Between Views: The Claude Glass and Landscape Today

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Abstract

A mirror allows us to see the impossible, both in the immediacy of the everyday and the conceptual discourse surrounding art and experience. The simplest expression of this impossibility is perhaps that with a mirror we can see ourselves and what is behind us, beyond our direct looking, all at once. More profoundly, the mirror is at the conceptual centre of the history of Western art and the paradoxes of representation. In the medium and discipline of photography, it has been particularly active in both its prosaic and symbolic roles. In eighteenth-century Britain, a particular type of compact mirror was used by artists and tourists to view and imaginatively shape the landscape into picturesque talking points: the Claude glass. This was such a popular activity that guidebooks advised of sites where the best views of outstanding landscapes were to be seen with the aid of the glass.

While the Claude glass is routinely cited in tracing the prehistory of photography and widely referred to in art history, landscape theory, colonial studies, literature studies, and more, it has had limited serious consideration and is generally understood as an obsolete optical tool. This research argues that there is more to be learnt from the Claude glass. The way of seeing and shaping landscape enabled by the device has numerous contemporary parallels, including its instant picture-making ability and the use of optical technology to manipulate the appearance of landscape to conform with the fashions of the day. This project argues that a re-evaluation and expanded understanding of the Claude glass is useful in comprehending current trends in photography and its technology that allows users to filter their view and share their algorithmically coded pictures. These trends are also better understood through the embodied model of the Claude glass rather than the disembodied camera obscura.

To this end, the creative output of my doctoral research investigates the photographic object through themes of cultural and natural tourism, and the blending of the fictive and the real in landscape depiction. These works reference the Claude glass physically and conceptually in order to interrogate the way of seeing offered by this historical optical instrument and how that can inform contemporary landscape photography. Imagery was captured on location locally and during travel to historically linked
locations in Tasmania and Scotland, then manipulated and constructed in the studio. A variety of photographic objects have been made using different production techniques and displayed through the course of the research. The works are not meant to merely recreate the object itself but to introduce new questions around the capabilities and limitations of contemporary imaging technology by demonstrating how simple artistic interventions such as shapes, collage and reflection shift our engagement with landscape. These relationships are reanimated and made more visible by recourse to the Claude glass, which has allowed me to consider the differences between veracity and truth in photographic production and how certain imagined realities around landscape representation become true only through photographic production.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Introduction

Landscape and Desire

On Saturday, 14 September 2019, at 2:07:23 pm, I watched as a fellow hiker stopped near the peak of Conic Hill above Loch Lomond, Scotland, turned her back to the lake, lifted her phone above her shoulder and took a picture of the view.\(^1\) Over two hundred years earlier, the author Elizabeth Isabella Spence may have performed very similar actions on the exact same spot.\(^2\) In taking this view, Spence would almost certainly have been holding the popular instrument of her time—a Claude glass—which was a convex mirror made of darkened glass that was held in a case for travelling and was small enough to fit in a pocket. In different centuries, both women had climbed the hill to physically engage with the environment and take in the view. The view and the desire to visit and register it remain virtually unchanged. While this century, the fleeting image in the Claude glass has been replaced by the stilled and permanent image of a photograph, one of the concerns of my project is to consider the continuity in the form and desire for those images across centuries and technologies.

A Claude glass made the landscape comprehensible for an eighteenth-century British tourist. The glass made a place legible by creating a miniaturised view from what is often the visually complex and overwhelming reality of being in landscape. Further, it gave that view the composition and appearance of a familiar cultural form: a painting. The reductive properties of the glass gathered all of visible nature into the palm of the user’s hand and condensed the extreme tonal range of the colours of the world to something more akin to the palette of paint. The unbounded world was also given an oval frame, friendly to the hand, that could shift any number of times as the user considered their visual interests. The artworks I have made during this research revise and translate those properties and their visual outcomes from the terms of painting to those of photography.

\(^1\) I know the exact time she did this because I was taking photographs of the scene myself and the EXIF information attached to those raw files includes these details. I made multiple photographs over a short period of time and later blended them on a computer, bringing a series of moments together to make my own picture (Figure 37).

The Claude glass enables remarkable visual immediacy and scope in that it allows the user to both make a picture from the landscape and view pictures in a landscape, and to do both instantly. In this way, the view in the glass offers distance from the object of fascination without the user ever physically moving away from it. The title of this project, *Between Views*, is a play on the duplicity of the instrument. A user of the glass is always somewhere between: between views to peruse, or between the fleeting images they see on the glass, or between those two activities of making and engaging with images. The four series of artworks that I have produced for this project are all situated somewhere between the visions of the Claude glass and a contemporary photographic representation of the landscape. These images are informed by the specific form of vision that a mirror in the landscape, and more particularly the Claude glass, brings to looking at the environment. The world is doubled and folds back onto and into its emulation on the surface of the mirror’s glass. The reproduction of the world in a Claude glass is not exact. The properties of the glass change the world to make it instantly more like a picture. That is the gift of the glass and its specific intention. These characteristics will be familiar to most readers through descriptions of photography, yet the direct connection back to the Claude glass that I am concerned with here is not a significant part of the story of photography as it is told in the literature.

The Claude glass predates the ability of photography to automatically recreate the world, which brings into question André Bazin’s claim for photography that “for the first time, between the originating object and its reproduction there intervenes only the instrumentality of a nonliving agent.”3 Photography has long been the dominant way to make pictures in the landscape, and today many such photographs are made on devices that are the same size and shape as a Claude glass. These devices are also carried in pockets and are used to gain sense from the world by making it legible in pictures. The images made are immediate and can also be as fleeting as those on the glass, recorded and retrievable but most often lost in the incomprehensible volumes of photographs accumulated on devices and in cloud storage. In achieving the images, there are no intermediary processes, no real technical skills to be understood in order to make an

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Despite these obvious similarities, the Claude glass is generally passed over as a precursor to photography, with nearly all histories of photography beginning with the camera obscura. The camera obscura has been given preference in pre-photo history because, as an instrument, it shares a number of physical characteristics with later cameras, most importantly a diaphragm with which to focus light and make a picture. The Claude glass lacks any sense of interiority—it is all surface—the image made where it appears and nowhere else. Today, the technology of photography is shifting to a new physicality where there is no lens and the product of the image is both produced and viewed in the same device. In this way, we can be said to have arrived back at a place where the real and the imagined overlap in the same temporal and physical space, just as they did in the original use of the Claude glass.

In this thesis, I explore the specific history of the Claude glass and how the glass is positioned in the broader histories of the mirror and reflection in art, and more specifically, photography. The only book-length discussion of the Claude glass is Arnaud Maillet’s *The Claude Glass: Use and Meaning of the Black Mirror in Western Art*, which was translated from the original French in 2004. As such, I refer to Maillet’s book throughout this paper, along with the work of his mentor, Jonathon Crary, particularly his *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, in order to situate the Claude glass in the history of optical devices. My project adds to understanding of the Claude glass, and I have made new discoveries about the device and its use. I have established a highly plausible example of usage of the device in nineteenth-century Australia and uncovered a previously unheralded painting pertaining to the Claude glass in the collection of the National Trust of Britain. Through the making of four series of photographic works, I have explored the specific mode of vision that the Claude glass offers and how that vision is a continuing theme in the issues that arise around the representation of landscape.

My discussion is organised into four chapters. Chapter 1 considers the history of the Claude glass, from its naming to the modern confusion around what actually constitutes the object. I investigate its usage by tourists in Britain at the height of its popularity at the turn of the eighteenth century. I also trace the only Claude glass in a public collection in Australia—John Glover’s glass in the Tasmanian Museum and Gallery. Through an analysis of a painting by Glover, I identify evidence of him using the glass
as a visual aid, which is to my knowledge the first time this has been done in relation to his work. I also scrutinise and question the use of the Claude glass as a metaphor by writers on the colonial project, who appear unfamiliar with the device itself but eager to engage its rhetorical strengths.

The second chapter takes into account that the Claude glass is a mirror. Through examples from art history I evaluate the glass in terms of the history of the mirror and reflection in art through themes that are central to my project: the mirror as a prosthetic aid to vision; the mirror used in the landscape; the painterly qualities of the reflected image; reduction and concentration in the reflected image; the mirror image as metaphor; the absence, or even obliteration, of the self in the mirror’s frame; and temporality in the reflected image. I also consider the work of diverse and significant artists known for their engagement with mirroring and reflection, concentrating on the work of Yayoi Kusama, Robert Smithson, Dan Graham and Anish Kapoor. Their works and aims are also discussed in relation to the development of my own artwork for the project.

The re-evaluation of the Claude glass in the context of the history of photography is the concern of the third chapter, which I begin by discussing Geoffrey Batchen’s acknowledgment of its importance in the medium’s pre-history. He sees the importance of the Claude glass in both its Picturesque representation of landscape and in fuelling the desire to create photography as permanent record of those views. I then consider the continuing influence of those terms of representation on the production of contemporary landscape photographs through artwork by Susan Mooney and Andrew Moore. Finally, I contemplate the current technological shift in photography, which moves away from lens-based image making and consider Phillipe Dubois’s questioning of what is real and what is fictive in contemporary photography through a comparison of contemporary photography practices to the use of the Claude glass.

The final chapter is an elaboration on the photographic work I have made over the course of the project. I describe each of the separate yet related series of works made and make connections back to the historical and conceptual discussion of the earlier chapters of the discussion. I outline how the work was made in response to the critical investigation of the Claude glass and how these themes evolved and changed over the
course of the project. In this chapter, I also provide a brief description of other artists who have either engaged with the Claude glass in their practice or with themes of seeing and censoring pictures in a landscape.
Chapter 1. Looking Back: History and Usage

The Instrument Itself
The Claude glass is a black convex mirror that was used by artists and connoisseurs of the landscape in eighteenth-century Britain. The best were made of glass ground by opticians and came in a variety of shapes, sizes and hues. The convexity of the glass allowed the user to bring a wider prospect into a smaller, more decipherable, frame, while the darkened aspect reduced the tonal range, giving the reflected image a painterly quality. Looking at a landscape in a Claude glass is a seductive and compelling visual experience. It is remarkable how similar the qualities of the view reflected in the glass are to a painted picture, that view being bordered by the mirror’s edge and its gradations of colour and tone reduced and yet subtly intensified. This reminds us that the name of the mirror references the seventeenth-century French painter Claude Lorrain, due to the similarities of tone and spatial arrangement of landscape views reflected on its surface to those of his celebrated paintings.

Figure 1 Claude Lorrain, *Pastoral Landscape*, 1638

At the time, Lorrain’s paintings were seen as the pinnacle and ideal form of landscape representation and writers have speculated that this was important to the popular uptake and use of the Claude glass. Jean Hagstrum describes the glass as being used to “modify scenes, arranging them like an idealized landscape by Claude Lorrain on the soft hued surface of the glass,” arguing that the mirror “suggests both faithful realism and stylized
idealism.” 4 Similarly, Malcom Andrews sees the device as a “portable means of realising the efforts of the idealizing imagination,” 5 a correcting lens that collects the elements of a landscape and, through the imagination, reconstitutes them into an image of aesthetic harmony. Andrews sees this use as a form of filter, describing the Claude glass as being able to “superimpose a Claudean idiom on British landscape.” 6 For the eighteenth-century tourist, this filtering was a shortcut to attaining the “picturesque eye” 7 that William Gilpin described as finding its “chief objects in nature, but it also delights in images of art.” 8 In this way, the Claude glass was the first instrument that enabled a user to turn the greater landscape into an artful image without any skill but simply through the desire to do so. Turning ones back on nature to look at its reflection, softening its tones, rearranging its elements to form a composition by thoughtfully tilting the mirror and altering the view all formed part of this cultured and fashionable activity, the first fad in a long and ongoing history of such in optical technology. 9

Rebecca Solnit also argues that the Claude glass was a “crucial tool for those eighteenth-century English aesthetes bent on transforming the experience of actual places into aesthetic experience.” 10 The device, she says, “expresses conflicting desires: to be in the landscape and yet removed from it; to immerse and distance oneself from the world.” 11 These conflicting desires and outcomes also connect us to aspects of contemporary photographic technology, which I will discuss in Chapter 3. They also characterise the representation of landscape across the history of the genre and in my own work. For the eighteenth-century tourist, the joy of the Claude glass was in its de-

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6 Ibid., 69.
7 William Gilpin, Three Essays: On Picturesque Beauty; On Picturesque Travel; And on Sketching Landscape: To Which Is Added a Poem, On Landscape Painting (London: printed for R. Blamire, 1792), 27.
8 Ibid.
9 Jonathan Crary lists a number of devices that were popular at the beginning of the nineteenth century for the “hallucinatory nature” of their images. These include the thaumatrope, phenakistiscope, Faraday Wheel, zootrope, magic lantern, London diorama, and kaleidoscope. He sees these devices, and particularly the stereoscope, as developments of the study of subjective vision and physiology that led to a “reorganization of vision” that produces a new kind of observer in the late nineteenth century. Jonathan Crary, Techniques of the Observer: On Vision and Modernity in the Nineteenth Century (Cambridge, MA: MIT Press, 1990), 102–119.
11 Ibid.
familiarisation of local landscapes, which through its reflection, could be reimagined into a distant Arcadian past. Its use emphasised Romantic amusement by facilitating what Gilpin described as “visions of the imagination; or the brilliant landscapes of a dream.”

![Diagram of convex mirror and focal point]

**Figure 2** Diagram illustrating the focal point of a convex mirror

In a physical sense, the Claude glass is an uncomplicated instrument. It opens and closes and, when suitably positioned, it offers a reflection of the view behind the user. The convexity of the mirror brings a wide field of view into focus and the focal point of that created image sits not at the mirror plane but somewhere behind it (figure 2). When looking into the glass, everything around it goes out of focus, intensifying the reflected image. The darkened image is tonally reduced so that clouds become clearer as highlights are lessened and detail revealed. Shadows are more concentrated, abstracted forms that can be changed in scale by dipping and shifting the face of the glass. Due to the reductions of light, field of focus and scale, the view is intensified and the user has the sense of holding a condensed and slightly altered version of nature in their hand. These qualities allowed artists to arrive at compositions for their drawings through quickly ascertaining the gradations of tone in their desired view.

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13 Ernst Gombrich describes artists using the glass because “it was supposed to do what the black and white photograph does for us, to reduce the variety of the visible to tonal gradations,” making the world easier to reproduce as a drawing. Ernst Gombrich, *Art and Illusion: A Study in the Psychology of Pictorial Representation* (Princeton, NJ: Princeton University Press, 1969), 46.
Terminology and Variety


There are also inconsistencies in terminology in the literature.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{claude_glass}
\caption{Claude glass, Collection of Victoria and Albert Museum, London}
\end{figure}

The dark mirror is variously known as the ‘Claude glass,’ the ‘Claude mirror,’ the ‘Lorraine glass’ and the ‘Claude Lorraine mirror.’\footnote{As an interesting example in his review of Maillet’s book \textit{The Claude Glass}, Sven Dupre points to Maillet’s insistence that the Claude glass should be referred to as the Claude mirror despite the book’s title. Sven Dupré, “The Claude Glass: Use and Meaning of the Black Mirror in Western Art by Arnaud Maillet.” \textit{Aestimatio} 2 (2005): 24–32.} To add to the confusion, other optical instruments share these names but are physically different and others again share physical characteristics but are known under other names.\footnote{Bertelsen explains that the confusion over the glasses is further heightened by the fact that, besides the mirror, another artistic aid exists that is also referred to as ‘Claude glasses’ (in the plural form). This apparatus consists of two to five small, differently dyed glasses, often inserted in a horn case, from which they may be unfolded one at a time or several at once in order to give a different tint to the landscape viewed. Bertelsen, “The Claude Glass: A Modern Metaphor between Word and Image,” 185.} As noted, the glass came in numerous shapes, sizes and tints, but it was usually small enough to be held in one hand and protected in a case, similar to those that would later be used for daguerreotypes. Thomas West described the variations available in his 1789 publication of \textit{A Guide to the Lakes in Cumberland, Westmoreland and Lancashire}, where he encouraged his readers to take more than one glass on their tours:

A glass of four inches or four and a half inches diameter is a proper size. The mirror is a plano-convex glass and should be the segment of a large circle;
otherwise distant and small objects are not perceived in it; but if the glass be too flat, the perspective view of great and near objects is less pleasing, as they are represented too near. These inconveniences may be provided against by two glasses of different convexity. The dark glass answers well in the sunshine; but on cloudy days the foil is better.\(^\text{17}\)

West also explains the best way to use the glass

… the person using it ought always to turn his back to the object he views. It should be suspended by the upper part of the case, and the landscape will be seen in the glass by holding it a little to the right or left (as the position of the parts of the view require) and the face screened from the sun.\(^\text{18}\)

West’s exhortation to carrying variations of the Claude glass point to the simplicity of the device. It also anticipates the variety of photographic equipment, such as different lenses and filters, that would be carried by tourists in the twentieth century to ensure that they were able to capture the landscapes they were visiting in the way they desired.

As Written

As noted previously, Maillet’s *The Claude Glass: Use and Meaning of the Black Mirror in Western Art* is the only full-length and recent study of the device.\(^\text{19}\) He outlines the various applications of the mirror from the occult through to its most popular use as a tool for decoding the landscape. He situates the Claude glass in terms of the history of observational practice, much like Crary’s influential *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* does for the stereoscope.\(^\text{20}\) Both Maillet and Crary question a history of optical instruments that describes them solely in terms of their material characteristics and technological determinism. These authors are concerned also with the cognitive and social practices that frame the devices. Crary argues that a change in vision occurs at the beginning of the nineteenth century, a shift from what he calls “the camera obscura model”—that is, a Cartesian linear perspective of viewer and subject—to a concept of vision where the observer’s body is an inseparable part of the scene. This, he argues, is due to a collapse of the distinction between vision and the act of looking. Vision is no longer essentially passive and

\(^{17}\) Thomas West, *A Guide to the Lakes in Cumberland, Westmoreland and Lancashire* (London: W. Pennington, 1789), 11

\(^{18}\)Ibid., 12.


\(^{20}\) Crary, *Techniques of the Observer.*
independent of the subject but rather the product of the visual experience of the viewer. Crary develops this argument by contrasting the camera obscura with the stereoscope, using the two instruments as paradigms for his two models of vision. He presents the optical devices as “points of intersection where philosophical, scientific and aesthetic discourses overlap with mechanical techniques, institutional requirements and socioeconomic forces”.

In his analysis of the camera obscura, Crary takes pains to avoid the presumption that the devices were being used by artists as “an inadequate substitute for what they really wanted, and would which soon appear— that is, a photographic camera”. Maillet’s study also recognises this difficulty of historical determinism and, similar to Crary, uses insights from the history of art, literature, literature theory, philosophy and aesthetics in an attempt to define the instruments place in the history of vision.

In his 1992 review of *Techniques of the Observer* Tom Gunning finds fault in Crary’s methodology by comparing it to Foucault’s *The Archaeology of Knowledge*. He sees Crary as moving too swiftly between “different institutions and types of discourse and interrelates them freely” and not adequately exploring Foucault’s “discursive formations” leading to a universalizing of the history of vision that he describes. Geoffrey Batchen also critiques Crary’s methodology but understands the book as a challenge to conventional history. He believes the role of the “admiring reader” is to further challenge the book’s own premise to “extend its polemical range”. Maillet’s book does just this by questioning the history of the Claude glass and thus insisting on its position within Crary’s timeline of vision.

The Claude glass was in popular use around the time that Crary’s proposed change in vision occurs, yet he gives it only the “place of a mere implement.” In setting the device in the earlier camera obscura model of vision, where “the authority of an ideal eye remained unchallenged” and giving the Claude glass the “status of the tool,” he

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21 Ibid., 8.
22 Ibid., 32.
26 Ibid., 129.
27 Ibid., 131.
implies it has no place in the new “territory of the fully embodied viewer,”28 which “depends upon the denial of the body, its pulsings and phantasms, as the ground of vision.”29 Maillet, however, considers the Claude glass to have a greater role in the history of vision than being a mere tool, believing that it “participates in the transition between” the ‘camera obscura model’ and the ‘modern concept’ of vision.”30 This is because while the glass reflects a suite of passive visual characteristics, the observer is more concerned with that reflected view than the place they physically inhabit. Unlike devices such as the camera obscura that were used to accurately represent the landscape, the Claude glass transformed the view into something else. This possibility of transformation is closer to the modern concept of vision; the cultural overlay of representation is occurring at the point of vision, where technology is being used to shape the view.

For Maillet, the dark mirror can be perceived as either “a strictly optical instrument” or a “metaphoric, or even symbolic instrument.”31 There is, he argues, a deep ambiguity within the Claude glass32 that arises from the combination of the real and the abstracted: a view reduced in the Claude mirror is transformed into an ideal view, that is, one with universal character. The Claude mirror eliminates particular details and imperfections. This removal of triviality brings forth an abstraction, that ideal of beauty. The mirror allows one to select and to combine different elements, which the reflection presents as a unity.33

Maillet argues that due to this blending of the real and the ideal, the Claude glass can “through the filter of the imagination … bind nature and poetry together.”34 Thus, he argues, the ability to visually manipulate the landscape has the user interested “more in sensation itself than in the objects of sensation,” creating a “specific mode of vision.”35 His contention here is vague and under-explained but hinges on preferring an image over its referent because of what the Claude glass adds to the transition from one to the other—that is, its image as art. As a result, even though the Claude glass was superseded in its role as a tourist device by photography, it continued to be used as an

28 Ibid., 133.
29 Ibid., 134.
31 Ibid., 145.
32 Ibid., 144.
33 Ibid., 143.
34 Ibid.
35 Ibid., 151.
aid to painters into the twentieth century. The glass becomes, for Maillot, a transitional element between the “classicism of the eighteenth century and the modernity of the nineteenth” and is therefore “inseparable from modernity as defined by Crary.”

The eighteenth-century Claude glass–toting tourist was pursuing just what Rosalind Krauss describes a young Ruskin employing a “proto-modern way of seeing,” where “view hunting is a means of transforming the whole of nature into a machine for producing images.” The use of the Claude glass in organising nature into views presented a new way of seeing and imagining the landscape as a series of pre-determined pictures that predicts modern photographic vision.

Imaginative Views
Why did the British want to imagine their countryside in terms of paintings created a century earlier and made by a French artist living in Italy? During the eighteenth century, the contemplation of landscape both in nature and as represented by the arts became an important interest of British society. Much of this interest was generated by the cultivated class undertaking a so-called Grand Tour of continental Europe, particularly the Italian peninsula. These tourists brought home paintings and reproductions of the Italian landscape and collecting these became a fashionable activity. The most popular works were those by Gaspar and Nicolas Poussin, Salvator Rosa and Claude Lorrain. The enjoyment of the landscape was cultivated to such an extent that, as John Barrell writes, “To display a correct taste in landscape was a valuable social accomplishment quite as much as to sing well, or compose a polite letter.” As Luke Herrmann explains, the French Revolution and later Napoleonic Wars curtailed much British continental travel. At the same time, the industrialisation of Britain and need to transport goods efficiently improved inland roads, leading to an upturn in domestic tourism. Instead of taking the Grand Tour of Europe, the well to do began exploring the Lakes district and the wilds of Northern Britain. These destinations, despite their charms, lacked the golden light and ancient ruins of the Italian

36 Ibid., 152.
37 Rosalind E. Krauss, The Optical Unconscious (Cambridge, MA: MIT Press, 1993), 6. In the opening chapter of this alternative history of modernism, Krauss weaves the tale of a young John Ruskin, his relentless stare and his contemplation of abstraction, travel and nascent modernism—traits that many of the picturesque tourists had or aspired to.
countryside as depicted in the idealised landscapes of Lorrain. To be understood in terms of the classical landscape, the local view required imagination.\textsuperscript{40}

Herrmann observes that internal tourists were following “in the footsteps of the pioneers among them who had ‘discovered’ the beauties of England.”\textsuperscript{41} A number of those pioneers had produced guides and diaries of their travels through districts such as the Lakes and the Scottish Highlands.\textsuperscript{42} In these guides, the new terminology of the Picturesque was evolving. Hermann relates the “first evidence of the impact of the Picturesque on the painting and drawing of the landscape”\textsuperscript{43} to the burgeoning internal tourist market. Qualities of landscape that were promoted by practitioners such as Gilpin were ‘roughness,’ which he explains is “the essential difference between the beautiful and the Picturesque” and he sees it in “the bark of a tree, as in the rude summit, and craggy sides of a mountain.”\textsuperscript{44} Also, the Picturesque observer as a “practiced judge looks chiefly on the whole,” thus encouraging purveyors of the view to “survey nature; not anatomize matter.”\textsuperscript{45} For my series Dark Mirror (discussed at length in Chapter 4), made in the colonial ruins and grand natural sites of Tasmania, I directly reference these qualities of roughness favoured by Gilpin. The images gather in the environment to survey the larger scenes rather than concentrating on the miniscule within them (figures 27–31). The environment was bringing forth Romantic associations of the imagination; Gilpin explains: “What a place brings to mind is often as important as its physical appearance.”\textsuperscript{46} As Alexander Ross claims for the tourists, “Those who can associate Claude, for example, with the ruins they see will have distinguished proof of how the ruins may be arranged to provide beauty of the picturesque kind.”\textsuperscript{47} In this way, the Claude glass was an important tool for those

\textsuperscript{40} Barrell, The Idea of Landscape and the Sense of Place, 4–5.
\textsuperscript{41} Herrmann, British Landscape Painting of the Eighteenth Century, 110.
\textsuperscript{42} Nigel Leask’s comprehensive book, Stepping Westward: Writing the Highland Tour C. 1720-1830 (Oxford: Oxford University Press, 2020) surveys the range of literature and guides produced by the cultural experience of the Highland tour that attracted writers and such as Johnson and Boswell, William and Dorothy Wordsworth, Coleridge, Scott, Hogg, Keats, and Turner. Leask outlines how alongside Gilpin’s Picturesque, the books stimulated a burst of “home tours” from the 1770s. The form of the Highland tour guidebook peaks around 1800 coincided with steamboats and mass tourism, but also rack-renting, sheep clearance, and emigration.
\textsuperscript{43} Herrmann, British Landscape Painting of the Eighteenth Century, 26 and 110.
\textsuperscript{44} Gilpin, Three Essays, 4.
\textsuperscript{45} Gilpin, On Landscape Painting, 19; Gilpin, Three Essays, 26.
\textsuperscript{46} Gilpin, On Landscape Painting, 11.
without skill to determine and create these painterly associations. The quality of the view in the Claude glass meant it was used as a filter that layered visual culture over landscape, allowing easier and more pleasing interpretations of the provincial through classical associations to culture. The landscape could be made into a picture without the need for drafting skills or the expense of hiring an artist. Solnit describes the view in the glass as “already art, a finished artefact rather than a work in progress.”\textsuperscript{48} The image seen in the Claude glass was not a process image, such as a drawing, painting or photograph; rather, it was already complete, unable to be kept but ready for later discussion. British tourists began to see their own surroundings with a new interest; the lakes and the highlands could be viewed as a series of differing pictures that could be discussed in the parlours of cultured society.\textsuperscript{49}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure4.jpg}
\caption{Edward Alcock, \textit{Sophia Anne Delaval, Mrs. John Jandis, Holding a Claude Glass to the Landscape}, 1775–1778}
\end{figure}

Domestic tourism involving the use of the Claude glass became so popular in Britain that guidebooks suggested particular spots, termed “stations,” and the times for using the glass to best effect in those locations.\textsuperscript{50} That this was also very fashionable is


\textsuperscript{50} West, \textit{A Guide to the Lakes in Cumberland, Westmoreland and Lancashire}, 24–60.
emphasised by the painting *Sophia Anne Delaval, Mrs. John Jadis, holding a 'Claude glass' to the landscape* (Figure 4), attributed to Edward Alcock.\(^{51}\) This is the only painting that shows a Claude glass in use that I have found, yet it is not mentioned in the literature. The differences in the tonal range of the clouds and sky between the mirror and the landscape implies a dark mirror. In that small image, you can see the characteristic fashionable interpretation of the landscape, the darkened foreground, the staggered placement of the trees, and the way they arch with the circle of the frame. The mirror however is not held in the usual position for the backward view, as seen by the user, it is instead revealed to the viewer of the painting. In this, Sophia Anne Delaval is using the mirror to demonstrate her heightened fashionable tastes. Similarly with the cloth draped in the tree above her she, with the painter Alcock, is presenting an aesthetic control over nature and displaying the resultant image as a form of art, or even trophy.\(^{52}\)

Andrews introduces the idea of the fashionable Picturesque tourist, who was “typically a gentleman or gentlewoman engaged in an experiment in controlled aesthetic response to a range of new and often intimidating visual experiences.”\(^{53}\) He regards the activity as “analogous to the sport of hunting.” He quotes William Marshall’s history of landscape painting from 1795, citing the “Capturing of wild scenes” and “fixing them as pictorial trophies.”\(^{54}\) The hunting metaphor would continue into far more recent discussions on the use of photography and is still in common usage among photographers. Susan Sontag wrote of the predacious character of a tourist with a camera: “The predatory side of photography is at the heart of the alliance...between photography and tourism...” What photography is able to produce that a Claude glass could not is an artefact, a relic with “the status of found objects” that Sontag concludes

\(^{51}\) The painting is held at Seaton Delaval Hall, Northumberland, Britain, and was part of the exhibition *The Lie of the Land* at MK Gallery in Milton Keynes, 2019. The summary of the painting, on the museum didactic in *The Lie of the Land* exhibition, contained some commonly held misconceptions around the Claude glass, including that it “looks more like a ‘landscape mirror’ which was clear and convex for holding over the shoulder to see the landscape in reflection whereas a ‘claude glass’ was tinted yellow and used by enthusiasts of the picturesque movement to cast a golden glow over the landscapes they were viewing through.” Claude glasses were not tinted yellow, but darkened, and were also known as landscape mirrors.

\(^{52}\) While Alcock’s painting deserves further consideration in better understanding the Claude glass at the height of its use, that research is beyond the scope of the present enquiry.


\(^{54}\) Ibid., 69.
can “trade simultaneously on the prestige of art and the magic of the real.” 55 This dual reading of the photographic object also echoes Hagstrum’s assertions of the “faithful realism and stylized idealism” of the Claude glass. 56

**Inspiring Desire**

Of course, the remarkable qualities of the image reflected in the glass are famously thought to have, in part, inspired the invention of photography. Geoffrey Batchen presupposes the Claude glass as one of a group of optical devices that spurred the development of photography in order to “fix the transient reflected image.” 57 For those without the skill or time to transfer the image to sketchpad or canvas, it was impossible to record the views seen while travelling. The desire to demonstrate both personal taste and encounters with extreme landscapes drove efforts to fix such images permanently and therefore to allow their circulation and eventual reproduction. These desires are confirmed by the poet Thomas Gray:

> From hence I got to the parsonage a little before sun-set, and saw in my glass a picture, that if I could transmit to you, and fix it in all the softness of its living colours, would fairly sell for a thousand pounds …. 58

Similarly, Gilpin writes of using the glass while travelling in his chaise:

> Forms and colours in brightest array, fleet before us; and if the transient glance of a good composition happen to unite with them, we should give any price to fix and appropriate the scene. 59

The Picturesque tourist had a desire to experience nature but also expectations of how it should appear. As Jonathan Bate argues, “our perception of nature is pre-determined by aesthetic categories.” 60 So, the point of view of the tourist is that of the observer, essentially separated from nature by their own pre-conceptions and desires for what the landscape should be and how it should look. To meet these expectations requires imaginative work or, as Bate also states, “The encounter with nature is a form of recreation: it is also a form of re-creation.” 61 Instead of submitting to their

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61 Ibid., 135.
surroundings, the tourist is taking from them in order to make it more familiar and legible. Nature itself must be re-envisioned as art. The Claude glass allowed the tourist the opportunity to see nature as they desired it to be, while giving them the familiar pleasure of active looking as a form of aesthetic mediation and connoisseurship.

Picturesque tourism became so popular it was satirised in plays and books.62 Ann Bermingham notes that what had been “the delicate and sophisticated taste of a select few became the popular pastime of the bourgeois.”63 However, interest in the Claude glass waned as the British cultural engagement with their own environment changed. Political events, such as the *Enclosure Act* of 1773, which brought vast tracts of commonly held land into agricultural production, transformed the landscape of Britain.64 The filter of Arcadia and nostalgia for classical nature that the glass had provided were no longer popular in industrialising Britain. Critics such as John Ruskin turned against the Claude glass, describing it as “one of the most pestilent inventions for falsifying Nature and degrading art which was ever put into an artist’s hand.” Ruskin’s rejection of the device argued for an “innocence of the eye” and “the primacy of experience” unmediated by such a device.65 At this time, artists were taking inspiration from the *genius loci*, the prevailing character of their locale, to paint pastoral scenes that were rapidly disappearing throughout Britain. Yet the painter’s problem of natural light and colour exceeding the possibilities of the paint palette remained and therefore the Claude glass continued to provide a way of seeing tone through its global reduction of the intensity of light.66 Thus, as noted earlier, even though the Claude glass faded from popular usage, artists continued to use the dark mirror as an aid to see both their subjects and to compose and evaluate their paintings.

Photographers also found uses for the Claude glass, as evidenced by a series of articles and letters to the *British Journal of Photography* from as early as 1862. Several articles

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62 Bertelsen 2004, 187; Bradlow notes that the comic opera *The Lakers* was written by James Plumptre in 1798 as a parody of the picturesque tourists of the time. Also, the satirical poem by William Coombe of 1817, *The tour of Doctor Syntax, in search of the picturesque*. That details the travels of the pompous curate Dr Syntax stumbling and bumbling through the Lakes district in search of views. Bradlow, “The Claude Lorraine Glass,” 65.
64 Ibid., 9.
written over a long period of time encouraged photographers to use a Claude glass to evaluate their subjects prior to photographing them, the common theme being that the reduced light values of the glass will assist in understanding tone.67 These articles also suggested that a Claude glass could be used to view a camera’s ground glass to attain both the correct orientation of the image, the mirror reversing the reversed image of the camera, and a better contrast for viewing. In 1913, Claude glasses were said to be found easily in second-hand shops or obtained from dealers in optical goods, though “there is little demand for them now” and they could be bought for as little as two shillings68.69 There are no more mentions of the Claude glass in the Journal after 1920, since hand-held cameras with internal mirrors or rangefinders had become popular by then.

**Glover’s Glass**

The only reference I have found that places the Claude glass physically in an artist’s hand in Australia is in a footnote in David Hansen’s *John Glover and the Colonial Picturesque*, a catalogue published in 2004 that accompanied an exhibition of the same name at the Tasmanian Museum and Gallery in 2003. Glover is considered “the most important British artist to come to Australia before the gold rushes of the 1850s.”70 Hansen notes that Glover’s pocket Claude glass is “preserved in the Tasmanian Museum and Gallery collection.”71

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68 The equivalent of £6.80 in modern currency. [https://www.bclm.co.uk/media/learning/library/witr_costofliving1910.pdf](https://www.bclm.co.uk/media/learning/library/witr_costofliving1910.pdf)


70 Bill Bleathman, foreword to *John Glover and the Colonial Picturesque* by David Hansen (Hobart, Tas: Tasmanian Museum and Art Gallery, 2003), 12.

After reading this note, I travelled to Hobart to see Glover’s pocket mirror (figures 5&6). The glass is contained in a travelling case covered in sharkskin, held by two clasps and backed by a velvet lining with a wooden support. Its dimensions are 13 x 10 x 2 centimetres; it is very light and there is a piece of glass missing from the slightly convex mirror. In 2019, I viewed a Claude glass in the collection of the Victoria and Albert Museum, London, that was virtually identical but in better condition. I was able to take the mirror outdoors to reflect the suburban surrounds and was amazed at how detailed the view in the glass was (I will provide an expanded description of this, and the influence on my own artwork, in Chapter 4). It was even more obvious to me how the device had been an important tool for artists in organising and tonally considering a complex landscape and how it could continue to have relevance to contemporary image making.

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72 I contacted Elspeth Wishart, Senior Curator of Cultural Heritage, at the Tasmanian Museum and Art Gallery to arrange to view it. She was interested to discover more about the object as there were no records in the collection on the use and purpose of such a device.
Viewing the glass and the images it creates in an environment where it was likely to have been used in the past allowed me to consider the possible importance of the Claude glass in Glover’s depictions of the Tasmanian countryside. It gave me the opportunity to consider the specific vision that a Claude glass brings to bear on the landscape by making comparisons with remaining landscape features and qualities of the light in similar locations. To make these comparisons, it is important to comprehend Glover’s own history as a painter, his intentions in making his paintings, and how he responded to the landscapes of Australia in comparison to his earlier British paintings. This is of particular interest to my project as I am attempting to emulate the form of vision that a Claude glass offers in both my own familiar environments as well as others unfamiliar to me, ones that I visit as a tourist.

After a successful career as a landscape painter in England, Glover emigrated to Van Diemen’s Land in 1831 at the age of 63. His paintings were so inspired by the works of Claude Lorrain that he was known locally as the ‘Litchfield Claude’ and then later, as his reputation grew, he was referred to more derisively by his contemporaries as the

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Glover’s painting *Mount Wellington and Hobart Town from Kangaroo Point* (1834) depicts a landscape less than a kilometre from where we stood with his glass.
‘English Claude’ due to the indebtedness of his paintings to that style.⁷⁴ His theme and motif matched that of Claude, and his training gave him skill in reproducing the foliage of trees and the play of light with great fidelity. Hansen states that Glover used both the Claude glass and the camera lucida as tools in achieving faithfulness to nature in his paintings.⁷⁵ Tim Bonyhady cites Glover’s reaction to the Tasmanian countryside as “a trilling and graceful play in the landscape of this country which is more difficult to do justice to than to the landscapes of England.”⁷⁶ This graceful play is ably demonstrated in his painting *Australian Landscape with cattle: the artist’s property Patterdale* (c. 1833) (figure 7), which, according to Bonyhady, suggests a “a pride in having successfully civilized the colonial landscape.”⁷⁷ I believe the painting also shows evidence that Glover’s Claude glass was used in its production, though to the best of my knowledge, this is not argued elsewhere.

*Australian Landscape with cattle* shows part of Glover’s holdings of more than 3600 acres at Mills Plains, about 140 kilometres north of Hobart, that he had acquired under a free grant of land. Central to the composition is a large eucalypt with a distinctive curved form and branches touching both the ground and sky. There is a tension in the painting between the cleared land, the cattle that graze and relax on it, the cottage in the mid distance, the fallen logs that litter the landscape, particularly in the foreground and the enthusiastic rendering of the central native gum. The recently felled trees are an acknowledgment that the landscape is undergoing a transformation into pastoral land, as engineered by Glover himself. This recognition of change is balanced with a fascination for the alien forms of the central gum tree that are new to him but ancient in the landscape.

This is unmistakably an Australian environment. The grass is depicted using brown tones and the leaves are painted in the olive, yellow and pink hues of the local landscape. The rendering of detail in the trees is exquisite. Bonyhady notes that Glover moves away from his indebtedness to Claude in “making the foliage of his trees less

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⁷⁷ Ibid., 69.
bulky and opaque, flattening the perspective and sharpening the light."\textsuperscript{78} The arrangement of the painting has a classical form, with a darkened foreground containing logs on which to rest and contemplate the scene, and a layering of mixed tones that lead to a bright strip of waterway in the bottom third of the painting. From this, the land rises to darker hued hills, with the sky taking up more than half of the painting but broken visually by the prevailing gums.

Aspects of the painting that I believe demonstrate Glover’s use of a Claude glass include the slight vignette of tone from the corners of the painting that draw the eye centrally to its brighter tones; the darkened foreground that replicates the darkening of tones at the most convex section of the mirror; the evenness of tone across the sky which is more reminiscent of the glass and not the usual darkening of the sky away from the sun in nature; the darkening of the eucalypt foliage against the tones of the sky, which I noticed in the glass in Rozelle; and a quality to the tone of the clouds that is similar to the view in a dark mirror where highlights are reduced. Of course, I understand this is not a definitive account of Glover’s use of the glass but given his ownership of the device, written accounts of his use of it, and the similarities of tone and arrangement that the view in his glass give, it is a distinct possibility he used it in making this painting, particularly when we consider this is his home and as such, it is a view he had the opportunity to regularly study with the glass. Other paintings by Glover portraying the district and plausibly indebted to the Claude glass, for example \textit{View of Mills’ Plains} (c. 1883) and \textit{“Cawood”, on the Ouse River} (1838), are similar in the quality of their tones, darkened foregrounds and light-bathed central zones.

Describing these paintings, Hansen comments that “Glover does distort and simplify, for decorative effect and pictorial clarity”\textsuperscript{79} which was the primary purpose of the Claude glass for many of its users.

\section*{Unfamiliarity and Metaphor}

The politics of Australian landscape are intertwined with Britain’s colonial expansion into the world beyond Europe. Peter Beilharz, in his book \textit{Imagining the Antipodes}, a discussion on culture, theory and the visual in the work of Australian art historian

\textsuperscript{78} Bonyhady, \textit{Australian Colonial Paintings in the Australian National Gallery}, 47.

\textsuperscript{79} Hansen, \textit{John Glover and the Colonial Picturesque}, 102.
Bernard Smith, writes “landscape painting was part of a technology or will to power” and asserts, “The European project of controlling the world required a landscape practice that could first describe, then evoke in the new settlers an emotional engagement with the land that they had alienated from its Aboriginal inhabitants.” The conventions that had been developed and refined to aestheticise the landscape and make it into a picture were used by artists, scientists and explorers to present the New Worlds by overlaying European social and economic values on those lands. Understanding the world in this way allowed its exploitation and assisted in the disenfranchisement of its Indigenous inhabitants whose use of the land was seen by the colonists as inefficient. The possible role that the Claude glass played in the European project of colonialism is one of the major points of interest in writings about its use.

Both Jeffery Auerbach and Julie Barst are interested in the role of the Claude glass in the British colonial project. Auerbach argues that artists “saw through the lens of the Picturesque” and that this provided a measure of coherence to the far-flung empire by means of a pictorial framework that concealed hardships and beautified “the frequently unpleasant surroundings and conditions through a single refractive lens.” Barst also believes that the Picturesque can be understood to have “morally justified the British appropriation of Australia [by] emphasizing the connection between landscape and morality” and “serving in Australia to create and sustain the legal fiction of terra nullius.” While she identifies the Claude glass as a tool central to the colonial project, she is unable to prove, beyond the metaphorical, that this was the case. Her argument that philosophies of the Picturesque influenced the exploitation of the Australian landscape and the dispossession of the original peoples are valid but the links she makes to the Claude glass are tenuous, self-serving assertions. She sees the British “figuratively turn their backs to the existence of native Australians, just as a Claude Glass required” and describes how a “type of Claude Glass was used by artists and writers in Australia to distort the colony’s image.” Yet, neither Barst nor Auerbach are

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83 Auerbach, The Picturesque, 49.
84 Barst, “Transporting the Picturesque,” 163.
85 Ibid., 168.
able to place the device physically in the hands of explorers, artists or colonists. That is, they do not provide evidence of its use in the making of specific images. It is the act of turning away from the land in order to view it, implying blindness to, or chosen ignorance of the landscape as it was, along with the visual distortions resulting from reflection, that are useful to their arguments rather than an analysis of the qualities of the instrument itself and the representations it enabled. I argue that the Claude glass did however, as demonstrated in Glover’s paintings, play an observable role in the pictorial realisation of the new colonies for the artists who chose to look at it with the intention of comprehending that landscape as it was. The landscape is intensified in the reductive reflection, with the vastness of the new reduced to a legible scale and the bright light subdued. The Claude glass, a mirror that reflected the landscape as a painting, becomes emblematic of the way that painters see by appearing to double the landscape back on itself. This enfolding of vision is of particular interest to me, as it links the Claude glass to the wider field of mirroring in the history of art. In my own artwork throughout this project, I have investigated and presented in different ways the doubling and folding of imagery within the pictorial frame, as discussed in Chapter 4.

As I have argued in this chapter, the Claude glass has been overlooked in the histories of photography and the use of technology in vision. The greatest absence I have noticed in this research is a lack of firsthand observation of the Claude glass by contemporary commentators. The lack of practical knowledge for the use of the glass in shaping views reduces consideration of the device. Historical Claude glasses are hard to source, but it is easy to produce rudimentary versions of the device to experiment with view making. I believe that those views can be used to have a better understanding of representation, that despite the simplicity of the technology it is a rich and productive conceptual tool. Experiencing the Claude glass opens the discussion in the history of photography as well as engages with the broader history of the mirror and reflection in art.
Chapter 2. Every Claude Glass Is a Mirror

Mirrors and Perspective

Maillet argues that “every mirror is already … a black mirror.”86 In doing this, he takes away from the materiality and historical specificity of the Claude glass. Instead of seeing every mirror as a possible Claude glass, it is more useful to understand that every Claude glass is a mirror. The mirror is a powerful symbolic mechanism that links the conceptual and technical aspects of all image making, especially photography. A considerable range of literature addresses the theoretical implications and the practical use of the mirror in art. This in itself attests to the ongoing relevance of considering mirrors in image making and interpretation. Here I will concentrate on examples from the literature that illustrate the key themes most directly connected to my own concerns: the mirror as a prosthetic aid to vision; the mirror used in the landscape; the painterly qualities of the reflected image; reduction and concentration in the reflected image; the mirror image as metaphor; the absence, or even obliteration, of the self in the mirror’s frame; and temporality in the reflected image.

As noted earlier, the history of Western art is entwined with the mirror, and it is useful to review aspects of that history to comprehend how a landscape reflected in a pocket mirror could be understood in painterly terms by English tourists of the eighteenth century and how that device can inform landscape photography today. In her examination of the relationship between the mirror and painting in the Renaissance, Yvonne Yiu establishes that “the two earliest references to the mirror and painting in Renaissance texts both date from the fourteenth century,”87 but also that “there is a clear geographical divide between the written and visual sources.”88 She notes that at the same time as mirrors were appearing in paintings in the Netherlands, the written discussion on their use in painting was centred in Florence. In these texts, she concludes, “The mirror stands symbolically for the direct observation of nature that is the basis for the renewal of the art of painting” and that “In the eyes of early

86 “Now according to this experiment, if every mirror absorbs and reduces the light it reflects, every reflected image will therefore be slightly tinted, because it is thus tainted. This means also that every mirror is already in some way a black mirror.” Maillet, The Claude Glass, 106.
88 Ibid., 188.
Renaissance art theorists, the connection between the mirror and artistic innovation was astonishingly close.”99 For Yiu, the mirror is closely linked with the major innovations of the time such as naturalistic representation, linear perspective and the developing concept that “the mind of the painter resembles a mirror.”90

Debate around the practical use of mirrors in painting in the Renaissance continues today. Yiu’s analysis of the contemporary written accounts are in stark contrast to David Hockney’s practical discussion on the use of mirrors in earlier painting. In his book *Secret Knowledge*, Hockney proposes that major painters of the Renaissance used concave mirrors as technical aids to depict individual motifs within paintings. He claims that mirrors were used to project an image onto the painting’s surface for the translation of specific motifs rather than using them for the whole of the composition. These were assembled, “pieced together on a panel,” similar to a collage.91 However, Yiu cites contemporary accounts by the Florentine sculptor and architect Filarete that are contrary to Hockney’s claims. Filarete encouraged artists to “take a mirror and hold it in front of the thing that you want to do. Look in it and you will see the outlines of the thing more easily.”92 Filarete offers the mirror as a device of reflection and Hockney as one of projection. In this way, the mode of doubling available through the mirror provokes a binary opposition even across centuries. Yiu, through reference to Filarete, argues the mirror is a unifying component in coherent image creation, whereas Hockney sees it as fracturing of an image, which is then articulated into a logical and coherent view by the painter. These arguments demonstrate one of the key problems in researching the mirror as a visual tool. A mirror captures an image but does not retain or fix it so that all that visual information, until the invention of photography, is lost and can only be recalled through text, paint or print.

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89 Ibid., 191.
90 Ibid., 191, 201.
Filippo Brunelleschi famously used not one but two types of mirror in his first perspective demonstration (figure 8). Through a pinhole in a panel, a viewer could see a painted scene of the Florentine Baptistery via its reflection in a mirror. Burnished silver was placed in the painted panel to reflect the sky. The viewing mirror was set at a distance that correctly scaled the scene and gave a monocular view that allowed the illusion of perspective. The viewer observed the painting mimicking the real in a mirror, and also saw nature by means of a double reflection of the sky. In this complex peepshow, the mirror was both practical and conceptual in that the act of painting mirrors the real and the painting acts like a mirror, with the artist’s use of linear perspective creating the illusion of depth on a flat surface.

In Leon Battista Alberti’s 1435 treatise on painting, De Pictura, he considers a mirror the optimal judge in assessing a painting. Later, Leonardo da Vinci gave similar advice, noting that in seeing the painting reversed; “it will appear to you like some other painter’s work, so you will be a better judge of its faults…” He also recommended comparing a painting to the actual scene being painted as reflected in a mirror to evaluate the naturalism of the created scene with that of the mirror. In doing so, he equated the painted image with the reflection of reality that a mirror produces, a concept that was to become a dominant metaphor in discussions around painting. Of course,

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96 To support the premise that an artist generates an external analogy via the “marriage” of the world’s visual analogy with the viewer’s mental analogy, Kaja Silverman cites Da Vinci’s Ashburnham I: “The mind of a painter must resemble a mirror, which always takes on the color of the object it reflects and is
Alberti famously declared Narcissus to be the inventor of painting “What is a painting but the act of embracing by means of art of the surface of a pool?” Here, the reflecting surface of the water becomes a metaphor for the mimetic act of painting.

The mirror motif when painted in the Netherlands could be read in one of two ways: as moralising or painterly. Erwin Panofsky offers the example of Jan van Eyck’s Arnolfini Betrothal (1434). Panofsky suggests that the mirror functions on two levels. The signature testifies to the painter’s presence as witness to the marriage and he also asserts that the mirror is a well-known symbol of the Virgin’s purity, or speculum sine macula. Similarly, Michel Foucault and Yiu both discuss Quentin Massys’s St Luke Painting the Virgin Child (c. 1530) in terms of its symbolic representation of the mirror in painting. The portrait depicts St Luke’s studio in which a convex mirror hangs on the wall behind the painter. The position of the mirror highlights its importance as a painter’s aid and signals the profession of the subject as an artist. The historical links between the mirror, single-point perspective painting and artistic innovation would later allow users of the Claude glass to see paintings in their hand-held mirrors as they held them up to the landscape.

Contemplation and Voyeurism

Later paintings, such as Diego Velázquez’s The Toilet of Venus (1649-50), play with the concept of voyeurism and refection. In the image, Cupid holds a mirror to Venus who appears languidly naked from the back, gazing into the blurred reflection. However, what would be reflected in the mirror to Venus is her observer, originally Velázquez but later the viewer of the painting itself. What begins as a narcissistic contemplation of the self becomes a shared and knowing moment. The viewer is caught in the act of looking from behind, where they could expect to be unobserved. The furtive view is exposed and acknowledged through the mirror for the voyeurism it is. Of interest to me in this

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100 Yiu, “The Mirror in Painting,” 208.
painting for the terms of my own work is the alternate and unexpected view that can be seen in the mirror—that possibility of seeing more than we assume we will.

Velázquez’s mirror is a point of revelation; it shows a combination of the expected and the unseen to both the subject and the viewer. This sense of play in using the mirror to reproduce a scene and unexpected views is explored in my visual work for this project.

In the tradition of Filarete, Alberti and da Vinci, the Claude glass was encouraged as an aid to drawing by eighteenth-century artists and theorists of the Picturesque. Thomas Gainsborough’s *Study of a man sketching using a Claude glass* (c. 1750–75) (figure 9) is the only known contemporary representation of the use of the device for that purpose. As Frank Bradlow explains, “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.”

![Figure 9](image)

**Figure 9** Thomas Gainsborough, *Study of a Man Sketching Using a Claude Glass*, c.1750–1755

Also, in the eighteenth century, a shift away from da Vinci’s and Alberti’s belief in the primacy of reflection in art occurs in the theoretical discourse around mirrors. Batchen summarises accounts of this from Newton, Darwin, and Knight in *Burning with Desire*:

> …by the late eighteenth century, the mirror was no longer seen as a guarantee of unmediated reality. It was instead taken as a metaphor for a dynamic enfoldment of opposites, a movement that incorporates without synthesizing the conceptual poles of nature-culture, science-art, reflection-expression.

101 William Gilpin in *Three Essays, and Observations on the River Wye.*


The different understanding opens up the conceptual complexity of the mirror image and has enabled mirrors, including the Claude glass, to continue to reward artists in their use and interpretation. Mirrors continued to be an aid to image making and a symbolic motif within images for artists into the twentieth century. In 1912, Juan Gris added reflective material to his painting *Le Lavabo* (figure 10).\(^{104}\) Gris makes no attempt at the futile portrayal of a reflection in the mirror, instead inserting the actual material in a method not unlike Brunelleschi’s use of burnished metal hundreds of years earlier.

\[\text{Figure 10 Juan Gris, } \textit{Le Lavabo}, \text{ 1912}\]

\(^{104}\) Gris is cited saying “You want to know why I had to stick on a piece of mirror? Well, surfaces can be re-created and volumes reinterpreted in a picture, but what is one to do about a mirror whose surface is always changing and which should reflect even the spectator? There is nothing else to do but stick on a real piece.” In David Mower, “Through the Looking Glass and What the Artist Found There,” *Art International* 23, no. 5–6 (Sept. 1979): 64.
The reflective surface was also emphasised by sculptors such as Constantin Brancusi. For *Sleeping Muse* (1910) (figure 11), Brancusi made bronze casts from an original marble bust of a sleeping Baroness Renée Irana Franchon. The bronze is so highly polished that the surface became reflective and the viewer sees themself gazing upon the sleeping figure. This view is not rendered in the original marble and it shifts the reading of the sculpture by including the observing gaze of the viewer in their moment of interpretation. Brancusi’s and Gris’s mirrored forms bring the surroundings of the art into the work. Within the Brancusi, images form on the curves of the figure and upset the reading of it as a bust, on the Gris they add to the picture plane. The random assertions of the environment into the artworks are similar to those possible when using a Claude glass in the landscape. It is the physical engagement and concentration of the viewer that activates and abstracts the external world on the mirrored surfaces. There is a sense of play that links back to Velázquez; the mirror engages the body and movement of the spectator into the very artwork itself.

**Infinity and Obliteration**

In the 1960s, mirrors offered artists a means to question perception and provoke self-reflection in their viewers. Yayoi Kusama exhibited the first iteration of her Infinity Rooms in New York in 1965, *Infinity Mirror Room – Phalli’s Field*. The walls of the

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106 I observed this myself at the exhibition Constantin Brancusi: The Essence of Things at Tate Modern, London, in April 2004.
room were completely lined with mirrored panels, endlessly reflecting the viewer’s image. Apart from the walkway into the space, the floor of the room was covered in fabric phalluses made of red and white polka dot fabric. The viewer would “walk barefoot through the phallus meadow, becoming one with the work and experiencing their own figures and movements as part of the sculpture.” Jo Applin describes the work as producing “phenomenological and psychological uncertainty in participants.”

There is no landscape in which the viewer can situate themselves only a multitude of their own reflection surrounded by the polka dot phalluses. Even though the mirror is reflecting only the immediate environment of the room, as unusual as that room is, it is unnerving for the viewer to have all of that information in their sight all at once. This tendency of the mirror to be disconcerting when simply revealing the surrounding world, and automatically uniting the view, is something I pursue in my own work, as discussed later in Chapter 4.

Kusama, along with other artists in the 1960s, created fundamentally experiential environments, transforming the discrete closed form of art that viewers were used to. In Mirrored Room (1966), Lucas Samaras took the mirror to an uncompromisingly hard edged extreme. The interior and exterior, including floor and ceiling as well as furniture, were entirely constructed from mirrored panels. The only visible image was ‘drawn’ by the visitors navigating the space. He describes the experience of the room as follows:

Being imbedded in this huge crystalline structure that has no top, bottom, or sides, this feeling of suspension, this feeling of polite claustrophobia or acrophobia, this feeling of fakery or loneliness seems complex, associatively enveloping and valid to me as a work of art, wonder, sensuality, pessimistic theory, and partial invisibility.

Samaras has written that with the work he was engaging with the entire history of mirrors, from their appearance in fairy tales to funhouses. Both Kusama’s and Samaras’s use of mirrors to isolate and interiorise the viewer within the experience of looking are inherently different from the earlier employment of reflective surfaces to

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108 Ibid., 3.
110 Ibid.
mirror the external world of Gris and Brancusi. The emulation of the external reflecting mirror is replaced by the obliteration of the mirror reflecting itself. The lack of external information means the mirrored image becomes a landscape within itself and the zone of contemplation for the viewer is completely interiorised. Optical reflection is the bending or folding of vision back to its source but in these later works, mental reflection is implied—the bending or folding of thought back onto itself. Obliterating all sense of self and landscape, the disrupted views offered in these mirrors emphasise absence over presence. There is something missing in the mirrors, they conceal rather than reveal. Similarly, by employing a Claude glass, a sightseer privileges a reflected view over the real, and in doing so conceals the view they face. Such an act of visual obliteration is brought to its zenith in the works of Kusama and Samaras.

Disruption and Absence

Robert Smithson’s disruption of the reflective view of a mirror is perhaps the most often cited example of the use of the mirror in twentieth-century art. Smithson used mirrors as a primary material between 1964 and 1970. In earlier gallery works, the mirrors are typically angled away from the viewer, sometimes positioned on the floor or low on a wall, providing an unexpected view of either the gallery or some other space. Ann Reynolds argues that Smithson demonstrates that a single-point perspective does not account for the space it means to duplicate. By employing his mirrors on angles in works such as Enantiomorphic Chambers (1965), Smithson upsets the system of single-point perspective typically associated with them. The sight lines offered by the angled mirrors create a sense of absence by appearing to deflect rather than reflect the viewer.

In this way, Smithson can be understood to concentrate on absence as the single most important trait of the mirror. Absence defines a viewer’s experience of all mirrors. It is particularly relevant to the use of the Claude glass, which was held in such a way that the user was absented from the view. Nevertheless, even as you stand in front of a standard mirror, despite that fact that you see yourself in reflection, you are not in the mirror. Foucault describes this in terms of the incomparable and contradictory:

The mirror functions as a heterotopia in this respect: it makes this place that I occupy at the moment when I look at myself in the glass at once absolutely real.

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connected with all the space that surrounds it, and absolutely unreal, since in order to be perceived it has to pass through this virtual point which is over there.\textsuperscript{112}

Or as Smithson simply states, “You’re always caught between two worlds, one that is and one that isn’t.”\textsuperscript{113} For Smithson, the view into the mirror is a constant exchange between fiction and reality. This exchange was also central to the use of the Claude glass at the height of its popular use. Through the glass, nature was viewed from a point of total subjectivity allowing various fictions. It is worth recalling Malcom Andrews’s assessment of it as an “imaginative filter.”\textsuperscript{114} The single-point perspective view offered emulated paintings, from the Renaissance onwards, whose visual underpinnings were derived from the study and application of mirrors. The pictured space is an illusion on a flat surface, an image arising from within and projected outward. The surface of the mirror acculturated the wild view, giving a slightly altered other world that ‘is not’ but that was visually more compelling than the ‘is’ of nature.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.png}
\caption{Robert Smithson, \textit{Seventh Mirror Displacement}, 1969}
\end{figure}

From 1968, Smithson developed a series of ‘mirror displacements’ for gallery and outdoor settings. The most famous of this series is \textit{Incidents of mirror travel in the

\textsuperscript{112} Michel Foucault, “Of Other Spaces,” \textit{Diacritics} 16, no. 1 (Spring 1986): 24.
\textsuperscript{114} Andrews, \textit{The Search for the Picturesque}, 71.
For this work, Smithson visited nine sites in the Yucatan province of Mexico. At each site he arranged a group of up to 13 mirrors—some were partially buried, others placed in trees—and photographed them (figure 12). He then removed them to travel to the next site. The photographs and Smithson’s texts discussing the performance of the work were published in *Artforum*.\(^{115}\) Again, the use of multiple mirrors confounds single-point perspective by multiplying it, creating fractured poly-perspectival views outside the field of the photograph, the monocular medium used to record the work. To take Smithson’s photographs, he aimed the camera down at the ground or into the jungle and the mirrors reflected the sky or sunlight, appearing as pictorial holes in the landscape that became portals to the enveloping and penetrating universe beyond the frame. The act of capturing the work through photography involves a major shift in temporality. The mirrors are now locked in view and even though “the mirror itself is not subject to duration because it is an ongoing abstraction that is always available and timeless,” a photograph cannot make the same claim. No longer can the reflections be “fleeting instances that evade measure.”\(^{116}\) The photographs illustrate the difference in the conceptual employment of the mirror by Smithson compared to its usage by pre-modern artists. Instead of securing the illusionistic space of a painting, as per da Vinci’s advice, Smithson’s mirrors confuse rational space. Smithson goes so far as to say, “Reflections fall onto the mirrors without logic.”\(^{117}\) This falling without logic is a compelling description of the process of emulation and the random nature of encountering an unexpected reflection and informed my work in part of this project, *Still/Silent*, discussed in Chapter 4.

The physical presence of the mirrors in the landscape is similar to the actual addition of mirrors into the artworks by Gris and Brunelleschi. In all the artworks, mirrors reflect an external environment that is brought into the picture plane. In Smithson’s earlier works, the reflections add a temporal element to the spatial illusion of the painting, reinforcing one-point perspective, by inserting the appearance of the world surrounding the viewer. Unlike the physical mirrors in Gris’s and Brunelleschi’s works, the Yucatan mirrors are temporally locked by the photographic process. That is, they reflect only the recorded moment, no other views that would be available by moving them or moving

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\(^{116}\) Ibid., 32.

\(^{117}\) Ibid., 31.
around them. Their stationary pictorial presence emphasises the photographic flattening of the landscape. At the same time, their fixed reflections appear illogical as the mirrors are angled and sometimes obscured, inferring a degree of human agency. In pictorial terms, there is no symbolism in the reflections of sky, water and leaves in the mirrors; rather, it is the symbolism of the mirror itself, the disruption of space, that is of greater consequence. Instead of the mirrors being used to look within, as with Kusama and Samaras, in Smithson’s work, we are forced to look out and acknowledge a world beyond the boundaries of the pictured space. In the examples from Brunelleschi and Gris, the external world is folded into the pictorial space, but in Smithson’s use the mirrors disrupt, confounding comprehension by inserting incongruous elements without pictorial logic. The disruption of logical pictorial space by the use of mirrors is a continuing theme in art, and a central concern for my project.

Duration and Technology

Dan Graham also investigates mirrors through questions of perception, duration and technology, often collapsing the subject and the object. For example, in *Present Continuous Past(s)* (1974), Graham presents a room with two adjacent mirrored walls holding a video camera and monitors. The viewer can see themselves in real time, while on an opposing wall a monitor displays an image of the room recorded with the camera on an eight-second delay. This monitor image is also reflected by the mirror opposite the camera so that the image is also caught in the time delay. The reflected image repeats within the monitor, becoming smaller and smaller with each iteration.

A person viewing the monitor sees both the images of himself eight seconds ago, and what was reflected on the mirror from the monitor eight seconds ago of himself, which was sixteen seconds in the past (because the camera view of eight seconds prior was playing back on the monitor eight seconds ago, and this was reflected on the mirror along with the present reflection of the viewer). An infinite regress of time continuums within the time continuums (always separated by eight second intervals) within time continuums is created.

Graham cites Jacques Lacan’s theories of the ‘mirror phase’ to define the sense of identity, or concept of ‘the “self”’, that the reflection in the mirror affords:

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The child sees itself formed as an image in the same way as an Other, beside which it identifies. The child’s ‘ego’ is formed by an identification with its likeness: that other human being who is in the mirror and the reflection of its body, which is dissimilar to its subjective experience, but is identified with it. … The child falsely imagines his body image to be a unified and complete entity, identified with the image of otherness.\textsuperscript{120}

The mirror establishes a separate image external to the body that is understood as the social identity, a projected form that is seen by everyone but not the individual. Within the confines of \textit{Present Continuous Past(s)} what is the immediate present blends perceptually with the just past; the Other in the mirror becomes the Self in the video. Graham’s video feedback loops assert a form of temporality that is usually absent from any engagement with mirrors. The image in the monitor is the past being reinserted into the present.\textsuperscript{121} By allowing past actions to be seen in the present, Graham believes he returns control over their own image back to the viewer.\textsuperscript{122} The blurring of the boundaries between viewer, image, reflection and technology is another point of enfoldment of vision where the image becomes doubled, tripled and onwards but not to the point of the obliteration found in Kusama’s and Samaras’s mirror works. In Graham’s work, the reflected self is no longer parasitic to the viewer; technology allows a temporal separation that shows a view in the mirror that is otherwise unobtainable. This seamless blending of a sense of temporal and spatial dislocation within mirror vision, via technology, is an effect that I have been working towards in the artworks for this project. This is something I will return to later in this thesis.

\textbf{Semiotics and Prosthetics}

For many theorists, this reflecting of the self is the only studied purpose of the mirror. In \textit{Semiotics and the Philosophy of Language}\textsuperscript{123} Umberto Eco devotes a chapter to mirrors in which he excludes the mirror image from the class of signs by narrowly establishing the mirror as used for looking at ourselves. He sees other uses of mirrors as prosthetics extending the range of vision. A car rear-view mirror, for instance, adds to a driver’s vision and the understanding of the physical world and how to navigate it. Dentists use mirrors to see teeth that they cannot see in normal circumstances. Even

\begin{thebibliography}{9}
\bibitem{120} Ibid., 55.
\bibitem{121} Ibid., 55.
\bibitem{122} Ibid., 56.
\bibitem{123} Umberto Eco, \textit{Semiotics and the Philosophy of Language} (Bloomington: Indiana University Press, 1986).
\end{thebibliography}
when used for viewing the self, the mirror is used for particular purposes, such as brushing hair, breaking the self into a series of properties and actions. The mirror can show the unknown, the things beyond our visual grasp. We know we have hair but not how it looks to others, that we may reverse into a post, or why a tooth is aching, because these things can be seen in the mirror. In this way, Eco claims mirrors to be “on the threshold between perception and signification.” This threshold comes about because mirrors denote presence through absence. What we see in a mirror is signified to be exactly what it is, but we also perceive it is not actually within the mirror.

According to Eco, a prosthesis can also act as a channel, or a “medium for the passage of information.” The information can be deceptive yet in spite of this he asserts that “the mirror image cannot be used to lie.” This is due, he claims, to the mirror image being embodied by only one channel, the mirror. It is casually produced by the object reflected and cannot be produced in absentia of it. He concludes that the mirror image “cannot be interpreted” only the referring object can be read. There are cases however where “mirrors are used to produce processes which can be defined as semiotic,” and one of these is the distorting mirror. A distorting mirror becomes a distorting prosthesis that can be used to play an aesthetic game.

The game is a complex one: on the one hand, I behave as if I were standing in front of a plane mirror telling the truth, and I find that it gives back an 'unreal' image (that which I am not). If I accept this image, I am helping, one could say, the mirror to lie. The pleasure that this game gives me is not of a totally semiotic nature but of an aesthetic nature.

The distorted image produced by the mirror is “parasitic in respect to its referent” and we are forced into the hallucinatory situation of seeing one thing as another. Eco terms this “the dawn of a counterfactual exercise,” where an extra knowledge concerning what is and what is possible occurs: “the beginning of semiosis.” The semiosis occurs between the perceptive surprise and the channel, not between image and object. The information is about the anomalies of the channel and not the object itself. For Eco, all mirrors are distorting framing devices and any “semiotic contrivance” does not concern the image but rather the manipulation of the channel. Like Maillet, Eco has collapsed

125 Ibid., 208, his emphasis.
126 Ibid., 218.
127 Ibid., 218.
128 Ibid., 219.
the characteristics of all types of mirrors into a singular form and purpose to serve his argument. Another collapse he supposes is that of an object with its reflection in his insistence that a mirror image is parasitic and cannot be interpreted. In contrast, artists have used mirrors to differentiate an object from its reflection; for example, Smithson’s use of mirrors in his Yucatan project, or Kusama’s obliteration of the original object. It is the point of separation of the reflection from its object and how this can be presented in a flattened pictorial space that I am concerned with in this project. Earlier tourists with a Claude glass made what they considered to be miniature paintings using only a mirror, taking the use of the mirror outside of the everyday. They manipulated the channel to produce a new reading of the reflected landscape, creating an untruth that Eco denies is possible in everyday mirrors, and stepped over the threshold between perception and signification.

**Gathering and Collecting**

Contemporary artist Anish Kapoor also enacts a public aesthetic game by using the distortions of convex and concave reflective surfaces to. In this game, there is a fine line

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**Figure 13** Anish Kapoor, *S-Curve*, 2006
between art and entertainment, as acknowledged by Kapoor: “It’s a short trip from Disneyland to something truly mysterious.”

His monumental public sculptures such as Cloud Gate 2004, Sky Mirror 2006 and C-Curve 2007 are highly engineered curved polished metal mirrors that are intended to interiorise the viewer and reflect their inner world. Discussing the Cloud Gate work as prompting such inward-looking reflections, Mary Jane Jacob refers to a unifying mirror: “This mirror that Kapoor has given us is not so much a mirror of the self or of the city as a mirror into the self and in which we can see ourselves in union with others.”

For Partha Mitter, Kapoor’s mirrors are sites of transformation that offer a place to reflect on the impermanence of life by asserting the presence of the metaphysical within the everyday. Discussing the same works, Nicholas Baume appreciates Kapoor’s mirror works as illusive, seeing their formal qualities as producing a sense of limitlessness through their continual perceptual shifts. Like Mitter, he perceives the possibilities of transformation within a unifying mirror:

That when you interact with it you enter a space which seems neither on the surface nor inside. The work posits a kind of compressed energy, and that resonates very much with changes in our perception of the world. Our understanding and experience has been exploded onto both a micro and macro scale. The visual language that describes the world is changing; these works capture that transformation in a quite extraordinary way.

Kapoor is fascinated with the polished surface, believing that “when it is really perfect enough something happens—it literally ceases to be physical, it levitates, it does something else.” He cites artists such as Brancusi and Jeff Koons using polished convex surfaces, but prefers the concave forms of his own works: “They cease to be physical and it is that ceasing to be physical that I’m after.”

S-Curve (2006) (figure 13) is a single ribbon of slightly undulating polished steel that transitions from convex to concave and on whose surface, as Baume describes, the world “appears live, in multiple, simultaneous abstracted iterations.” On the polished surface, the surrounding scene is distorted and bent by the curves of the metal. In Kapoor’s

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130 Ibid.
131 Ibid., 118.
132 Ibid.
133 Ibid., 53.
134 Ibid.
135 Ibid., 52.
sculptures, nature is experienced virtually, with the surface of the forms abstracting the surroundings to create shifting imagery that follow the same sense of illogic that Smithson perceived in his Yucatan mirrors.

Kapoor’s giant public concave mirrors do not gather in a landscape, as a Claude glass would; instead, they concentrate a detail of that landscape on their surface. Their flipping of the macro and micro resulting in an abstract image rather than the insertion of another landscape into the visual space around them that a convex mirror would.

![Figure 14 Anish Kapoor, Sky Mirror, 2016](image)

The changes in perception, understanding and experience that Baume is alluding to, but not specifying, are most probably driven by technology. An example of that expansion on a macro-scale and the dialectic between nature and technology can be seen in Andreas Gursky’s *Ocean II* (2010) (figure 15). Gursky fuses found imagery of satellite views of coast lines with pictures of the ocean generated in photoshop to create a seemingly impossible view of an entire ocean. The scale of this type of scene can only be created digitally by gathering multiple individual points to build a composite view. Gursky’s imagery can be understood as a contemporary technological upgrade on the conjuring of a landscape found in the Claude glass. He gathers an entire ocean into his view to make visual sense out of an otherwise overwhelming example of nature.
As with the Claude glass, both Kapoor and Gursky gather in nature, bending the world to create pictures. Gursky makes a rectangle from the sphere of the earth and Kapoor curves and distorts nature back on itself. Their works demonstrate a continuing fascination with the properties of the distorting-mirror that made the Claude glass so popular in its time, the prospect to experience the world as art or, as Baume says, to conjure the “fugitive possibilities of the real”\textsuperscript{137} Also, both offer the stimulation of sensation that is, perhaps, a nod to Disneyland.

Figure 15 Andreas Gursky, \textit{Ocean II}, 2010

In this chapter, I have discussed aspects of the history of the mirror in art as it relates to the Claude glass. It is important to emphasise that the Claude glass is a mirror whose use has been limited to the purposes of art. The examples in this chapter demonstrate the mirror is a disruptive presence in art. The mirror surface can gather in a view, reveal the unseeable, and reference a world beyond the frame. Recording the mirror in photographs and videos also raise questions around visual perception and temporality. As a mirror, the Claude glass encompasses all these possibilities. These potentials perhaps explain why it was so popular for making a picture when in nature. There was a

\textsuperscript{137} Baume, \textit{Anish Kapoor}, 26.
desire, driven by a confluence of social and theoretical circumstances in Britain in the late eighteenth century, to make nature into art. In the next chapter, I will investigate that desire in terms of the Picturesque, how it is still affecting modern photographic practices and how, despite the simplicity of the instrument, the uses made of the Claude glass resonate through new technology.
Chapter 3. The Claude Glass, the Picturesque and Photography

The Claude Glass and Photography’s Origins

Geoffrey Batchen’s *Burning with Desire: The Conception of Photography* is a detailed account of the medium’s beginnings. He avoids the standard origin story of photography—when the first photograph was made and by whom—and instead addresses the discourse and technology of vision in the late eighteenth and early nineteenth centuries. He emphasises the expression of a desire to make permanent pictures by the action of light, concentrating on the aspirations of those he terms “proto-photographers.” He lists a series of concept-metaphors that summarise the difficulties of conceptually aligning a new human invention within a discourse involving nature. What was to develop into photography was discussed, by the proto-photographers, in terms of:

- A mode of representation that is simultaneously active and passive, that draws nature while allowing her to draw herself, that both reflects and constitutes its object, that undoes the distinction between copy and the original, that partakes equally of the realms of nature and culture.

At the time, landscape painting and poetry were the dominant modes of picturing nature, and central to those renderings of landscape was the Picturesque. Batchen looks to Gilpin as “projecting landscape as the central concern of the picturesque,” and he introduces the Claude glass as one of a group of instruments that changed the way that landscape was being viewed. He understands Gilpin’s reading of the complex view seen in the Claude glass as a precursor to photographic vision: “The pictorial properties that Gilpin admired in his Claude glass—the ability to reduce all things to visual equivalence—are strikingly similar to those that would later be found in photography.”

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140 Ibid., 73.
141 Ibid., 78.
Other photographic histories, among them Helmut Gernsheim’s 1982 *The Origins of Photography*, ignore the Claude glass in the history of the medium. Without a lens or diaphragm, the Claude glass does not rate a mention in Gernsheim’s chapter on the prehistory of photography. Gernsheim singles out the camera obscura as the only device worthy of note as a percussor to the modern camera, stating that the *camera lucida* “is not a camera at all” (his emphasis). However, chance events and impulsive actions were less likely in the more complex apparatus of the camera obscura, with its time-consuming set up. We can see parallels between how the instantaneous, spontaneous, contingencies of photography and the fleeting almost random views captured in the Claude glass imply a unique point of view. For example, the poet Thomas Gray describes the accidental capture of an image in his glass when falling after a late lunch. A note of his from 1769 reads:

> Dined by two o’clock at the Queen’s Head, & then straggled out alone to the *Parsonage*, fell down on my back across a dirty lane with my glass open in one hand, but broke only my knuckles: stay’d nevertheless, & saw the sun set in all its glory.142

From the accidental stumble, Gray’s glass is able to project an image to the poet that coheres his desires for the scene with the reality of the setting sun. This happy accident in the poet’s use of the glass pre-empts the ability to find the unexpected in the real when looking at a photographic image. This process of discovery is described by Victor Burgin in his essay “Looking at Photographs”:

> With most photographs we see, this decoding and investiture takes place instantaneously, unselfconsciously, ’naturally’; but it does take place – the wholeness, coherence, identity, which we attribute to the depicted scene is a projection, a refusal of an impoverished reality in favour of an imaginary plenitude.143

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142 Thomas Gray, Letter to Thomas Wharton, 29 October 1769, The Thomas Gray Archive, https://www.thomasgray.org/cgi-bin/display.cgi?text=tgal0565#ft. Interestingly, the quote from Thomas West’s guide in Chapter 1 has an alternative interpretation of Gray’s tale: “Another station remains, and which ought to be an evening one, in the vicarage garden. Mr. Gray took it in his glass from the horsing-block, and speaks of it thus: ‘From hence I got to the parsonage a little before sun-set, and saw in my glass a picture, that if I could transmit to you, and fix it in all the softness of its living colours, would fairly sell for a thousand pounds ’…” See West, *A Guide to the Lakes in Cumberland, Westmoreland and Lancashire*.  
As suggested earlier, the physical properties and images of the Claude glass are as relevant to later forms of the hand-held instant camera as the camera obscura is to the view cameras of early photographers.

Gray, Gilpin and tourists of the Picturesque generally were on the hunt to find and sketch or capture pictures of nature in a Claude glass. Even though Gray’s vision of the sunset came about by chance, the possibility of recognising the quality of such pictures was enhanced by his study of texts and paintings. He was searching for a particular experience because he had access to other examples in culture. For the view-hunters, nature, Batchen asserts, was “already a series of pictures” and he quotes a letter from Gilpin’s son to his father written on a trip to the Swiss Alps in 1788 as an example of this: “wherever I turned my eye I beheld a drawing of yours.”\(^{144}\) The pictures nature provides, however, can be improved upon, with Gilpin being “…so attached to my picturesque rules, that if nature gets it wrong, I cannot help putting her right…” For Gilpin, imagination rules the eye so that the Picturesque becomes “a circular economy of pleasurable memories with their source in the mind of persons already.” Batchen also cites the classical scholar and Picturesque theorist Richard Payne Knight from his *Analytical Inquiry into the Principles of Taste*, written in 1805:

*The spectator, having his mind enriched with the embellishments of the painter and the poet, applies them by the spontaneous associations of ideas, to the natural objects presented to his eye, which thus acquire ideal and imaginary beauties; that is, beauties which are not felt by the organic sense of vision; but by the intellect and imagination through that sense.*\(^{145}\)

The Claude glass reinforces our own visual separation from the world, the image it produces is a darkened distant place, beyond the point of touch. That place becomes a space imagined; however, it is also an insistence of an objective reality, a place beyond the frame and boundary of subjective representation. Knight’s spectator is imagining the world into a series of pictures that are informed by the tastes they have acquired through culture. Technologies such as the Claude glass begin to make these pictures tangible and the development of photography allowed them to be kept, shared and discussed.

\(^{144}\) Batchen, *Burning with Desire*, 75.

\(^{145}\) Ibid., 75–78.
Photography, Landscape and the Picturesque

In his introduction to *The Iconography of Landscape*, Denis Cosgrove states that “every study of a landscape transforms its meaning, depositing yet another layer of cultural representation.” As a new medium, just what photography could add to the pictorial and cultural representation of landscape was not yet known. James Ackerman argues that an understanding of the Picturesque is useful in the aesthetic choices made by photographers of the landscape in the period from 1839-1860. He makes the links between the aesthetics of early photography, writings on the Picturesque, drawing, and illustrations in guidebooks from the end of the eighteenth century up to 1840. He also notes that tour books with illustrations of the river valleys of England and Wales, the Lakes District and Scotland had created a great public interest that led to a substantial commercial market in photographs. To exploit that market, a number of practitioners used Picturesque themes and chose fine art as the model for their photographic imagery.

The rudimentary technology of early photography, such as its long exposure times and lack of sensitivity to certain colours, meant that subjects had to be chosen carefully. Built forms were good stationary material and employing formal Picturesque compositions established the taste of the photographer to their potential audience. By following the views seen in a Claude glass and continuing the pictorial motifs of the Picturesque, early photographers began the process of legitimatising photography’s claims to be accepted as art. They were deliberately placing the medium into the history of landscape painting and prints. However, as revolutionary as photography was, the Claude glass had some advantages over the early photographic processes. Technical knowledge was required to make the monochrome photographic imagery and production was a slow multi-step process. It was not until photography became industrialised and finally digital, some 175 years later, that it could replicate both the immediacy and colour of the Claude glass.

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148 Ibid., 88–91.
A Continuing Influence: Voyeurs Not Connoisseurs

As the chemistry and techniques of photography evolved, so new subjects became available along with the rise of new practitioners. Developments in photography enabled the making of views by tourists to become evermore ubiquitous. Sketchbooks and Claude glasses were replaced in the early twentieth century by hand-held cameras and later with digital devices such as mobile phones. As David Bate states, “the picturesque is important, since it anticipates the modern conventions of the tourist industry, where tourists with cameras follow in the footsteps of earlier travellers.”

More and more people mediate the world through technology and most tourist photographs become, as Sontag puts it, a way of “certifying experience.” As she argues, the photographic record becomes the priority, exceeding the terms of the experience itself. This continual recording of the world is a reductive process as people become voyeurs, separating themselves from the places they visit and treating them as purely visual experiences. The sites are reduced to mere reproductions of the forward gaze of their monococular camera.

Figure 16 Suzanne Mooney Lough Fee from the series ‘Behind the Scenes’ 2006

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Photographer Suzanne Mooney makes a critique of the numbing of experience and the resultant generic imagery of travel photography in her series ‘Behind the Scenes’ from 2006 (figure 16). Over blurred photographs of landscapes, she superimposes the back of a digital camera, showing a crisp rendition of the blurred image. The images place the camera as a mediating device with which we consume the landscape by framing, preferencing and excluding parts of what we see. There are no controlling hands on the camera as it floats in space. This enables the viewer to take the position of the photographer, with the camera as a barrier or a filter to the blurred landscape behind. For me, the fascination of the series is in the denial of pleasure in the photographs. In repeating the action of taking a photograph, the camera becomes a routine for capturing an image of, but not enjoying, the landscape visited. Mooney has taken up Sontag’s dictum that “most tourists feel compelled to put the camera between themselves and whatever is remarkable.”

Figure 17 Cyprien Gaillard, Geographical Analogies #7, 2006

The Picturesque is currently under re-evaluation as a cultural theory and much of the literature discussing photography and the Picturesque focuses upon the ruin. Stefanie Gerke argues that the Picturesque remains a relevant aesthetic category through the example of French artist Cyprien Gaillard (figure 17) and the irregularity of his polaroid images of failed and decaying architectural utopias. Photography, she claims, “has

151 Ibid., 23.
taken the role of landscape painting in providing picturesque perspectives of aesthetic appreciation.”

Another example of this type of imagery is found in Andrew Moore’s *Birches Growing through Books* from his ‘Detroit Disassembled’ series of 2014 (figure 18). The qualities most associated with the Picturesque, “roughness and sudden variation. Joined to irregularity of form, colour, lighting” are evident, despite very different strategies, in both Moore’s picture and Gaillard’s Polaroid composition.153

![Figure 18 Andrew Moore, Birches Growing in Books (from the series ‘Detroit Disassembled’), 2014](image)

Today, tourists with their cameras are also searching out the sites of infamous contemporary ruins, such as in Detroit and Chernobyl, in what has been termed “dark tourism.”154 In these abandoned areas, nature is a co-constructer of urban decline. Nate Millington, in commenting on the work of the photographer Camilo José Vergara, separates the processes of nature from those of the built, though decaying, environment:

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the return of nature to the city is a destructive process, as weeds and trees sprout from the roofs of buildings and cracks in the concrete, but this is a creative destruction that looks towards the future.\textsuperscript{155}

This fascination with decline and the incongruity of finding beauty in ruins is a direct continuation of the Picturesque and the early history of tourism. Over two hundred years earlier, Picturesque tourists were surveying similar decay, and the reclamation by nature, of the ruined Catholic buildings dotting the English countryside. In 1770, Thomas Gray wrote in his journal of his visit to the “noble ruin” of Kestrel, where he used his Claude glass to take in many scenes over the course of a day:

adjoining to the church between that & the river are variety of chappels & remnants of the abbey, shatter’d by the encroachments of the ivy, & surmounted by many a sturdy tree, whose twisted roots break thro’ the fret of the vaulting, & hang streaming from the roofs. the gloom of these ancient cells, the shade & verdure of the landscape, the glittering & murmur of the stream, the lofty towers & long perspectives of the Church, in the midst of a clear bright day, detain’d me for many hours & were the truest subjects for my glass I have met with yet anywhere.\textsuperscript{156}

Gray displays a commonality with our modern tourists and artists in hunting for distractions and the unforeseen, but not unexpected, visual joys amid their chosen decaying surrounds. For all, ruins become places for stoic meditations upon the ephemerality of life.\textsuperscript{157} The aesthetic interests appear to overwhelm any political concerns, the causes of the destruction and decay are secondary to the pleasure of viewing and recording them.

The subject interests of both the original purveyors of the picturesque and later photographers are some of the pictorial themes I have explored in this project. For \textit{Still|Silent}, I photographed an abandoned industrial complex in Brisbane and for \textit{Dark Mirror}, I travelled to the ruins of Port Arthur in Tasmania. I was not mimicking the experiences of the earlier Claude glass–toting tourist, but I was replicating their shifting perceptions of close environments by using technology to mediate the experience of


\textsuperscript{156} Thomas Gray, letter to Thomas Wharton, 18 April 1770, The Thomas Gray Archive, \url{https://www.thomasgray.org/cgi-bin/display.cgi?text=tgal0597}.

\textsuperscript{157} John Sellars, \textit{Marcus Aurelius} (London: Routledge, 2020), 99. Sellars believes that for the Stoic Marcus Aurelius, meditation upon death was a positive mental exercise as it concentrated the mind on purpose rather than trivialities. The educated and romantic tourist may have been searching for similar purpose within the ephemeral external of ruins.
nature. These experiences were valuable in gaining a deeper understanding of how I may present some of the physical properties and visual idiosyncrasies of the Claude glass in my final series of works. I found and experimented with visual forms in the familiar landscape of industrial Brisbane. Those circular forms morphed into elliptical pictorial motifs that echoed the form of Glover’s Claude glass and were the eventual physical shape of the work I made in Tasmania. The shapes also became central to the aesthetic of the final series.

The Trace of Light
Gray spent an afternoon of a ‘clear bright day’ happily chasing pictures in light; the ‘proto-photographers’ desired to make pictures by the ‘action of’ light; and contemporary photographers still revel in light’s irregularities. The quality of light has been a tangible line that runs through the aesthetic and technical aspects of photography from its pre-history in the Claude glass to the digital today. The Claude glass emulates and changes the nature of the light it captures, making a miniature image of the real world that appears to look like a painting. The processes of photography do something similar but are temporally locked to the moment of capture, though can be modified later in ways that are impossible for the immediate image in a mirror. Both processes are dependent on light—seeing it, establishing a relationship with the real by recording it, and attaching the trace of a thing made available by its action.

In both Moore’s and Mooney’s work, photography’s relationship to the real is evident and unquestioned. Moore’s Detroit photographs were made with a cumbersome 10x8 field camera using negative film. The trace is caused by light and remains on the film to be activated by chemicals and re-enacted through printing.\textsuperscript{158} Even in Mooney’s digitally manipulated work, we can see how photography can, in Sontag’s words, “usurp reality because first of all a photograph is not only an image (as a painting is an image), an interpretation of the real: it is also a trace, something directly stencilled off the real, like a footprint or a death mask.”\textsuperscript{159} Mooney’s image has either been digitally edited to remove the trace of the photographer, or more likely, a number of images have been photo-montaged to make this single image. However, the trace is the point of this

\textsuperscript{158} Gansky, \textit{Ruin Porn}, 125.
\textsuperscript{159} Sontag, \textit{On Photography}, 154.
work, with the link between the foreground and the background images being pivotal to the work’s success. The image being made is preferred over the physical experience of the tourist. Mooney is implying, however, that the photograph is not enough, that it is a diminished and reductive experience. As a photographic artist, she appears to be questioning the ‘taste’ of those photographers using small cameras at famous locations: a connoisseur criticising the kitsch voyeurism of standard tourists.

Arguments of taste and experience were also used against the Claude glass at the height of its popularity, such as Ruskin’s aversion to the Claude glass mentioned in Chapter 1 of this thesis. Ruskin did however encourage the use of other visual prosthetics such as magnifying glasses.\(^{160}\) His particular disdain for the Claude glass rests in indexicality, in that the trace of the instrument overwhelms the trace of nature in his viewing. The technology is not sufficiently transparent for Ruskin and rather than seeing through it to a clear view of nature, he is distracted by the instrument and its perceived inadequacies. Ruskin, like Mooney, is making an aesthetic judgement; he does not like what he sees.

Throughout the history of photography, technological developments have provided a basis for new types of imagery. Photography has and continues to provide numerous new ways of picturing landscapes, which has given us new ways to locate and understand ourselves in relation to them. The continuing changes in the technologies and techniques of photography—for example, the transition from analogue to digital practices—carry with them questions around truth, objectivity and representation.\(^{161}\) What the ongoing debates around the use and status of technology in seeing and recording landscapes demonstrate is that the experience of doing so continues to have currency and continues to be difficult to describe and understand. The rendering of landscape images remains a place for complex and difficult questions around our perceived obligations to the land we live in and visit. For some, such as Joshua Chang,\(^{160}\) Maillet summarises Ruskin’s criticism and quotes him: “.colours are thus universally polluted with black, by using the black convex mirror, one of the most pestilent inventions for falsifying Nature and degrading art which has ever been put in an artist’s hand.” Maillet, *The Claude Glass*, 147–48.

\(^{161}\) Matthew Biro asserts that technology is not the monster it appears to be, and that concepts such as truth in photography have always been contingent on a variety of factors. See Matthew Biro, “From Analogue to Digital Photography: Bernd and Hilla Becher and Andreas Gursky,” *History of Photography* 36, no. 3 (2012): 353–366, DOI: 10.1080/03087298.2012.686242. Olga Smith provides an overview of a number of those issues in her introduction to photography and landscape; Olga Smith, “Photography and Landscape,” *photographies* 12, no. 2 (2019): 137–142, DOI: 10.1080/17540763.2019.1603837.
photography of the landscape allows a form of truth telling. Writing on Robert Adams’s work in the American West, Chang asserts that the technology of photography somehow allows the artist “to tell the whole truth.” Chang suggests that Adams’s photographs are able to convey “whole and urgent truths” by “discovering unexpected calm” in places where “beauty and tragedy coexist.”162 In a similar way, Gansky believes that photographs such as Moore’s of Detroit have the potential of delivering a Stoic awareness to a broader consensus in that they:

… arrest the attention of viewers and cause them to question the pace of development and the onward rush of national time, then perhaps the photographs can help shift the meanings of progress and pose a challenge to creative destruction, forestalling the processes whereby human endeavours rise, rapidly and inevitably, into ruin.163

By contrast, others such as Sontag and Mooney critique how the act of photographing separates us from our environment by preferencing the potential future image over the perceptual now of recording it. All of these arguments operate at the level of intent and engagement. Those who choose to interrogate their world through themes such as hope, ruin, development and destruction are seen to be offering truth and purpose whereas those who want to merely take a picture are ignoring the ‘true’ experience of landscape. This is, of course, a simple binary position within a complex field but it establishes the point that making a landscape picture is an act of self-expression.

A Technological Shift

I have already mentioned Gilpin’s and Gray’s desire to share the views seen in their Claude glasses. Technology now allows images to be shared directly and almost instantly from device to device. This is no longer delayed by developing and printing processes. As Lisa Gye notes, “camera phone images mean that self-expression is shifting away from ‘this is what I saw then’ to ‘this is what I see now’.” The immediacy of portable hand-held devices, their ability to share photographs instantly, allows us to participate in what Gye describes as “an economy of presence.”164 The proliferation of photographs being shared and seen on digital networks and mobile platforms collapses

163 Gansky, Ruin Porn, 136.
our sense of visual space. There is an association that comes from the instantaneous sharing and viewing of images that parallels Foucault’s description of the mirror image as an “absolute real, connected to all the space around it.”165 This flattening of the visual space is evident by comparing the uses of photography by tourists before and after the advent of mobile technology. Previously, photographs were taken to be displayed after the holiday and archived into family albums, scrapbooks or shoe boxes.166 Today, photographs are used to form a visual co-presence with absent family and friends.167 They are used to establish a presence in the landscape that is immediately seen and engaged with by the viewer. There is a sense of connection, due to a lack of temporal distance, that was not available in earlier photography. The images also have another life as they can be digitally archived and later considered in the same way we have done with earlier forms of photography.

How photographs are produced on these platforms is about to undergo another radical shift in technology. Photography has always required optics and some type of recording material but now research is being conducted that will do away with the lens and lead to new forms of cameras. Lenses take up valuable space in arrays such as mobile phones, and removing them will make the devices lighter and allow other design enhancements. One possibility under investigation is lens-less photography using an image sensor.168 The working principle of this technology is to use the transparent glass cover of the image sensor not as a lens but as a surface with which to register light. A complex numerical solution is required to make images from the process. The sensor will always be on, scanning and recording the surroundings, much like a mirror is always on.169 Images will be created by combining this stream of information into photos and videos.

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165 Foucault The Order of Things, 18.
166 These practices have been noted and discussed in a variety of sources, including: R. Chalfen, Snapshot Versions of Life (Bowling Green, Ohio: Bowling Green State University Popular Press, 1987); D. Chambers, “Family as Place: Family Photograph Albums and the Domestication of Public and Private Space,” in Picturing Place: Photography and the Geographical Imagination, ed. J. Schwartz and J. Ryan (London: I. B. Tauris & Co Ltd, 2003), 96–114.
169 Ibid.
Photography will no longer be of the instant but an algorithmic composite of numerous points of time. This shift will physically bring the mobile device even closer to the Claude glass as the surface of the device again becomes the seeing platform for a functionally transparent technology. The images that play upon the surface and are “already art,” as Solnit claims for those in the Claude glass, can be made permanent.\textsuperscript{170} The latest advances in photographic technology take us back to the visual appearances and aspirations from its prehistory in the Claude glass.

Dubois considers images produced by such a mixture of algorithm and the real to be a “representation of the world and not as a necessarily real having been there.”\textsuperscript{171} For Dubois, this new photography is no longer a trace of the real, locked into a particular past, but becomes instead a fictional parallel representation, a plausible world with its own logic. The criterion for thinking about the photographic image therefore shifts from that of reality to what Dubois terms “fictivity.”\textsuperscript{172} Here, photography no longer reproduces the world but invents it. The application of this new theory of fictivity to photography opens up a number of conceptual fields and propositions around authenticity and believability. For me, the Claude glass has been a useful historical antecedent for these post-photographic considerations as it also allows the real to seamlessly shift into the realm of image and become an imagined fiction, without any skill or delay.

The artworks in my final series in this project consider the parallel representation of the world and the spatiotemporal unity of the image that Dubois raises. The images are no longer the traditional block of space and time of photography but an acknowledged combination, a collage of assembled elements, that have the appearance of a coherent whole. There is a truth in the fiction of the collages, a plausibility in the realm of their possibility. They use Claude glass–like visions to bring into question how we think of the real in photography by presenting multiple versions of it, all at once.

\textsuperscript{170} Solnit, “A Small Piece of Somewhere Else,” 27.
\textsuperscript{172} Ibid., 163.
While the Claude glass, an historical instrument, is in limited use today, I have demonstrated in this chapter that a number of debates surrounding it at the time of its greatest popularity remain relevant and can be usefully applied to current photography. Questions around engagement with the subject, the concept that previsualised aesthetics predetermine the pictures ‘found’ when ‘hunting’ with technologies, the transparency of a device when viewing through it, and the complexities of representing nature were all applied to the Claude glass. New developments in photography parallel key characteristics of the Claude glass and it therefore has the potential to be a useful model in understanding temporality and representation in the technology. This and the previous chapters have investigated the history of the Claude glass and its particular place within the Picturesque sensibility, the development of photography and the broader use of the mirror in art. The final chapter focuses specifically on my studio research outcomes and the possibilities I perceive for the form of vision facilitated by the Claude glass.
Chapter 4. Between Views: The Claude Glass Now

For this project I have produced four separate series of artworks. Each of the series responds to a different point of the research and also to the series preceding it. *Error and Illusion* investigates the dualism of reflection by projecting an environment that is then also reflected on a black mirror within the gallery space; *Still|Silent* uses the found imagery of industrial safety mirrors within the frame of the photograph to reference an exterior world and to consider the appearance of totality and unity in photography; *Dark Mirror* considers the representation of the ruin and nature through the stylised photography of colonial and touristic subjects in Tasmania and experiments in the physical form of the resultant imagery; and *Between Two Views* adapts and collages the specific forms of vision offered by the Claude glass, using environments in Scotland as subject matter, so as to consider the oppositonal perceptions of reality and fictivity in contemporary photographic imagery.

*Figure 19* Carl Warner, *Black Mirror*, 2016 (installed 2021)
**Error and Illusion**

My first action in the studio was to produce a salon-scaled version of a Claude glass (figure 19). I wanted this to be larger than the usual scale so that it could be used in a gallery context and viewed by multiple people at once. After a series of discussions, experiments and samples, the manufacturer created a 60 cm diameter and 2 cm deep black convex mirror, made by heat-slumping black stained glass. The result is an ink-black surface with slight irregularities created due to the heating process. I used the glass to reflect high resolution landscape photographs that were projected onto the opposing wall in a gallery space.

![Image](image.png)

**Figure 20** Carl Warner, *Error and Illusion*, 2016

The images projected were made in North Queensland where I had followed a section of the failed 1848 expedition of Edmund Kennedy when he crossed what is now known as the Atherton Tablelands (figures 20). I chose this particular location so that the work could be read in multiple ways. The area is identified with the ill-fated journey of Kennedy, but it has a longer, though less acknowledged history of Aboriginal occupation, being Djirrbal and Ngadjonji land. I titled the work *Error and Illusion* in reference to the folly of Kennedy’s doomed exploration, the many errors that led to his death, and the illusion of riches he failed to achieve.

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173 The Kennedy Highway and Edmund Kennedy National Park are named after him and memorial plaques in the area commemorate the failed journey. His expeditions are chronicled in Edgar Beale, *Kennedy, the Barcoo and Beyond, 1847: The Journals of Edmund Besley Court Kennedy and Alfred Allaison Turner with New Information on Kennedy’s Life* (Hobart, Tas: Blubber Head Press, 1983).
This series was also a meditation on my research that focused on the writing of Julie Barst and her assertions that the Claude glass was a metaphor for the European project of disenfranchising the Indigenous people of Australia from their lands.\textsuperscript{174} I wanted to explore the possibilities of a dual representation of a landscape in order to reference the opposing histories of the area. Projected on one wall were the highly detailed digital images of the landscape and reflected in the glass opposite was its darkened painterly reflection. When looking at the projection, the viewer was a bystander; however, when looking into the mirror, they could not avoid seeing themselves in relation to the projected vista. In reflection, the viewer was visually both present and absent in the landscape.

![Image of Carl Warner's Error and Illusion installation]

\textbf{Figure 21} Carl Warner, \textit{Error and Illusion}, 2016

The work was presented at the Sydney College of Art (figure 21). It was a problematic installation, as the reflection of the projection in the glass was smaller than intended, taking in too much of the room itself. I had wanted the glass to reflect only the projection so that when looking into the glass the viewer would be visually placed only in that landscape. Instead, they saw themselves in the room, which framed the shrunken landscape. The viewer has to acknowledge their own presence as spectator/observer in the black mirror (figure 22). This presence is reduced to form, being backlit in a darkened room, and they become shadows on and over the projected landscape. The

\textsuperscript{174} Barst, "Transporting the Picturesque."
shadowy forms of the spectator and others in the space appear to rise from the darkened room itself as their inky black shapes blend into the darkness of the reflected chamber. They are neither in the mirror nor the landscape but appear to be in both. This is the effect that Smithson described as being “caught between two worlds” and Foucault as the “over there” of the mirror image.\(^\text{175}\) In this respect, even though I was unable to achieve exactly what I wanted with the work, I felt the audience’s engagement matched my aims for the installation.

A soundtrack of ascending insect noises, recorded on site at the Mt Hypipamee crater on Djirrbal land, accompanied the projection. The soundtrack was played at an uncomfortable volume. By incorporating the overwhelming audio, I wanted to suggest the immensity, wild magnificence and horror of nature that made the experience of the Australian landscape difficult for a traveller of the eighteenth century.\(^\text{176}\) I learnt of how disruptive the sounds of the Australian bush were to British colonists from Peter Denney’s excellent essay “Picturesque Farming: The sound of ‘Happy Britannia’ in Colonial Australia” that merges the predominantly visual ideas of the Picturesque with colonial perceptions of the aural landscape of Australia at the time of British colonisation.\(^\text{177}\) Denney argues that the Picturesque was a shift “from an acoustic to visual mode of knowing and valuing the land” in eighteenth-century Britain that led to a change “in the dominant image of the countryside, from noisy to quiet.”\(^\text{178}\) In Britain, a silent landscape was perceived to be a cultured one, but in the Australian context, the noise of nature was thought to be ‘primitive’ and required replacing with the sounds of human labour. My own soundscape emphasises the overwhelming aspect of the aural cacophony of nature that challenges the Picturesque aesthetics of the mirror.

\(^{175}\) Smithson, “Incidents,” 28–33; Foucault, *The Order of Things*, 21.

\(^{176}\) Both Bicknell and Bonyhady use terms such as “immensity,” “horror” and “wild magnificence” to describe the reactions of colonials to the Australian bush. Bicknell, *Beauty, Horror and Immensity*, xiii, xiv; Bonyhady, *Australian Colonial Paintings in the Australian National Gallery*, 63.


\(^{178}\) Ibid., 87.
Figure 22 Carl Warner, *Error and Illusion*, 2016

*Still|Silent*

Figure 23 Carl Warner, *Still|Silent 04*, 2017
In the *Still|Silent* series, I was interested in capturing the random possibilities of pictures made in the contemporary landscape by stationary mirrors. A mirror is always on, and ready with an image. Convex mirrors litter the contemporary urban landscape. These ‘safety’ mirrors have a lineage to the earliest form of the surveillance camera. An earlier form, known as the Butler’s mirror, was used in Regency period (1811–1820) British dining rooms to enable staff to view all of the room and anticipate service while keeping an unseen, discrete, distance from guests. Modern safety mirrors are placed just as purposefully; they reflect an image without any intent beyond surveillance. The mirror image imitates photography in allowing everything in one visible field to be observed and surveyed. The fixed aspect of the safety mirror is the antithesis of the portable Claude glass, yet my conjecture was that, given their ability to gather, these modern mirrors could be thought to have a lineage to both the Butler’s mirror and the Claude glass, surveying a landscape, ready for an eye to activate the landscape reflected in them.

![Figure 24 Carl Warner, *Still|Silent* (installation detail), 2017](image)

In pursuit of these ideas, I photographed the images for this series in an abandoned paint factory that still had safety mirrors located at numerous points across the site. The site evokes the melancholy of abandonment due to its derelict state. In this built environment, natural forms are secondary; only glimpses can be had of weeds.

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179 Following on from researching Smithson’s *Incidents of Mirror-Travel in the Yucatan* (1969), as discussed in Chapter 2
colonising the space or of trees in a distant background. The series comprises eight photographs that are divided into two suites of four works. The first suite of four are traditionally framed works of the landscape that are viewed square on, utilising a direct, deadpan engagement with the environment. The images collapse the space they view, creating abstracted forms in the landscape. The set of four is divided into two pairs, two of the internal spaces of the factory and two of the external bunds—that is, the area where industrial chemicals are stored behind protective walls (figure 24). One image of each space is blocked centrally and flattened by a wall. The other two open and extend the landscape for the viewer. Still|Silent 01 presents a bund with an opening in the block wall that frames the sky, trees and city beyond, offering a picture within a picture. Still|Silent 06 has the illusion of receding space due to the diminution of scale in the geometric rhythm of the industrial shelving and the room appears endless (figure 25).

The images reinforce the forward monocular view of the camera and the visual containment of the physical within the frame of the photograph.

Figure 25 Carl Warner, Still|Silent06, 2017

The other suite of four photographs focused on the safety reversing mirrors attached to the buildings throughout the site (figure 26). The circular convex mirrors were photographed so that their fastenings are mostly visible. The camera was positioned so as not to be in the view of the mirror, just as a Claude glass could be held to obscure its
operator. The angle of the view is oblique and active in comparison to the deadpan, passive view of the other four framed images. The image in the mirror becomes a picture in itself, separate to the picture that contains it. They were printed on metallic paper with optical properties that make the image change slightly as a viewer moves past them. The works were backed by aluminium, face mounted to acrylic and baton mounted to the wall to give an illusion of depth. This made the work more object-like, and gave them the physicality of a modern mirror. The absence of an external frame emphasised the frame of the mirror inside the image.

![Image](image_url)

**Figure 26** Carl Warner, *Still|Silent* (installation detail), 2017

The mirrors of the first and last images reflect a collapsed vision of solid concrete driveways and the two central images have mirrors reflecting the factory and open sky. In all four images, the sky softly envelops the ‘urban frame’ of the mirror, heightening the lucidity of the enclosed image. The isolated images float in space just as the works float on the gallery wall. In looking only upwards, there is no link to the ground that is imaged in the mirror apart from its isolated reflection. Liberated from their referent, the mirror pictures are also portals to the world beyond the frame of the image. Maillet
writes, “The mirror is defined less by its edges than as a surface reflecting an image,” but to picture a mirror, the edges define just what is reflection and what is emulation. Foucault also described the process of emulation and reflection in *The Order of Things*: 

> Which is the reality and which the projection? … for emulation is a sort of natural twinship existing in things; it arises from a fold in being, the two sides of which stand immediately opposite to one another. 

As photographs, the images break the bonds of this twinship and take on the illogical construction of Smithson’s Yucatan mirrors. The pictured reflections are projections in the pictorial frame, referencing scenes outside that frame but the bond to their opposite is broken.

These two suites of photographs present different ways of seeing and understanding the landscape. The site is representative of the effect of twentieth century industrialisation on the landscape. The machine has fully negated the natural world, but this machine for the manufacture of paint has become redundant. My aim with this series was to shift the viewer to a new way of interpreting the subject of my work. There are similar visual motifs occurring in both suites: the picture within the picture; the illusion of depth on the two-dimensional surface; and the representation of the banal in terms of the sublime, though I believe the images of the mirror within the frame markedly shift the perception of those themes. The photographs have become objects with a physicality that also recalls the referent. In the image, a viewer can see beyond the frame by way of the mirror. The reflected world is the clearest section of the image and the closed visual field of the photograph opens up. It is not only the camera lens that is being seen through, as the mirror becomes a lens and an alternative form of vision is recognised. Moving on from the series, I wanted to experiment with the “specific mode of vision” that Maillet attributes to the Claude glass by replicating the view and the sensation of the glass in a photograph.

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As mentioned in Chapter 1, my sighting of Glover’s glass in December 2017 was a transformative experience. I want to stress just how surprised I was by both the clarity of the glass and how the reflection was darkened though not particularly weakened. The verticals of the urban industrial surrounds I saw in the glass were straight and clear and all of the reflection was in sharp focus (figure 27). The tonal range of the scene was reduced, bringing out detail in the clouds and darkening the trees and shrubs in the mid-distance. A weatherboard house with a green roof across the road was clear, as was the tree line at the top of a distant mountain, and even the houses on the slopes of Mt Wellington in the far distance were visible. Through the viewing, I gained an experiential understanding of the form of vision offered by the Claude glass and was able to conceive of using other materials that would imitate the qualities of that view and the physicality of the instrument.
I originally planned to photograph landscapes that Glover had painted around Patterdale. However, I did not want to merely replicate those views in the same way that I did not want to merely imitate the use of the Claude glass by earlier practitioners. My attention had shifted as I learnt more of the use of the glass by pastoral and Picturesque tourists in the eighteenth and nineteenth centuries. I decided to shift the emphasis of any work made in Tasmania to that of a tourist’s engagement with the landscape rather than a painterly rendering of the environment. As such, I visited the natural wonder of the Tarkine\textsuperscript{183} and also one of Australia’s most famous and historic sites, the ruins at Port Arthur.

![Figure 28 Carl Warner, *Dark Mirror 6*, 2018](image)

Seeing Glover’s Claude glass gave me a fuller understanding of both the optical and tonal qualities of the instrument. To imitate these characteristics, I photographed the tourist sites using a medium format digital camera with a wide-angle lens. This allowed

\textsuperscript{183} In a public talk at the University of Queensland on 24 April 2016, I heard the former politician and environmental activist Bob Brown make the statement that “every Australian should visit the Tarkine at least once.” He invoked the language of the picturesque using descriptive words such as ‘rough nature’ and ‘sublime’ to describe the remote rainforest environment. His encouragement towards environmental tourism based on experience and aesthetics allowed me to draw a comparison to British tourists surveying their own Island in earlier times.
a gathering of the field of view that is similar to the perspective of the glass. I slightly underexposed all the images to replicate the tonal reduction of the dark mirror. At both sites, I followed the directions of the tourist guidebooks and participated in guided walks, imitating a cultured eighteenth-century tourist following the stations identified in their guidebooks. During these activities, I photographed scenes that had generic Picturesque motifs, such as the winding path, the irregular shape of a tree and the ruined cathedral. I did not want to manipulate the photographs digitally in post-processing beyond some tonal adjustments, as I aimed to prioritise the immediacy of my engagement with the landscape.

Figure 29 Carl Warner, *Dark Mirror 4, 2018*

In the Tarkine, I again considered the beauty, horror and immensity of nature and its history in an Australian context. The Pieman River and surrounds contain many Picturesque irregularities—for example, fallen trees, with their greyed timber filling what would have normally been a watercourse (figure 29). Underexposing the

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photographs kept the tones soft and the shadows greatly reduced. In *Dark Mirror 2* (figure 30), one can see the darkened tones that mimic those of Glover’s glass.

![Figure 30 Carl Warner, Dark Mirror 2, 2018](image)

One of the first production decisions I made was to imitate the physical form of Glover’s glass and I cropped the images into proportional oval shapes. A strong impression I had of his glass was of how well it fitted into the hand, so I sized a number of images to approximate those proportions. I had the images printed directly onto toughened extruded acrylic that was 6 and 10 mm deep. They were then mounted to alupanel backing, for rigidity, and cut into elliptical shapes using a CNC router and the edges were polished to clear. Six photographs were made at 60 x 40 x 10cm and ten were made at 15 x 10 x 6 cm. The larger images were wall mounted and the smaller versions were left on plinths and shelves in the gallery space.
The series *Dark Mirror* was exhibited at Jan Manton Gallery, Brisbane, in May 2018 and the smaller lozenge-shaped works seen in Figure 31 fitted comfortably into the hand. Viewers were encouraged to pick up these smaller works and look at them in different lights and angles as they appeared to change density when seen in different planes. The scale, physicality and encouragement to handle the little mementos was an allusion to the tourist gift shop and the knick-knacks collected by visitors. Andrews labelled the Claude glass a ‘knick-knack’ of the Picturesque tourist and my small works act as Andrews “pictorial trophies”. ¹⁸⁵ I did not and do not resile from this, I was keen to see if a response could still be evoked by the scale and form suggested by the Claude glass. The series alternates between the grand Picturesque vision of a wild landscape and the physically tamed and constructed tourist trinket. The act of “fixing untamed landscapes” into memento-styled objects reduces them to a constructed ideal of nature. The “incompatible principles” of “Truth to nature” and “the modifying imagination”

serve as a rupture that divides the works from the landscapes they portray.\textsuperscript{186} There is an underlying assumption of control over nature, a separation from, and mastery over, it.

Making the works as ellipses was a success. Feedback suggested it allowed an alternate take on the landscape picture by alluding to the outmoded shapes of oval and passe-partout mattes. I decided that I wanted to continue the exploration of this shape but to blend it with the previous interests I had in the ‘picture inside a picture’ forms of the \textit{Still|Silent} series of works. The process of cutting out an ellipse made me realise that part of a landscape disappears when you place a Claude glass in front of it. From this point, I wanted to make images that brought to the fore the obliteration and replacement of the view. I decided to take pictures in two directions every time I made a landscape image: one of my chosen landscape and the other of the view in the opposite direction. I achieved this by turning the camera 180 degrees on a tripod head, thinking of it as a binary event, a two-way view. I would see both what was in front of and behind me just as one can in a mirror.

\textsuperscript{186} Ibid., 71.
In July 2018, I began my experiments with photographing ‘two-way’ landscapes at Cannon Creek outside Boonah in South East Queensland. The property has views that stretch to the Great Dividing Range with no straight horizon lines, only the roll of the hills. I made a number of working images photographing in opposing directions, planning to collage an elliptical cut out of one photograph centrally situated and slightly higher in the rectangular frame when positioned over the opposing view. The overlaying central image was to be reversed and darkened to match the reduced and intensified view of the Claude glass. I shot all the images on a digital camera with an LCD\(^{187}\) on the back of the camera for viewing. The more traditional through the lens system of viewfinder takes up the entire field of view and forces a monocular vision. Looking at the back of the camera is not the same disembodied experience, it is similar to looking at a Claude glass, with a gap between the pictured scene and the eye. Working only from the image on the back of the camera, I was no longer immersing myself fully in the technological view but considering all my surrounds.

\(^{187}\text{Liquid Crystal Display (LCD) is a form of visual display used in electronic devices, in which a layer of a liquid crystal is sandwiched between two transparent electrodes.}\)
In the studio, I experimented with image placement, firstly by creating an ellipse mask and then collaging that image over the reverse shot in Adobe Photoshop. Due to having used a number of different lenses, I had a suite of images of the same scenes at differing scales to choose from. There was a real sense of play in placing the images, for example, in the working image (figure 33), the trees appear to be ‘holding up’ the ellipse. The final work, *Dark Mirror Cannon Creek* (figure 34), did not include two images, instead having a black ellipse as the overlay, an obliteration of part of the scene. I made the decision to use the face mounting to acrylic process again so that the black ellipse would act as a tain\(^{188}\) to the acrylic and become a mirror-like surface. The gallery spectator would see themselves in this darkened form and be framed in the surrounding landscape, producing an immersion of sorts.

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\(^{188}\) The tain is the, often tin foil or plate, backing used behind glass to give it mirror like properties.
The work was an experiment that was successful in its physicality—the black space did act like a mirror—but I felt the imagery had limited use in the project, as I was unsure what the repetition of the darkened form would add across a body of work. I also became aware of the artwork of James Tylor and his series ‘(Removed Scenes) From and Untouched Landscape’, 2018, (figure 35) that “highlights the contemporary absence of Aboriginal cultures within the Australian landscape.”

Tylor’s images have cut out forms of squares, rectangles and circles that reveal an underlying black velvet to create voids in his landscape photographs. These voids represent an absence, removal and censure of traditional First Nations culture from the Australian landscape. The repetition of the motif is a powerful signifier in the work, pointing to a multiplicity of loss and an ongoing process of disempowerment. The obliteration of the landscape that I was alluding to visually in my own work has been a political process operating for generations since colonisation and it would have been disingenuous of me, I believe, to continue with that form despite the concept coming from a very different idea. My

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initial work in this project had engaged with themes of the disenfranchisement of the Indigenous peoples of North Queensland and a lack of acknowledgment of them in the tourist signage in the areas I visited. It had been informed by scholarship that used the Claude glass as a metaphor for the colonial project, when no such metaphor is required. I concluded that I would focus my work on the tourist travelling to Britain and engaged in the natural tourism of that country which I felt greater entitlement to experience and represent. That landscape and that role seemed more open to me and my optical experiments and also helped formally close the circle of my engagement with the Claude glass in a way that rang true to its origins and my own. I would follow the journeys of the original Picturesque tourists on trails still being walked today. Doing this would allow me to better understand the process of Glover’s painterly transcription of new landscapes and his desire to comprehend new sights through facets of the old. I would be taking the Claude glass, or the form of vision it offers, full circle by going to the places it was originally used. Not with the intention of expropriating those lands but rather to see and present them as new landscapes, seemingly natural places of visual interest in an otherwise overpopulated island. It has never been my intention to merely repeat the use of the glass, but to find ways to understand the vision and the desires it created and to make those anew for myself and others.

**Between Two Views**

In my research, I have found other contemporary artists who reference the Claude glass in their practice. For example, American artist Toni Gentilli combines antique optical equipment and modern digital devices into her art.

![Figure 36](image) Toni Gentilli, *The Thing Itself (iPhone as Claude Glass)*, 2015
She has incorporated an iPhone into a wooden field camera, replacing the negative holder with a phone inside a velvet overlay (figure 36). The phone is switched off and acts as a Claude glass, with the screen becoming a dark mirror. The camera is then placed in the landscape and the images on the mirror documented. There is an initial fascination with the images but the index of the process, the continual sighting of the method of the production, the soft edge of the velvet and the sense of the screen quickly overwhelm or dampen that fascination. Mark Morris also makes the links between the Claude glass and the iPhone. He calls the Claude glass a “slab of slightly deformed shiny material” that “appears to do the work of a photographer savvy with special effects and filters.” He believes the experience of using a Claude glass to be a “twice removed experience” in that if a painting is once removed, an image that looks like a painting is at another remove again. Gentilli’s images appear to be a further step away from experience. The photographing of the reflected image in the landscape could be considered similar to Smithson’s Yucatan photographs but the thrice-removed experience of them lessens the illogical interest of the reflection. The works also share visual similarities to Mooney’s ‘Behind the Scenes series’ (figure 15), but lack a critical engagement with the method of production that Mooney’s works elicit.

As described earlier, tourists now use the hand-held phone to make images in the landscape in the way the Claude glass was once used. Both are almost transparent technologies; the images made with them are seemingly an automatic and obvious part of enjoying the environment. This seamless experience of a technological vision was something I wanted to convey in the work I planned to make. Mooney’s and Gentilli’s artwork highlight, for different reasons, the technology that informed them. I am more interested in exploring the sensation of vision, of being in an environment and the sensation of an experience, rather than revealing the mechanics of that translation of experience. The ellipse shape I used in the Dark Mirror series and the experiments with ‘two-way’ images allowed me to reference the Claude glass without it becoming an overbearing motif in a series of works. My aim was that there should be a sensation, or illusion, of image making in the pictures, but not for the technology to be visually dominant. In using the shape, I also recognised that it could be read in alternate terms.

191 Ibid., 107.
such as an historical model of framing and designating pictures as “art.” However, I believed that this consideration is outweighed by the connection of the Claude glass to the form and therefore to the hand and the agency of the body in considering and determining the images produced.

Numerous guidebooks aimed to accommodate the Picturesque traveller in late eighteenth and early nineteenth century Britain. In addition to writings by Gilpin and West, there are many other guidebooks, such as Spence’s *Sketches of Present Manners, Customs and Scenery of Scotland*, John Stoddart’s *Remarks on Local Scenery and Manners in Scotland during the years 1799 and 1800*, and a *Guide to Windermere with Tours to the Neighbouring Lakes and other Interesting Places* by Miss Harriet Martineau. I chose two places in Scotland that had links to the earlier tours, the Shetland Islands and the Western Highlands. Both promised wild scenery, ruins and a bucolic atmosphere. It was my intention to slowly traverse the countryside, so I decided to walk an established trail, as this would give me more opportunity for contemplation of the scenery and consideration of its photography.

According to its website, 40,000 people complete the 154-kilometre West Highland Way walk every year. Established in 1980, it was the first long distance walking route especially designed for tourists in Scotland. The path proceeds from Milngavie to Fort William, running from the edge of Scotland’s largest city, Glasgow, along the shores of its largest lake, Loch Lomond, across its grandest moor, Rannoch, and under the highest peak in Britain, Ben Nevis. Many of the sites visited along the way were also stopping points in the guides from the earlier picturesque tours. Loch Lomond, Conic Hill, Rannoch Moor, Glen Coe, Ben Nevis and Fort William are frequently mentioned in the old guides. In traversing the West Highland Way, I was following in the footsteps of the picturesque tourists and looking to engage physically with the same

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environments. I expected to forge a relationship with the landscape by trekking it and gain a sense of completion by finishing the journey.\textsuperscript{195}

The decision to walk through the landscape was also informed by Robert Macfarlane’s book \textit{The Old Ways: A Journey on Foot} and his thoughts on the communal aspects of walking, its traditions and the connections made possible through the act of walking:

Paths are the habits of a landscape. They are acts of consensual making. It's hard to create a footpath on your own...Paths connect. This is their first duty and their chief reason for being. They relate places in a literal sense, and by extension they relate people. \textsuperscript{196}

Macfarlane writes about discovery and part of that process is reading the country we walk through. Ben Jacks also affirms the reading of landscape by walking through it. He outlines four waking practices “sighting, measuring, reading and merging.”\textsuperscript{197} Jacks states that walking “facilitates reading at both the near-at-hand tactile scale and the larger scale of visual and narrative culture.” There is a metaphysical possibility in walking through a landscape that Jacks believes takes the traveller beyond intellectual ideas and concepts to embodied knowledge. He relates the practice of merging while walking to the Buddhist practice of mindful awareness, as a way to account for a site’s infinite and unfolding qualities.\textsuperscript{198} Walking allows us to be present in a landscape—to see, touch and breathe it. We can appreciate the land at both the visual and tactile scale and allow ourselves a deeper appreciation of the surroundings we visit. I was interested in the meditative aspects of walking long distances where a good walking trail becomes an “holistic integrated person-environment system.”\textsuperscript{199} By walking the landscape, I was hoping to have a greater engagement with it on multiple levels of meaning and experience.

The Shetland Islands have an inhabited history that can be traced to Neolithic times. You do not have to travel far here to see Picturesque sites. The ancient ruins of Jarlshof are situated next to the airport on the island of Mainland and there are numerous brochs,

\begin{itemize}
  \item Den Breejen lists these expectations as common themes for those walking the West Highland Way. \textit{Ibid.}, 1427.
  \item \textit{Ibid.}, 271, 273.
\end{itemize}
crofts\textsuperscript{200} and castle ruins scattered around all the Islands. I travelled to the northern most island of Unst and walked to the Muckle Flagga, a lighthouse at the tip of the British Isles. The day had perfect weather, the North Sea was a deep blue, the clouds unthreatening and the wind surprisingly light at the tip of inhabited Britain. I began my project there by photographing towards the lighthouse and back to the land (figure 37.) This image reveals the types of choices I was making for the series. I wanted to emphasise the pleasure that I was experiencing in the landscape and its representation. In turning 180 degrees and flipping the image, certain parts of the landscape appear to line up. If you were standing in a landscape with a Claude glass, it is one of the things you would perhaps do, play to align the foreground and background. You might also move the glass closer and further away from your eye to balance the overall effect. This overlay image sits near centre and is not dissimilar to my early working images from Cannon Creek in terms of the blocking.\textsuperscript{201} On recognising the Claude glass was not a fixed point in the view but moved in relation to the eye and landscape, I no longer felt the need to overlay the image centrally in the frame. The elliptical image could be at different sizes and positions over the other image. The shape would be a constant in the photographs that visually moves through the series, bringing coherence to the pictures while emphasising the sense of visual play.

\textsuperscript{200} Brochs are round iron age stone budlings found only in Scotland. Crofts are small, rented farms. The ruined stone farm buildings of failed crofts are all over the Shetland Islands and Scottish mainland.

\textsuperscript{201} Blocking in photography is the relation of the objects within the frame, where they sit and how they relate visually. It also means the positioning and movement of actors across and within the frame of a film.
Collaging the ellipse onto the background prevents the picture from claiming a totality based only in what is in front of the camera by instead referring to a multiplicity of moments in the experience of the scene. In the final works, framing is made obvious because the partitioning of the landscape is not only recognised, it is also multiplied within the image.
Another image collage from Shetland, *Bressay* (figure 38), is visually very different to the other pictures in the series. I was on a tourist boat circumnavigating Bressay Island as it approached close to the gannet nest sites there. On one side was the closed expanse of dark rock covered in nesting birds and the patina of their habitation, and behind was the expanse of the North Sea with birds circling in the pale skies above. I was, perhaps absurdly, reminded of Lorrain’s *Pastoral Landscape* of 1638 (figure 1), where birds are depicted circling in the top middle third of the painting and others are alighting on the river in the bottom middle third. Apart from this visual coincidence, the image combines the most disparate pairing in the series. The rock floats in the sky and the birds, rather than the landscape, bridge the two directions of the image and deliver coherence. Those in the sky circle those on the nest, an illusion to the cycle of life and a meditation on impermanence. This is the most apparently collaged image of the series, yet in many ways it is the most documentary and true to my experience on the day.
As described at the start of this thesis, on my second day walking the West Highland Way I stopped near the peak of Conic Hill to set up my large camera on a tripod and observed a tourist taking her phone photos. The spot is a popular stopping point for many walkers coming from both directions, a great place to take in the view, eat, and rest. I was one of only two people who used a camera-only device to take photographs in the time I was there, the other was my walking partner. The woman holding her camera up to capture herself and the view together that day on Conic Hill is at a pivot point. She is looking one way and photographing the other, able to see both at once because of her technical device. Though unlike the users of the Claude glass, it is likely she is not seeing a landscape but rather herself in the device in the landscape. The place and her stance are unchanged from the picturesque tourist but what she is seeing is as different as the technology they use.

The exhibition of these works, which is the final series for the project, included 10 photographs and two mirror pieces and was shown at Jan Manton Gallery, Brisbane, in February, 2021. I also placed a set of two mirrors in an alcove off to the left of the gallery entrance. The mirrors were positioned so that one reflected the other and the
view of the mirror first facing the spectator was of both a reduced mirror and window (figure 40). The first consideration of the mirrors is that they present two views but in reflecting each other and the window, those views multiply, and thus a simple visual presence becomes multiple and compound.

![Figure 40 Carl Warner, *Between Two Views* (installation detail, Jan Manton Gallery), 2021](image1)

The ten photographs were produced at two scales, five at 75 cm x 100 cm and five at 35 x 50 cm. The gallery has two ceiling heights and the larger size was for the expansive area and the smaller provides a more intimate view in the lower ceilinged space. All but one picture contained an ellipse. The view of Conic Hill (figure 39) is central in the group of five large photographs (figure 41). It is also placed directly opposite my original *Dark Mirror* 2016 (figure 19); the intention was to emphasise, across the series, the complex conceptual issues that arise from reflection. A viewer first encounters the pair of mirrors when walking towards the exhibition space proper, then the photographs and the black mirror that gathers all of the images and the gallery rooms into its shadow form. The generic industrial mirrors are circular, which maintains a difference to the elliptical forms in the photographs. The ellipse dances across the images, shifting position and scale, emphasising the experimentation and play involved in making the

![Figure 41 Carl Warner, *Between Two Views* (installation detail, Jan Manton Gallery), 2021](image2)
images. The images in the ellipses are darker, more intense than the picture that surrounds them. Horizon lines meet or intersect with other forms, adding to the flow across the suite of works. The central, documentary style, image in the group of larger works grounds them all, while also being slightly disorientating with its downward view of the vast loch.

The suite of five smaller works was broken up over two spaces to invite closer inspection, the colours in the images slightly more intense than those of the larger pictures. They are meant to be walked up to, looked at over time, echoing the walks I made to capture them.

![Figure 42 Carl Warner, Altnafeadh, 2020](image)

My intention in the exhibition was to incorporate the older form of the backward view into a surrounding landscape scene and to flatten all that into one picture plane. I see this not as a total, but as an expanded landscape that blends the vision of the Claude glass with the seamless image production available in digital technologies. In collaging the two elements, I am reinterpreting, but not restaging, the original way of seeing
established through the use of the Claude glass, the device that originally delivered “visions of the imagination; or the brilliant landscapes of a dream.”

Conclusion

The artworks made during this research have been informed by understanding the Claude glass as an aid to vision that pushed a sense of the visual beyond recognition towards a condition where the visible world had the potential to become art through technological automaticity. At the height of its popularity, it enabled the visual mediation of landscape with an immediacy and simplicity that many without artistic skill found utterly compelling. While these qualities allow for obvious comparisons with today’s ever more accessible technologies of photography, the Claude glass has been neglected in both the history of photography and in consideration of the lineage of mirrors and reflection in art history. Yet, as I have shown, the device has many precedents and antecedents. Glover’s use of a Claude glass in producing his paintings can be traced to Filarete’s encouragements to painters to use mirrors during the early Renaissance. Today, Anish Kapoor exploits the gathering and abstracting properties of mirrors, similar to the Claude glass, on a vast public scale. As an integral part of photographic history, the Claude glass deserves to be contemplated again, particularly now that vernacular photographic image creation is so immediate and the lens is becoming obsolete. This shift to the screen of a device as an image recording surface moves photography from its history of single-point perspective, and the reliance of that model of vision on the camera obscura, to a generalised view that leads to a new temporality of capture, one that is layered and multiple rather than instantaneous and singular. That shift is better understood through the embodied model of the Claude glass rather than the disembodied camera obscura. No longer will a supposedly coherent and complete picture consume the attention of the eye; distractions and additions will always be in play. This gap between seeing and what is seen will allow a different consideration of the view, a better understanding that it is sited outside of us rather than completely within, as per the camera obscura model of vision. This shift demands an acknowledgment of an exteriority of vision as productive and the Claude glass is a wonderfully direct means towards this.

In researching this project, I have also added to the history of the Claude glass in identifying its depiction in Edward Alcock’s painting *Sophia Anne Delaval, Mrs. John Jandis, holding a Claude glass to the landscape* (figure 4), not previously mentioned in
the literature. I have also tentatively established that the only Claude glass in a public collection in Australia, the Tasmanian Museum and Gallery, attributed to being used by John Glover, was produced in England in the eighteenth century by comparing it with a similar item in the collection of the Victoria and Albert Museum in London, therefore adding to the item’s provenance. My analysis of Glover’s glass and his paintings also point to the use of the glass in an Australian colonial context and the continuing use of the device by painters after the height of its popularity. That analysis also supports Arnaud Mailet’s contention that the Claude glass was an important transitional device in the shift that occurs in the early nineteenth century from subjective to objective viewing.

The artwork I have made throughout this project has engaged with the peculiar vision that a Claude glass allows. I have not imitated or merely repeated the historical use of the glass. Instead, I have used it as a visual and conceptual model in order to represent landscape not according to an all-consuming totality of vision, as characterises most photographic technologies and their use, but rather, through a technology and image type that are one and the same and understood as part of a greater visual whole. The works acknowledge a world beyond the frame, presenting an alternative engagement with landscape representation to the typical square-on, single perspective view. The works are deliberately positioned between views, between technological ways of seeing, bridging two scopic regimes as enabled by the camera obscura and the Claude glass. In this sense, the visual outcomes of the project echo Mailet’s description of the glass being a transitional device between ways of seeing.

While the Claude glass can be understood as a tool to see nature as if it were already art, its simple technology also demands a physical interaction with nature and an insistence on the concept of the real. Today’s technological innovations provide new choices to the photographer, a chance to shift the locus of sight from the eye to the hand allowing other senses equal priority as we physically engage with the surface of the image. These different modes of engagement with our surroundings, as afforded through using both the Claude glass and photography, are central to the art made throughout this project. In comparison to the immediacy of the Claude glass, the landscape as seen through most photography risks being a second hand, indirect, experience. The photographic
technology that followed the Claude glass took over vision to become a consuming and, supposedly, complete reality. A return to the Claude glass and its embodied model of vision has allowed me to consider anew the way we visually organise the world around us rather than simply address what appears in front of the lens as a disembodied image.
Bibliography


Costello, Diarmuid, and Margaret Iversen, eds. Introduction to “Photography between Art History and Philosophy.” In “Agency and Automatism: Photography as Art Since the Sixties,” edited by Diarmuid Costello and Margaret Iverson, special issue, Critical Inquiry 38, no. 4 (Summer 2012): 679-693.


Gray, Thomas. Letter from Thomas Gray to Thomas Wharton, 29 October 1769. The Thomas Gray Archive. [https://www.thomasgray.org/cgi-bin/display.cgi?text=tgal0565#ft](https://www.thomasgray.org/cgi-bin/display.cgi?text=tgal0565#ft).


“How to See a Landscape As It Will Be Depicted by Photography,” *The British Journal of Photography*, 21 August 1868, 396


