

Shadows in Renaissance Painting: 'Standing Between Darkness and Light'

Valerie Shrimplin

Abstract. Defined by Leonardo as 'standing between darkness and light', shadows are and always have been everywhere, but they are not always depicted in art. Rarely shown in Early Christian and medieval art, the portrayal of shadows really comes into its own in Renaissance Italy – linked with the immense advances in scientific study of the age. The Renaissance interest in shadows and optics, as with linear perspective, demonstrates a wish to explore, explain, and depict the natural world. The role of shadow in Renaissance painting can be either the use of shading to give bodily and other forms a three-dimensionality hitherto not achieved, or the actual depiction of cast shadows, sometimes with symbolic meaning. Shadows were also considered scientifically in relation to science and the new learning (optics and astronomy), as well as the use of shadows to bring a psychological or even magical resonance to Renaissance painting – mysterious, ethereal, or even divine.

Introduction

In his *Notebooks, On Painting, Six Books on Light and Shade*, Leonardo da Vinci described shadows as 'standing between darkness and light'.¹ As well as being important scientifically, used to achieve a naturalistic approach, the depiction of shadows in art can bring a psychological or even magical resonance to a painting. They can enhance a mood, being mysterious, ethereal, or even divine. Shadows cast by unseen sources can indicate the presence of God as much as of the sun, but they can also be threatening.² Shadows are everywhere but, just as the natural tendency is to disregard these phenomena that we can see but not touch, they are of limited physical depiction in art. We seldom notice or pay very much

¹ Leonardo da Vinci, *Notebooks, Six Books on Light and Shade*, ed. J. P. Richter (New York: Dover, 1970), Vol. I, pp.67–123.

² As in Hans Christian Anderson's *The Shadow*, 1847. Shadow puppets, or Peter Pan's loss of his shadow (identified as 'self'), are not so threatening.

Valerie Shrimplin, 'Shadows in Renaissance Painting: 'Standing Between Darkness and Light'', *Culture and Cosmos*, Vol. 26, no. 1, Spring/Summer 2022, pp.79-93.

www.CultureAndCosmos.org

80 Shadows in Renaissance Painting: 'Standing Between Darkness and Light'

attention to shadows, either in everyday life or in art where they often give bodily and other forms a three-dimensionality hitherto not otherwise achievable. Yet shadows, in art as in reality, can also convey intense meaning – ranging from sun images as representative of the ‘Good’ or the deity, to shadows as indicative of darkness and evil. Approaches varied from Classical, Early Christian and Byzantine times, to medieval depictions of shadows and shading and the heyday of shadows in Italian Renaissance painting with their legacy for future practices.

In the early Renaissance in Italy, the depiction of shadows and shading was inextricably linked to the new learning, and related to the investigation of the natural world, science and the growing knowledge of optics. With increasing accuracy, shadows in Renaissance art seem to fall into four different categories: (1) shading used to enhance bodily form and three-dimensionality; (2) the depiction of actual cast shadows; (3) scientific links to optics, perspective and even astronomical observation; and (4) used for spiritual, symbolic and mystical purposes, to express psychological and magical ideas.

Definitions and themes

A simple dictionary definition of shadow is typically ‘A dark shape cast on a surface by an object blocking rays of light; more generally, an area of relative darkness’.³ Put simply, shadows first require a light source, secondly an item to cast a shadow and, thirdly, a surface or object onto which the shadow is cast. But there seems to be more to it than that, since shading and shadows, particularly as portrayed in art and literature, can have metaphorical and symbolic meaning as well. In literature, references to shadows as symbolic are plentiful, for example in the work of Shakespeare as ominous representations of sadness and gloom (*Life’s but a walking shadow... Macbeth*, V, 5, 23), or as mysterious (*If we shadows have offended... Midsummer Night’s Dream* V, 1,5). In art, shadows and shading can relate directly to seen or, more dramatically, unseen objects and often take on additional meaning. The origin of portraiture is sometimes linked to shadows and silhouettes, whilst the existence of ghosts and spirits may well owe something to eerie shadows cast in candle and

³ *Oxford Reference*,

<https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100458387;jsessionid=BF20E4E5AA913FD8C5AEE718FCC9F3A9> s [accessed 14 April 2023].

lamp light before the days of the electric light. Shadow games, where children make or chase shadows that can be seen but not touched, are of ancient origin.

Leonardo Da Vinci made a careful study of shadows in his *Six Books on Light and Shade* (a compilation largely written in the late fifteenth century).⁴ Defining shadow as ‘the obstruction of light’, he noted that ‘shadows have in themselves various degrees of darkness, because they are caused by the absence of a variable amount of the luminous rays’. He observed that ‘Shadow is the diminution alike of light and of darkness and stands between darkness and light’, that ‘The forms of bodies could not be understood in detail but for shadow’, and that ‘Darkness is the strongest degree of shadow, and light is its least’. As well as defining shadow as ‘the diminution of light’ and darkness as ‘absence of light’, Leonardo also wrote extensively on the scientific and technical aspects of shadows, such as their distance and length, motion and rapidity.⁵ Leonardo’s *Notes on ‘Gradations of Shadows’* together with studies, such as *Study for the Angel’s Head in the Virgin of the Rocks* (1483, Turin Royal Library), demonstrate his technical and scientific approach. Bodily form is achieved by shadows on the face, limbs and drapery. The London version of *Virgin of the Rocks* (1508, National Gallery version) additionally demonstrates his use of shadows to enhance the symbolism and mystery of the subject.

The origins of the Renaissance approach to shadows can however be found in earlier times. The art historian Vasari (1511–74) acknowledged the historical context of shadows in the classical era, commenting that ‘for the first paintings... the ideas of softness of unity and the clashing harmony made by light and shadow were derived’.⁶ In fact, portraiture was traditionally thought to have evolved from the idea of tracing a silhouette or shadow of a figure, as described by Pliny in his description of the ‘Maid of Corinth’, who traced her lover’s shadow on the wall before he went off to war. The idea is shown in *The Origin of Painting*, 1775, by David Allan [Fig. 1]. The depiction of shadows in painting are seldom found, however, in Classical Greece and Rome.

⁴ Ernst Gombrich, *The Depiction of Cast Shadows in Western Art: Companion Volume to Exhibition at the National Gallery* (London: National Gallery Publications 1995), pp.19–21.

⁵ Leonardo, *Notebooks*, especially pp.69, 70, 73, 75, 89, 91, 95.

⁶ Giorgio Vasari, *The Lives of the Artists*, trans. George Bull (Harmondsworth: Penguin, 1971), *Preface*, p.25.

82 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'



Figure 1. David Allan, *The Origin of Painting*, 1775 (National Galleries of Scotland) Photo: Wikimedia Commons.

In early Christian Art, the mosaics at Ravenna significantly include the depiction of shadows, such as *Christ as the Good Shepherd* in the

Culture and Cosmos

Mausoleum of Galla Placidia, Ravenna (425 AD).⁷ By contrast, in Byzantine mosaics shadows are rare – not because the mosaicists might have been unobservant or incapable of depicting shadows but because they had no desire to depict Christ in mundane realistic space, taking a rather more abstract expressionist approach with solid gold backgrounds (as in the *Washing the Feet*, early eleventh century, in the narthex of Hosios Loukas in Boetia, Greece). Vasari was very critical of Byzantine art, since it did not appear to be naturalistic, and he tended to judge artists by their ability to depict the real world about them. The Byzantine approach influenced western medieval art and the so-called ‘Italo-Byzantine’ artists of Duecento (1200s) Italy, but the Trecento (1300s) saw an increasing movement towards the use of shadows and even perspective, to achieve three dimensionality of figures and the space in which they were set. A comparison of the three great *Madonnas* by Duccio (1285), Cimabue (1290–1300) and Giotto di Bondone (1300–05), shows how the figures become increasingly modelled in light and shade as well as real shadows being used to give solidity to the thrones on which they are seated.

In the frescoes of the Upper Church at Assisi (1296–1304) by the Master of the St Francis cycle (generally thought to have been early works of the young Giotto), extensive use is made of shading, rather than actual shadows, to depict bodily form and three-dimensionality, but the depiction of cast shadows is seldom included, so as not to detract from the subject or ‘clutter’ the paintings. The same applies to the frescoes by Giotto di Bondone, in the Arena Chapel in Padua (1305–07) where the bodily form and gestures of the figures, for example in *The Flight to Egypt*, are remarkably shown in three dimensions by the use of shading, but cast shadows of the figures and donkey are scarcely indicated. The same applies to early landscapes, as particularly evidenced in the Sienese school by artists like Simone Martini (*Condotiere*, 1328) and the Lorenzetti brothers (*Allegory of Good and Bad Government*, Palazzo Pubblico, Siena 1340), where, however, shadows are used to indicate the cavernous depth of many of the buildings.

This tradition was continued in the fifteenth century (Quattrocento) by artists like Lorenzo Monaco and Gentile da Fabriano, whose altarpieces of *The Adoration of the Magi* (respectively 1420–22, and 1423) still adhered to the rich traditions of International Gothic – heavily influenced by the tapestry-like approach of northern artists. Yet great change was also taking

⁷ The many art works that are cited here but not illustrated are generally well-known and can quite easily be found by online searching. Museum locations are indicated where there might be different versions of the same subject.

84 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'

place from around 1400, with heightened interest in the classical tradition and Roman art and architecture. It was at this time that Masaccio (1401–28) emerged as the first great Renaissance painter of shadows. His London, National Gallery *Madonna* shows dramatic observation and use of shading and shadows, especially when compared with the more Italo-Byzantine or medieval approach in the *Madonnas* alluded to above. Similarly, Masaccio's *Expulsion of Adam and Eve from the Garden of Eden* (Brancacci Chapel, 1426–27) clearly shows cast shadows, although there appear to be dual light sources – one emanating from the garden in the form of 'rays' representing God and Heaven (on the left), whilst the shadows of the figures are projected back from the light source/sun on the right. Even more dramatic in its use of light/shade and actual cast shadows is Masaccio's, *The Tribute Money*, 1426–27. As Vasari pointed out, artists 'proceeding to the observation of light and shade, shadows and other problems... endeavoured to compose their pictures with greater regard for real appearances, attempting to make their landscapes more realistic'.⁸ The light source in the fresco seems here to be coming from the adjacent window in the chapel itself, in a much more scientific and realistic way.

In the same chapel, Masaccio's painting of *St. Peter Healing the Sick with His Shadow*, 1426–27 [Fig. 2] demonstrates a very different, almost 'revolutionary' approach where the cast shadow of St Peter is the actual subject of the painting. As a symbol of good and healing (as opposed to the notion of shadows as ominous, or even evil in later art), the relation between the individual and shadow is examined, taking on the role of saviour itself.

These developments lay alongside the 'new learning' of the Renaissance, particularly in the study of optics, light and their corresponding geometry. The architect Filippo Brunelleschi (1387–1446) was one of the first to study light rays and sources and the idea of linear perspective and a 'vanishing point.' His experiment of 1415, using a peep hole and mirror at the Baptistery in Florence, demonstrates his accomplishments in the realm of perspective, optics and measurement, of which shadows and light rays were an integral part.⁹ The humanist writer and poet Leon Battista Alberti (1408–72) also examined linear perspective in his treatise *On Painting (De Pictura)*, 1435). Similarly, drawings by Albrecht Dürer demonstrate the continued interest, 100 years later, in light rays, shadows and perspective.

⁸ Vasari, *Lives*, p.93.

⁹ Vasari, *Lives*, p.136f; Antonio Manetti (1423–97), *Biography of Brunelleschi*.



Figure 2. Masaccio, *St Peter Healing the Sick*, 1426–27 (Brancacci Chapel, Florence). Photo: Wikimedia Commons.

86 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'

Following the approach by Brunelleschi, paintings of the Quattrocento (1400's) became increasingly scientific in approach, as exemplified by the drawing of a *Chalice* by Uccello (1397–1475) or his frescoes at Sta Maria Novella, 1446–48, where his depiction of *Noah's Ark* shows a strong interest in optics and perspective – as well as the startling inclusion of actual cast shadows of figures and trees (as in his fresco depicting the *Flood and Waters Subsiding*). In addition to his scientific analyses, Uccello also exploited the symbolic use of shadow, as in his *St George and Dragon*, circa 1470, where the dragon emerges from a sinister dark cave. Interestingly, Uccello also includes a tiny crescent moon in the same painting.

Use of dark and shade appears to have become increasingly symbolic in Quattrocento painting. Modelling in light and shade was by now widespread, as was more general light/dark symbolism (including sun-symbolism), but the depiction of shadows was sometimes only hinted at. Artists by now modelled in light and shade but actual cast shadows still seemed to get in the way. Modelling with shading was everywhere but cast shadows remained rare. Many fifteenth-century artists demonstrated a reluctance to depict all the actual shadows, perhaps seeing them as confusing in paintings that were already complex. In contrast to his use of cast shadows at Sta Maria Novella in the 1440s, Paolo Uccello took this approach in other works such as the versions of *The Battle of San Romano* (1438–40 and 1435–55) where the inclusion of shadows as well as all the soldiers, horses, armour, lances and battlefield debris would have cluttered the paintings. Uccello's later work, *The Hunt* (1465–70, Oxford, Ashmolean), recalls Dante's being 'lost in a dark wood' in the opening lines to his *Divine Comedy* but, again, there are few cast shadows even though the whole concept of symbolism of the dark wood is evident.¹⁰

In the later fifteenth century, painters like Piero della Francesca also eschewed the inclusion of cast shadows in many of their works, although Domenico Veneziano (1410–71), like Masaccio, used them to great effect.¹¹ Dramatic shadows are featured in Veneziano's *St Lucy Altarpiece*

¹⁰ Dante, *Divina Commedia*, 1, 'Nel mezzo del cammin di nostra vita mi ritrovai per una selva oscura, ch  la diritta via era smarrita'.

¹¹ For details of well-known examples cited here, see, for example: Peter and Linda Murray, *The Art of the Renaissance* (London: Thames and Hudson, 1971).

1445–47 [Fig. 3] where the light from an unseen source, symbolic of God the sun, causes shadows to fall right across the centre of the altarpiece.

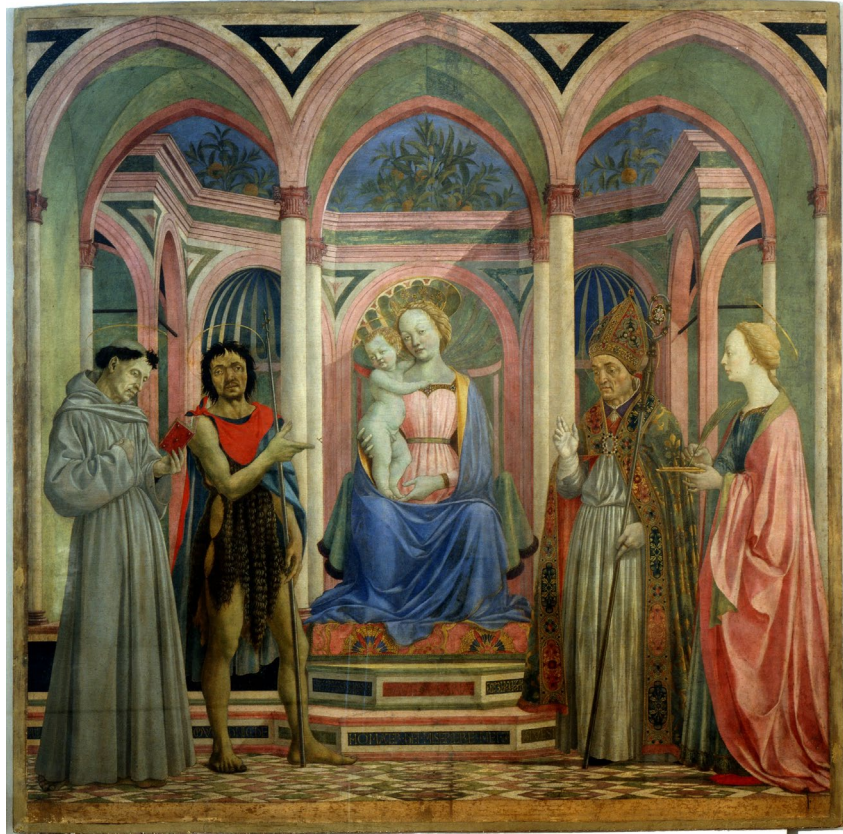


Figure 3. Domenico Veneziano, *St Lucy Altarpiece*, 1445–47. (Uffizi Gallery): Photo: Wikimedia Commons.

Piero's early reluctance to depict cast shadows is shown by his *Baptism* (c. 1450) where cast shadows may well have resulted in confusion, due to Christ's reflection in the water which however also shows a further interest in optical phenomena. On the other hand, in his fresco of *Constantine's Dream* (of conquering with the help of Christ), circa 1455, dramatic dark shadows are used, to contrast with the light from the angel that illuminates the scene. Piero's *Flagellation* (1455–60) includes partial shadows cast by the group of figures on the right, whilst in the background scene centred on Christ – famous for its mathematical analysis of the complex paving

88 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'

drawn accurately in perspective – no extra layers of shadows were used since the composition was complicated enough.¹² Cast shadows would get in the way in these scenes. However, in his late work, the *Brera Madonna* (1472–74), cast shadows are used by Piero to heighten the spirituality and pathos of the scene, as the sleeping Christ child on His mother's lap prefigures the scene of the *Pietà*. The scene is worked out with amazing scientific accuracy as a shadow falls on the curve on the conch of the apse.

The association of shadows with spiritual meaning was also developed by Fra Angelico. His early *Annunciation* of 1425–26 (Prado, Madrid) includes a dramatic light source emanating from the heavens, but cast shadows are not shown. In his later version at S Marco, Florence (c. 1440), Mary casts a shadow whereas, significantly, the angel does not. The angel has no shadow but the full-length shadow of the Virgin Mary is cast on the wall behind her, suggesting that at this point she is human rather than divine. A similar contrast between the human and spiritual is also demonstrated in the *Annunciation* by Fra Filippo Lippi (1450–53, National Gallery) whilst Leonardo da Vinci's *Annunciation* (1472–75, Uffizi) includes the participants' cast shadows across the scene.

Science and spirituality were often combined during the Renaissance. Luca Pacioli 1447–1517, for example, was famous for examining the scientific theory of optics and his 1509 *De Divina Proportione* (*On Divine Proportion*), was actually illustrated by Leonardo.¹³ In Venice, artists had a particular reputation for their increased emphasis on light and colour and the two versions of the *Agony in the Garden* by Mantegna (1455–56) and Giovanni Bellini (1465) (both National Gallery) combine the predilection of the Venetian School for colour with the inclusion of shadows to indicate bodily form – as also in Mantegna's *Mars and Venus* ('*Parnassus*'), 1497. Verrocchio's *Baptism* (1475), like that of Piero della Francesca considered above, does not confuse matters with too many shadows in addition to dealing with the watery reflections, although the shading on the drapery of the angel on the left is masterfully shown – the earliest identified work by Verrocchio's young pupil, Leonardo da Vinci.

One of the most dramatic uses of light and shadow at this time is the cast shadows through the doorway in Luca Signorelli's *Birth of St John the Baptist* (1485–90, Louvre) which is almost 'cinematic' in the drama it adds to the scene [detail, Fig. 4].

¹² Marilyn Aronberg Lavin, 'Piero della Francesca's *Flagellation*: The Triumph of Christian Glory', *Art Bulletin* 50, no.4 (1968): pp.321–42.

¹³ See portrait of Pacioli by Jacopo de' Barbari, c. 1500 (Naples).



Figure 4. Luca Signorelli, *Birth of John the Baptist*, 1485–90. (Louvre Museum) Photo: Author, 27 March 2019.

The shadow cast by *St Sebastian* in Pietro Perugino's painting of his martyrdom (c. 1490–1500) adds a naturalistic feeling and humanity to the subject. The seldom-observed shadow of the shell in Botticelli's *Birth of Venus* (1483–85) also tends to make the subject more 'believable' – being both delightful and delicate as well as dramatic.

By the time of the 'High Renaissance' in Italy in the early 1500s, the use of shading and shadows was increasingly utilised to add symbolism and mystery, rather than to demonstrate scientific prowess of the artist. Both

90 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'

versions of Leonardo's *Virgin on the Rocks* (Louvre 1483–86 and London 1508) are set in a deep, dark shadowy cave, but there is little indication of actual shadows. The artist clearly avoids harsh shadows in sunlight, in line with his dictum 'There are no lines in nature' and reserving his study of cast shadows for his scientific work and optics. Leonardo da Vinci was clearly more interested in the use of other 'shadow' effects: *sfumato* (meaning 'smokey' outlines), *chiaroscuro* (contrasts of light/dark) and 'aerial perspective'. As in the background landscape to the *Mona Lisa*, 1503, he observed that 'Shadows fade and are lost at long distances because the larger quantity of illuminated air which lies between the eye and the object seen tints the shadow with its own colour'.¹⁴ Using new techniques, his approach transcended the depiction of cast shadows in order to focus on the overall harmony of a painting.

Later in the sixteenth century, Michelangelo, although placing a huge emphasis on light and sun-symbolism in his *Last Judgment* (1536–41) rarely included actual shadows. His early painting of the *Doni Tondo* (1504–06) utilised shadows and shading to heighten the notions of bodily form in space whilst the *Separation of Light and Darkness* on the Sistine ceiling (1512) and the inclusion of Sun-symbolism and cosmology in his *Last Judgment* (1536–41) show a much more sophisticated approach to light/dark symbolism with immense spiritual meaning.¹⁵ Had the depiction of cast shadows simply become regarded as unfashionable? Or disturbing the sought-after overall harmony of a painting? Psychological and magical aspects of dramatic light and dark came to the fore, no doubt influenced by the Neoplatonic revival of Plato's shadowy Cave (*Republic* VII) where chained men can only see shadows of the real world (as illustrated by Jan Saenredam, 1565–1607), and also by modern impressions of the shadows.¹⁶

Shadows still played a significant role, however, as they were examined and used in relation to scientific ideas in the Renaissance. Peter Apian (1495–1552), in his *Cosmographia* (1524, folio 6 verso), used shadows to demonstrate the sphericity of the Earth by depicting the Earth's shadow on the moon during eclipse [Fig. 5]. Other polyhedral shapes are ruled out here, on the grounds of the image formed by the shape of Earth's shadow

¹⁴ Leonardo, *Notebooks*, Vol. 1, p.99.

¹⁵ Valerie Shrimplin, *Sun-symbolism and Cosmology in Michelangelo's Last Judgment* (Kirksville, MO: Truman State University Press, 2000).

¹⁶ See <https://mattlowpt.wordpress.com/2018/04/08/what-can-platos-allegory-of-the-cave-tell-us-about-knowledge-translation/>.

on the Moon. Shadows were also used in analysis of astronomical features and theories such as Copernicus's argument that the Earth 'must in fact have such a shape as its shadow reveals, for it eclipses the moon with the arc of a perfect circle. Therefore the earth is not flat... but it is perfectly round', as illustrated by Apian's diagram of shadows during a lunar eclipse to demonstrate the earth's sphericity.¹⁷



Figure 5. Peter Apian, *Cosmographia*, 1524. p. 27 (of 142) (Bibliothèque Nationale de France). Photo: Wikimedia Commons.

¹⁷ Copernicus, *Revolutions* (1543), Book 1, Chapter 3.

92 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'

Another scientific theme is depicted by Giorgione's *Three Philosophers* (c. 1509), a highly symbolic summarising of the history of astronomy by depicting Renaissance science (symbolised by the figure of Copernicus), together with its roots in the classical past (figure of Plato/Aristotle) and Arab astronomy (Avicenna/Averroes) – with the three figures gazing into the empty darkness of the (Plato's?) cave.

Shadows thus clearly played a significant role in Italian Renaissance painting, both in terms of creating space and bodily form, as well as imparting deep spiritual, religious or dramatic feeling. But what of its legacy and significance? Many subsequent works remain in the shadow of the tradition established in Renaissance. The heyday of the depiction of cast shadows was the early fifteenth century (Masaccio), but the legacy continued in the seventeenth century, in Mannerism and the Baroque, with the work, in particular, of Caravaggio, well-known for his use of dramatic lighting and light sources (*Supper at Emmaus*, 1601) – and also in northern Europe, with Rembrandt himself as master of light and dark.¹⁸

The Romantics and Pre-Raphaelite Brotherhood in nineteenth-century England looked back to the early Renaissance and themes like Tennyson's *Lady of Shalott*, being 'half-sick of shadows', were immensely popular (as in John William Waterhouse, *I Am Half-Sick of Shadows, Said the Lady of Shalott*, 1915). The Pre-Raphaelite William Holman Hunt even made the cast shadow of Christ the actual subject of the painting in *The Shadow of Death*, 1873, as the young Christ in the carpenter's workshop stretches, casting a shadowy premonition of His crucifixion on the wall behind. Light and shadows also became the actual subject of the painting in the work of the Impressionists (as exemplified by Monet's *La Pie*, 1868/9, and his series of *Haystacks End of Summer*, 1891).

It has been shown that the idea of shadows and darkness being exclusively menacing was sometimes repudiated in the Renaissance [e.g., Fig. 2, Masaccio] and this continued to be considered. In William Collins's *Coming Events Cast their Shadows Before Them* (c. 1832), small boys open the gate for a friendly passing horseman whose 'off screen' presence is shown by his cast shadow. The work is also known as *Rustic Civility* but the shadow of the unseen figure could also be perceived here as quite threatening. This idea was taken forward in the twentieth-century film industry, particularly by Alfred Hitchcock, where the hugely enlarged

¹⁸ David de Witt and Franziska Gottwald, 'Rembrandt & Light' in Jennifer Scott and Helen Hillyard, *Rembrandt's Light* (London: Bloomsbury, 2019) pp. 17-38.

shadows of menacing or unseen figures heightens the tension and horror (Hitchcock's *Laura*, 1944, starring Clifton Webb). Towards the end of the film, Hitchcock uses the technique observed long ago by Leonardo: 'If an object is placed in front of a single light is very close to it, you will see that it casts a very large shadow on the opposite wall, and the farther you remove the object from the light the smaller will the image of the shadow become'.¹⁹ So it can be seen that much of this modern approach owes a great deal to the past.

The depiction of shading and actual shadows was not unknown in classical, Byzantine and medieval art, but really came into its own in the Renaissance period – an era as important for the questions asked as for the answers given. At first used to depict bodily form and three-dimensionality, shading became utilised to show actual cast shadows and to demonstrate the underlying science, linked to perspective, optics and even astronomy. Moving on, it became increasingly used to convey symbolism and mystery, as well as psychological and magical ideas. Its legacy and significance should not be underestimated.

¹⁹ Leonardo, *Notebooks*, Vol. 1, p.109.

94 Shadows in Renaissance Painting:
'Standing Between Darkness and Light'