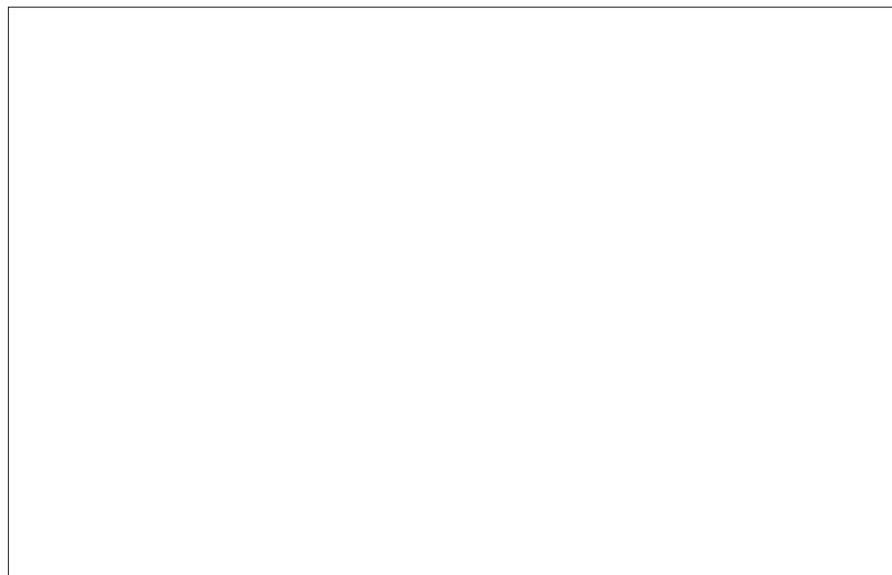


Figure 1. Munch, 'Watercolour and Pencil', 1930. The artist portrays himself in bed, testing his vision in the right eye while covering his left one with his hand. The scotoma of the residual right vitreous haemorrhage looms as Death's head at the end of the bed.² Credit: Edvard Munch: The Artist with a Skull: Optical Illusion from the Eye Disease 1930. Watercolour and pencil on paper. MunchMuseum, Oslo. MM T 2157. This image has been cropped.

telephone or by telegraph, is to be entirely avoided.²

Munch was naturally terrified by his loss of vision, which would further impact on his already gloomy outlook on life. Munch's right eye gradually recovered and 3 months after the initial event, he started to make drawings documenting the vitreous clouds in his right eye by covering his left one (Figure 1). Apart from black spots which followed his eye movements, he further described a 'bird's head', probably corresponding to the 'Weiss' Ring' of the (alleged) vitreous detachment.¹ Initially Munch described the bird's body as 'heavy', but as the vitreous haemorrhage was slowly reabsorbed and shrank, so did the bird, which gradually moved out of the centre into the upper visual field (Figures 2–4).^{1,4,6}

Munch followed his visual recovery almost obsessively, and with clinical detail. Some of his sketches of the shadows and scotomata in his right eye are annotated with the exact viewing distance between his eye and the paper, including the conditions under which the observations were made. His most innovative and ingenious idea was to superimpose a grid of lines over some of his drawings to precisely document

the extent of his scotoma, and to help him monitor its improvement.⁴ Whether the idea to use a grid was Munch's or Raeder's we do not know. Nonetheless, it is noteworthy as it preceded the publication of Amsler's grids by 17 years.⁷ Munch's right vitreous haemorrhage eventually cleared entirely and he continued to work, almost until his death.

The question remains as to what caused Munch's haemorrhage. Eight years after the haemorrhage in the right eye, Munch suffered from the same problem in his left eye. In a letter dated March, 1938 Raeder documents:

'There now has occurred a similar condition in his left eye, so that he is now threatened with complete blindness in both eyes'.⁴

Raeder's observation, that is, that the artist was now at the verge of going blind, is puzzling, as it suggests further deterioration in the right eye after recovery from the vitreous haemorrhage in 1930. This in turn has been interpreted as a sign of an underlying systemic disease that predisposed Munch to ocular haemorrhage.⁴ However there is no evidence for this. Many potential diagnoses have been suggested including retinal haemorrhage

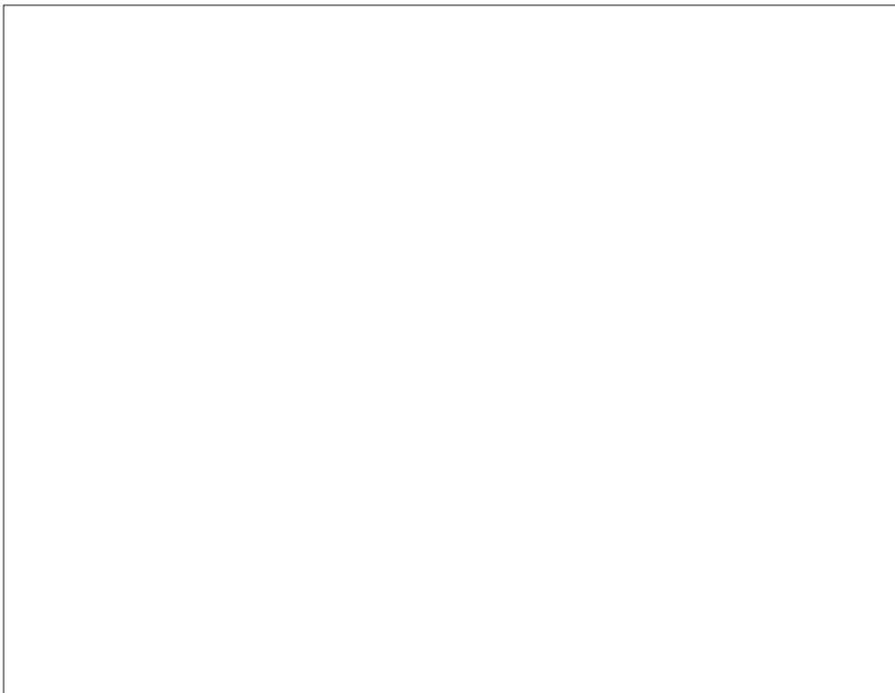


Figure 2. Sketches showing the wispy, fibrillar shadow that he observed as the dense scotoma from his right vitreous haemorrhage began to clear. Realistic representation of the floater.⁴ Credit: Edvard Munch: The Artist's Damaged Eye 1930. Watercolour, India ink and crayon on paper. MunchMuseum, Oslo. MM T 2167.



Figure 3. Transformation of the floater into a bird's head figure. Edvard Munch: The Artist's Damaged Eye 1930. Crayon on paper. MunchMuseum, Oslo. MM T 2138.

with macular oedema and breakthrough bleeding into the vitreous, posterior vitreous detachment, branch retinal vein occlusion with neovascularisation, and vascular abnormalities such as a macular aneurysm.^{1,2,4}

Vitreous haemorrhage from a retinal tear or rhegmatogenous retinal detachment seems doubtful, given the spontaneous recovery. Diabetic retinopathy



Figure 4. Sketch of the bird's head scotoma showing the letters 'AP' within the open beak. Edvard Munch: The Artist's Damaged Eye 1930. India ink on paper. MunchMuseum, Oslo. MM T 2136.

is also implausible; if Munch had developed diabetic proliferative changes in 1930, he would not have survived until 1944.

Given the history of floaters ('dark spots which show up like small flocks of crows far up when I look at the sky') it seems most likely that Munch suffered from a haemorrhagic vitreous detachment first in the right and later in the left eye.²

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The crucial aspect of Munch's pathology for us as clinicians is, that:

'... we can recognize in his sketches not only the characteristics of floaters and ocular haemorrhage, but his efforts to document and measure the impact of his disease'.⁴

One may, indeed, say that Munch allowed us a view of the visions inside his eye.

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The images for Figures 1–4 are displayed in the print version only

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