

THE CLAUDE LORRAINE GLASS

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This paper examines the use of the optical device known as the "Claude Lorraine Glass" and its use by landscape artists in order to convey a relatively wide-angled view on to a small scale surface, and to thus allow the various tones to acquire unity, without totally suppressing all the detail.

In hierdie artikel word ondersoek ingestel na die gebruik van die optiese apparaat bekend as die "Claude Lorraine-spieël", en die gebruik daarvan deur landskapskilders om betreklik wye uitsigte op 'n klein oppervlak weer te gee, sodat die verskillende tone 'n eenheid aanneem sonder om al die detail te laat vervaag.

It is difficult to think of a more surprising source for art history than a detective novel – a detective novel, moreover, written by a writer residing in the USA, about life in – of all unlikely places – an English village.

It appears that the writer of the detective story in question, Martha Grimes, who lives in Washington DC, makes regular trips to England to research material for her mystery novels. These novels usually feature a police inspector bearing the appropriate name of Richard Jury. One of the claims her publisher makes for her books, which attempt to be in the style of Agatha Christie, but are arguably pale imitations, is that they are carefully researched.

The particular story which revealed to me the surprising piece of art history is entitled *The old contemptibles*. It deals with a mysterious murder that takes place in a village in the Lake District. The case is solved when Inspector Jury discovers that a landscape sketch of the scene of the murder had been painted by a local artist using a "Claude Glass". A careful examination of the painting points clearly to the murderer. Because the use of the Claude Glass necessitates the artist having his, or her, back to the scene being painted, the artist in the case missed seeing the actual murderer.

The passage in *The old contemptibles* which stimulated my interest in this optical device, reads as follows:

"That's right. Six years ago you knew about her planned walk up Scarfell. You knew she'd always been determined to cross over by way of Broad Stand. You got up there before Virginia. But when you discovered Francis Fellowes had come along behind her – after you'd shoved her off – that must have unnerved even you, Dr Viner. There was no way down except past Francis."

She said nothing. Jury waited. Her curiosity would force her to speak.

"Police questioned Francis because no one else could possibly have been up there,

unless of course, it might have been an expert climber. Which I am not."

"You were there; Francis painted you into her picture."

She laughed. "Oh, my God! He couldn't have seen "

It was the smallest slip. "Seen you'? Why? Because he had his back turned? Because you were hiding in that crevice called Fat Man's Agony?"

"No. He couldn't have seen me because I wasn't there."

Jury tossed the leather pouch on the desk.

"What's this? She picked it up, opened it.

"A Claude Glass."

"And ? Her smile was tilted. She tapped the ash from her cigarette.

"And he painted the scene behind him." Jury nodded towards the little mirror. "That's why painters of picturesque used a Claude Glass. Fellowes painted the crevice in that rock face" (Grimes 1991: 395).

After I read this passage I was intrigued because, although I thought I knew about most optical devices used by artists – a subject that has always interested me – I never heard of this Claude Glass. I then wrote to several art galleries and museums in South Africa asking the following three questions:

1. Whether any modern painters either here or overseas were known to be using the Claude Glass today?
2. Were there any examples of Claude Glass in South African museums?
3. Could they indicate some literature which dealt with the Claude Glass?

The replies were astonishing. Only two museum directors, who admitted that they had never heard of the device, could find any reference to the Claude Glass in their institutional libraries and I had already found a reference myself.

When I referred to the *Oxford companion to art* (Osborne 1970: 247) I found:

"Claude Glass. A small black convex glass used for reflecting landscapes in miniature. It abstracts the artist's subject from its sur-

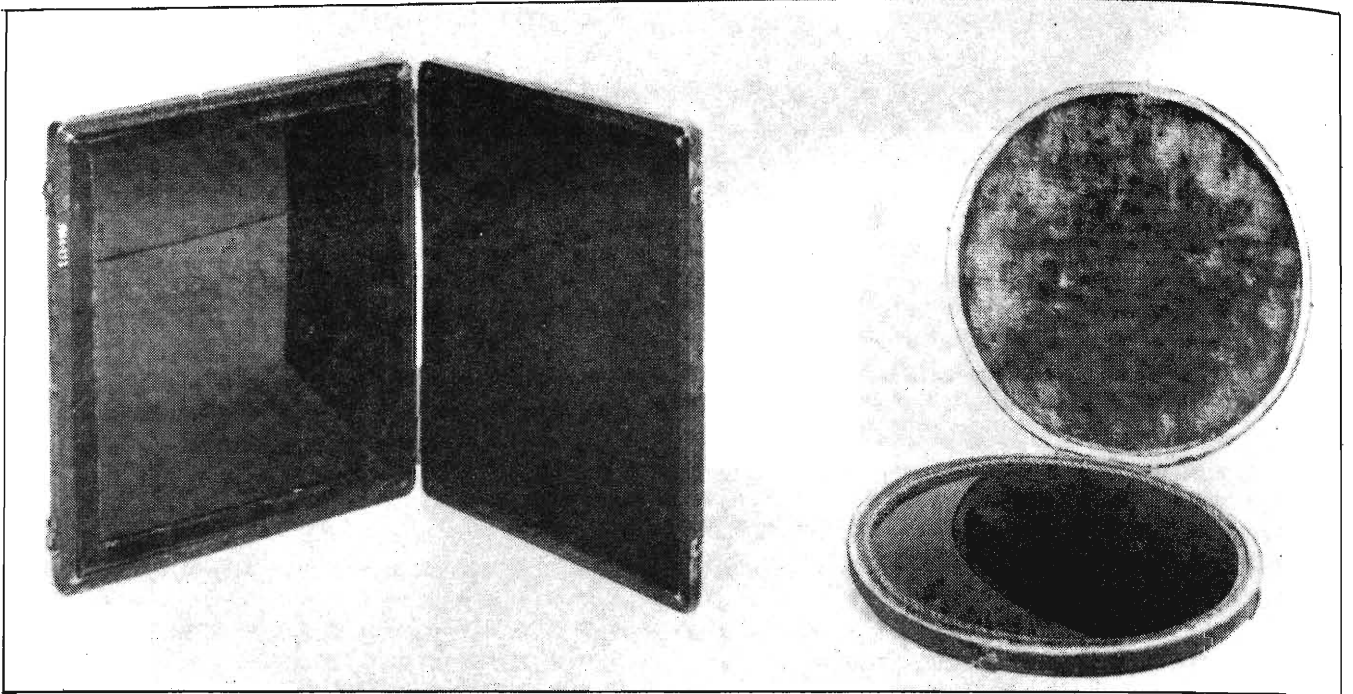


Figure 1: Two Claude Glasses. (With acknowledgement to Clarke 1981).

roundings, simplifies it, and subdues the colours so that it is seen in terms of light and shade. It also reduces the intervals between the lights and darks, and by concentration enables the painter to see his subject broadly and to assess the relative tonality of the various parts. It was popular in the 17th and 18th centuries, and not only with artists, for the poet Gray carried one with him in his travels round Britain in search of the picturesque. Claude Lorraine was said to have used such a glass. An Italian artist whom Mrs Merrifield interviewed (*Practice of old masters*, 1849) told her that he possessed a black glass which had once belonged to Dughet and Poussin and before them to Bamboccio (Pieter Van Laer). A view reflected in this glass, he said, looked 'just like a Flemish landscape'. In the 19th c. it was used by Corot who regarded tonal unity in painting as supremely important."

The only other reference I could find that was of any value to me was one in the *Encyclopaedia Britannica* (*Micropaedia* 1975). The entry in the *Encyclopaedia* reads as follows:

"Claude Lorraine Glass – black convex glass used by artists to reflect the landscape in miniature, and in doing so, to merge details, and reduce the strength of colour so that the artist is represented with the broad picture of the scene and a certain tonal quality.

"The 17th century French landscape painter Claude Lorraine is credited with the invention of the glass. It was widely favoured by artists of the 17th and 18th century and is used occasionally today."

This was written in the 1970s. The *Encyclopaedia* is the only reference which claims that

the glass was invented by Claude Lorraine. It will be seen that other references maintain that because Lorraine painted landscapes (in the "picturesque" manner) the glass was named after him.

Despite widespread correspondence, I was unable to ascertain anything more about this Claude Glass until I mentioned it to Michael Godby, Professor of History of Art at UCT, who referred me to Martin Kemp's book entitled *The science of art* which deals with optical themes in Western art from Brunelleschi to Seurat.

Discussing the use of cameras in art, Kemp (1990: 199) says the following:

"The problem remained, however, that the camera image was traditionally stigmatised as mechanical and inartistic. Its effect might be astonishingly natural but it would not meet the highest requirements of either 'ideal' or 'picturesque beauty' – to use the terms which played such a central role in the aesthetic controversies around 1800. A simpler optical device, the Claude Glass, seems to have met the demands for picturesque beauty in the eyes of many artists. In its most common form it consists of a mildly convex glass, either with a black backing or self-tinted, and was commonly mounted in a velvet-lined carrying case. Its effect was to convey a relatively wide-angled view on to a small-scale surface. The slight curvilinear distortion is more than offset by the sense of a coherent gathering together of the disparate elements of the scene. Its tonal effect is to reduce glare at the top end of the scale, as in a large expanse of luminous sky, and thus to allow the subtlety of the middle tones to emerge, as, for example in a bank of clouds. The darker tones

acquire unity, without totally suppressing the detail. It was these harmonising effects that earned the Glass the name of the great landscape artist, Claude Lorraine.

“The Glass does not appear to have any direct associations with Claude himself, but it was certainly known to his Northern contemporaries in Rome. A number of authors refer more generally to the advantage of a convex mirror as a means of encompassing a wide prospect within a small field [Italics mine, FRB].

“Gerard de Lairese in 1707 states that it is very convenient ‘for drawing all Sorts of large Works in narrow Places or Streets. [...] ’Tis also useful to Landskip painters in their Country Views. They may take Tracts of Land, with Towns and Villages, Waters, Woods, Hills, and Sea, from East to West, without moving either Head or Eyes. ’Tis likewise proper for those who are ignorant of Perspective.’

“The Claude Glass really came into its own in the eighteenth century, when it was available in a number of shapes – rectangular, with or without chamfered corners, oval or circu-

lar – and could alternatively be backed with silver for use in dull conditions. Tinted transparent glasses were also available, and permitted the modulation of colours and tones in any desired manner. Pierre Henri Valenciennes, an important landscapist and theorist in France, considered that ‘the mirror represents Nature with more force, purity and finish than the camera obscura, because the reflection in it is simple and the objects are painted there instantaneously’.

“Other serious artists paid attention to its properties. One of Gainsborough’s drawings shows a circular glass in use. It came to be regarded as a kind of instant ‘artist’s eye’, favoured by ladies and gentlemen of sensibility for its ability to transpose an admired view into the optical semblance of a venerated masterpiece in the Claudian style. The most complete testimony of its use occurs in Thomas Gray’s account of his tour of the Lake District in 1775. The splendid views ‘gave much employment to the mirror’. At Kirkstall Abbey, for example, it encapsulated ‘the gloom of those ancient cells, the shade and verdure of the landscape, the glittering and murmur of the stream, the lofty towers and long perspectives of the church’. It is clear that such employment for the glass is less in the service of optical precision than for its ability to transpose reality into a more melodious key. As such it was well placed to escape the censure of mechanical artlessness levelled against most optical aids.”

Further help in my search came from Evelyn Cohen of the UCT Department of Art History, who referred me to a book called *The tempting prospect* which is described as a “social history of English Watercolours”, by Michael Clarke. In this fascinating book, Clarke (1981: 32-9) describes the use of the Claude Glass as follows:

“The canon for judging ‘picturesqueness’ was provided by seventeenth-century Italian landscape, the works of Claude Lorraine, Gaspard and Nicolas Poussin, and Salvator Rosa. The truly picturesque tourist equipped himself with the appropriate guide-books, sketching-pads and a selection of viewing



Figure 2: Thomas Gainsborough (1727-1788), *Study of a man sketching using a Claude Glass* (c. 1750-5). Pencil drawing. (With acknowledgement to Clarke 1981).

glasses, the best-known of which was the 'Claude Glass', so named after the landscape painter, which was capable of giving a bluish cast to far distances – as found in the master's paintings (Italics mine, FRB).

"The glass itself was a slightly convex mirror, four inches in diameter, backed with a black foil and cased like a pocket-book.

"Thomas West, author of the very popular *Guide to the lakes* (first published 1778) advised: 'The person using it ought always to turn his back to the object that he views. [...] It should be suspended by the upper part of the case, holding it a little to the right or left (as the position of the parts to be viewed requires), and the face screened from the sun'.

"A selection of glasses was produced, including one named after the poet Thomas Gray, and the whole activity was satirised by the Rev James Plumptre in his comic opera *The Lakers* of 1798. Confronted with the view across Derwentwater to Borrowdale, Miss Beccabunga Veronica exclaims: 'Where is my Gray? Oh! Claude and Poussin are nothing. By the bye, where's my Claude-Lorraine? I must throw a Gilpin tint over these magic scenes of beauty'" (Clarke 1981: 33-5).

The reference to "Gilpin tint" requires some explanation which Osborne (1970: 868) provides: "The apostle of the picturesque in the sphere of taste was the amateur artist and writer William Gilpin." The picturesque represented "a standard of taste, mainly concerned with landscape which gained general acceptance in the second half of the century" (Osborne 1970: 868). Paintings were formally divided into foreground, middle distance and far distance, "in the 'classical picturesque' style, exemplified for the 18th century chiefly by the works of Claude Lorraine and Gaspard. Poussin and also the Romantic picturesque which derived from Elsheimer through Salvator Rosa" (Osborne 1970: 858).

Clarke's book has an illustration of two different types of Claude Glasses and the caption to this illustration (figure 1) reads as follows:

"Two Claude glasses. The low-key reflections produced by the glass were brought to resemble the landscape effects found in the paintings of the seventeenth-century artist Claude Lorrain. The glass itself was essentially a slightly convex blackened mirror though silvered mirrors were used on days too dark for the blackened kind."

Clarke also reproduces a Thomas Gainsborough sketch entitled "Study of a man sketching using a Claude Glass" (figure 2) and this pencil sketch shows a circular glass.

I followed up the reference to Thomas Gray's account of his tour in the Lake District

and was intrigued to find mention of a Claude Glass in two works edited by Edmund Gosse. In *The works of Thomas Gray in prose and verse* edited by Gosse (1854: 290), I found a passage saying that "Mr Gray usually carried with him on these tours a plano-convex mirror, of about four inches diameter on a black foil, and bound up like a pocket-book."

In Gosse's biography of Gray (1882: 187), there is a more intriguing reference to Gray's use of the Claude Glass:

"It seems that Gray walked about everywhere with that pretty toy, the Claude-Lorraine glass, in his hand, making the beautiful forms of the landscape compose in its lustrous chiaroscuro. Arranging his glass, in the afternoon of the 2nd of October, he got a bad fall backwards in a Keswick lane, but happily broke nothing but his knuckles."

When I seemed to have reached a dead-end in my research, I received a letter from Mr Lionel Lambourne, head of the Painting Section (collection of prints, drawings and paintings) at the Victoria and Albert Museum. Mr Lambourne (1992) informed me that they had an example of a Claude Glass of the 18th century in the collection, and that there is a second rather late example in the collection of the Science Museum which is in an adjacent building. He sent me a copy of the relevant entry from the catalogue of the Tate Gallery Exhibition, "Landscape in Britain", which was held in 1973. It reads as follows:

"The Claude Glass, a slightly convex blackened mirror, was standard equipment for Picturesque tourists, producing instead low-key images of supposedly Claudian character. 'The person using it ought always to turn his back to the object that he views', Thomas West explained in his *Guide to the Lakes*. 'It should be suspended by the upper part of the case [...] holding it a little to the right or left (as the position of the parts to be viewed require) and the face screened from the sun.' Thomas Gray, who had one bound like a pocket-book used a glass constantly on his tour of the Lakes in 1769 and on one occasion, no doubt doing the required about-turn, 'fell down on my back across a dirty lane with my glass open on one hand, but broke only my knuckles: stay'd nevertheless, and saw the sun set in all its glory'. Silvered mirrors were used on days too dark for the blackened kind. The landscape could also be viewed through coloured filters, used separately or in combination."

As will be seen from Clarke's book (1981: 83), "Thomas West to the object that he views".

An interesting reference was provided by the City of Johannesburg Public Library. In his book *The artist's craft* James Ayres (1985: 69)

remarks: "The Claude Glass, with its distractingly pretty image, was to be of greater use to painters (than the camera obscura). The black convex mirror not only reduced and reversed the subject, it also simplified colour and tonal range. It has been used by painters especially landscape painters, since the seventeenth century, to examine both subject and canvas."

A short, but meaningful, description of the Claude Glass is to be found in *The Century Cyclopaedia* (Smith 1894: 257): "The 'Claude Lorraine mirror' is so called from the fancied similarity of its effect to his [Claude's] pictures."

The role of mechanical aids such as the *camera obscura* and Wollaston's *camera lucida* have always intrigued me. There are frequent references to the use of these two types of cameras and also examples of their use by well known artists in the biographies of various artists. For instance in South Africa Thomas Herschel used a *camera lucida*, and the Rev Christian Latrobe a *camera obscura*, to make their South African sketches. In Europe, Vermeer, Paul Cézanne, Joshua Reynolds, and Degas are said to have used a *camera obscura*.

Both the *camera lucida* and the *camera obscura* have the drawback that while exactitude in draftsmanship can be obtained by using them, they do not assist in creating tonal effects, or flexibility of composition. The Claude Glass, on the contrary, enables an artist to make subtle changes in design and composition as well as to achieve more creative tonal effects. As Kemp, quoted previously, has emphasised, the "camera image [...] would not meet the highest requirements of either 'ideal' or 'picturesque' beauty." Moreover, the Claude Glass in its various forms would appear to have been simpler to use.

I am indebted to Estelle Maré, editor of this journal, for drawing my attention to a passage in Patrick Trevor-Roper's book, *The world through blunted sight*. Trevor-Roper, an eye-specialist by profession described his book as "an enquiry into the influence of defective vision on art and character." The passage in question reads as follows:

"Finally, both the myopia and hypermetropia of an artist will have a direct influence on the optimum distance for viewing his work. Artists who record on their rectangles of canvas a relatively small view, normally use a simple geometrical perspective, the laws of which remain approximately accurate for such a 'narrow-angled' span. Some artists (like Canaletto) achieve wider-angled effect by basing their geometrical perspective on two points about 10 degrees apart. Others

aim for a more panoramic rendering, after the manner of that eighteenth-century affectation 'the Claude Glass' – a darkened convex mirror in which some (like the poet Gray) preferred to view their landscapes, since both mellowed the tone and 'opened them out' like a Claude painting" (Trevor-Roper 1990: 42-3).

Trevor-Roper adds a footnote to the effect that:

"These convex mirrors were used in all seriousness by the Dutch naturalistic artists of the previous century, sometimes in the form of a crystal ball which is actually depicted in certain of their studies, and this in turn probably derives from their use of one or more mirrors (typically by Vermeer) – a method said to originate with Titian's exploitation of Venetian glass. Gerard Dou is said to have manipulated with his foot a certain screen in which was set a concave lens bearing a grid of threads to correspond with a similar grid on his canvas. Canaletto, who at sixty-eight was painting distant scenes without glasses, is said to have used a camera obscura (the image of a distant scene being cast through a small aperture into a darkened room on to a screen at close range)" (Trevor-Roper 1990: 43).

The available literature does not indicate any individual landscape painting which was created with the aid of the Claude Glass. Nor is there any indication of the earliest date on which the glass was used. It would appear, by artists who painted in the 'picturesque' manner, that it would have been in fairly general use from about 1810 until the end of the 1970s. There is, however, very little information to substantiate the time in which it was used, and also very little information on whether modern artists use it.

The reasons advanced for calling this optical device after Claude Lorraine are somewhat confused. It will be seen that Claude is said to have been the "inventor" of the glass as the *Encyclopaedia Britannica* suggests; that he was also said to "have used such a glass" (Osborne 1970: 247) and that it owes its name to the fact that its use produced an effect similar to the work of Claude. Most secondary sources point to the last conclusion. An examination of several short biographies of Claude Gelée, called Le Lorrain, and in England Claude Lorraine (1600-1682) produced no further information, although a full scale biography or autobiography may well do so. This does, however, seem unlikely since the writer of the entry in *The Oxford companion to art* would no doubt have looked for evidence of this type.

The likelihood remains that because the use of the glass produced works in the man-

ner of Claude Lorraine, it was named after him. Claude was born in Lorraine in 1600, and is said to have started life as a pastry-cook. At the age of 13 he was in Italy, working for the landscape painter Agostino Tassi. "By the end of the 1630s he had a big reputation as a landscape painter" (Murray 1965). Unlike Poussin who "derived his heroic landscapes from Titian and Annibale Caracci, Claude's sources lie chiefly in the romanticised poetic landscapes of the later mannerists such as Tassi and the Northerners, Elsheimer and Brill. Like them used the later Mannerist traditions of the division of the pictures into areas of dark greenish-brown foreground, light and green middle distance, and blue for distance, [...] with a composition creating a sense of infinite distance and tree forms treated as feathery fronds in silhouette" (Murray 1965). In England the works of Claude, who was greatly admired, were influential in creating the ideals of the picturesque. When he died in 1682, he left not only a legacy of sought after works, but also an influence which persisted for a very long time.

Because of the paucity of information on the subject of the so-called Claude Glass, it has not been possible to examine any landscapes by modern artists who used, or who now use this optical device. Original works by Claude were greatly admired in England, and had a strong influence on artists such as Richard Wilson and J M W Turner, and particularly on artists of the 'picturesque school'. Claude's emphasis on depicting the mood of the landscape was in terms of light and colour. With the use of the Claude Glass it would seem that even landscape artists who lacked great talent, could, to some extent, capture harmonious tones of light and colour as a unity, which they were unable to do without its use.

The catalogue of the Tate Gallery exhibition, *Landscape in painting* (1973: 124) emphasises that the "role of mechanical aids in landscape art is an intriguing issue, but one which has hardly been investigated."

It would be significant to know if the Claude Glass is still being used by modern artists.

Only the *Encyclopaedia Britannica* maintains that it "is used occasionally today". James Ayres in the passage already quoted, however, would seem to suggest that it is still used at the present time when he says that the glass "has been used by painters since the seventeenth century". In Martha Grimes' *Old contemptibles* set in the late 1970s, the artist certainly used this Claude Glass. Possibly Mrs Grimes had seen a modern artist using one, and this provided the idea for her ingenious murder plot.

If the quotations from secondary sources have been given *in extenso*, it is because, despite a certain repetitiveness, there are slightly different nuances in each quotation. In the absence of primary sources – with the one exception of the quotation from the journals of Thomas Gray – each quotation casts a little more light on the use of the glass. Were it possible to see at least one landscape painting, which has without doubt been created with the assistance of a Claude Glass, it would assist a great deal in understanding the efficacy of its use.

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