And this kind of visual freedom is typically answered in the stone mouldings of the painted architecture. Although Veronese owed a debt to the 'real' buildings of Sanmicheli and Palladio, as Marini suggests in her elegant essay, it is also true that his painted architecture resists any attempt to reconstitute the logic of an actual structure. It would also be inaccurate to talk of 'accessories', 'settings' or 'backgrounds' in Veronese's painted world, given that these elements are granted pictorial equality with the figures themselves, indicating that the painter was unable or unwilling to construct a clear hierarchy between them.

Veronese's anti-intellectual approach to painting provided an alternative to the significance and urgency of works by the late Titian, Tintoretto and Bassano in an increasingly 'serious' age. If his invitation to enter into a free sensuous play of invented forms and patterns found many followers among later artists, it inevitably frustrated the inquisitors of the Counter-Reformatory church, whose primary concern was to limit 'artistic licence'. Perhaps, too, Veronese's visual freedom must continue to frustrate the meaning-hungry demands of the determined iconographer of today. To this extent, the tireless quest for 'original meaning' to be found in Alessandra Zamperini's recent monograph seems misplaced.² This monumental production, featuring three hundred superb colour illustrations, provides a fine alternative for those who did not manage to see the exhibitions, or for those who want a more permanent reminder of the spectacularly visual qualities of Veronese's art. That Veronese is particularly suited to this kind of coffee-table production is telling enough: the other great sixteenth-century Venetians have proved more difficult to accommodate to such a format. Zamperini's mostly wellargued text does battle with the sumptuous production in a blow-by-blow account of the painter's career, in which the main emphasis is on pinning down the precise subject-matter, patron or (with a rather scatter-gun approach) the visual source in each example. It is, however, difficult to square this kind of rational scholarly exercise with the exuberant and essentially ambiguous pictorialism of the paintings themselves. There remains the suspicion that in the search for the nuts and bolts this author has misrepresented Veronese, whose main achievement was to undermine the authority of the text by the force of his visual realisation.

¹ Catalogues: Veronese. By Xavier F. Salomon. 272 pp. incl. 164 col. ills. (National Gallery, London, 2014), \pounds_{35} (HB). ISBN 978–1–85709–553–1; and Paolo Veronese: L'illusione della realtà. Edited by Paola Marini and Bernard Aikema. 399 pp. incl. 190 col. + 6 b. & w. ills. (Mondadori Electa, Milan, 2014), €35. ISBN 978–88–918–0150–0. Catalogue numbers cited in this review refer to the Verona catalogue; paintings shown in London only are indicated in the text.

² Paolo Veronese. By Alessandra Zamperini. 351 pp. incl. 300 col. ills. (Thames & Hudson, London, 2014), £60. ISBN 978-0-500-09383-2.

Making colour

London

by ULRIKE KERN

AN EXHIBITION ON the subject of colour has not been attempted before. Given that colour is a broad and wide-ranging topic, this perhaps is no surprise. The study of colours extends well into the fields of history, science and culture, as has been demonstrated by John Gage, and, as Rosamond Harley has made clear, every pigment has its own story concerning its chemical composition, processing and handling, naming and categorisation.¹ The exhibition Making Colour at the National Gallery, London (closed 7th September), was introduced by an historical overview of the topic, and continued with individual sections, playfully organised around the spectral colours of blue, green, yellow and orange, red and purple, as well as gold and silver. Paintings were displayed along with pigment specimens, or pigment and painting were merged together, as in Orazio Gentileschi's David contemplating the head of Goliath, painted on a slab of lapis lazuli (Fig. 55). The exhibition included pieces ranging in date from late antiquity to contemporary, but focused on the early modern era to c.1900. The paintings were almost exclusively drawn from the Gallery's own holdings, complemented by objects from other British collections, an economical approach and, for the aims of the exhibition, a justifiable one, considering that there is no such thing as a canon of paintings of colour. Besides, only a few artists treated the topic as subject-matter, as did, for instance, Rubens in



54. *Pictoria, sculptoria et quae subaltemarum artium*, by Théodore Turquet de Mayerne. 1620–46. Manuscript, watercolour and ink on paper. (British Library, London, MS Sloane 2052, fol.80v; exh. National Gallery, London).



55. David contemplating the head of Goliath, by Orazio Gentileschi. c.1612. Oil on lapis lazuli, backed with slate, 25 by 19 cm. (Private collection; exh. National Gallery, London).

his Juno and Argus painted in primary colours with a rainbow to represent the relationship between light and colour (Wallraf-Richartz Museum, Cologne). The National Gallery possesses beautiful paintings that illustrate changes in the appearance of pigments. The durability of ultramarine and the effects of metallic composites, in particular, can be appreciated, while paintings affected by fading and darkening raise the important and not uncontroversial question of how to deal with the effects of time on works of art. There is no catalogue as such, but a slim publication from the National Gallery's series A Closer Look serves as a companion to the show.²

The exhibition was organised along historical lines, which helped to explain which pigments were preferred by painters, when and why. Colour theory was represented by the appealing illustrations of colour treatises, such as the first symmetrical colour circle by Moses Harris of 1776 or samples of watercolours by Théodore Turquet de Mayerne (Fig. 54). These diagrams provided valuable information about assessing, mixing and categorising colours, and the sheer scale of the books indicated that they included a considerable amount of text. England, in particular, has produced various writings on colour, some neatly written manuscripts, some as illustrated printed books. In order to convey the variety of theories of colour, whether concerning the preparation and use of pigments, colour combinations and mixtures, or optical problems, it would have been good to have included more such examples, if only to reflect how much thought lay behind the making and use of colours.

Most of the exhibits in the sections devoted to a single colour were chosen to display the qualities of specific pigments, ranging from the intensity and durability of ultramarine, the changeability of some greens and yellows, the variety of ingredients used to create different



56. The painter's daughters chasing a butterfly, by Thomas Gainsborough. c.1756. Canvas, 113.5 by 105 cm. (National Gallery, London).

shades of red, the uniqueness of orange and purple pigments, or the techniques of applying metallic colour. A fundamental problem in the history of colours is their durability, and the samples of watercolours on paper and coloured glazes on maiolica plates demonstrated the attempts made to create normative systems of colours to provide guidelines for artists. The comparisons of natural and synthetic pigments in the different sections gave an idea of the impact that the discoveries of synthetic pigments must have had on artists. The most enthusiastic reaction was probably the passion for purple in the Victorian era, following the discovery in 1856 of synthetic purple by Sir William Perkin. Yet, concerning the ways in which artists dealt with the problem of changeability of pigments, some issues were left untouched. Why, for instance, did Jan Janz Treck use smalt for the blue ornament



of the Chinese porcelain bowl, while we can deduce from seventeenth-century sources that he was probably aware of the fugitive quality of the pigment in an oil medium (Fig. 57)? Was he trying to render an authentic hue by using the same pigment as used in the actual porcelain, or did he value the low price of the pigment above its limited durability? The problem of permanence was crucial for artists and collectors, and synthetic pigments did not entirely solve the issue. After the initial popularity of Prussian blue in the early eighteenth century, for example, the synthetic pigment soon showed instances of fading, one of which can be seen in Gainsborough's portrait of Mrs Siddons (National Gallery).³ The introduction of synthetic pigments also led to doubts as to their durability. Considering that they could fade and change quickly, it seems relevant that Gainsborough, when using delicate synthetic Naples yellow, painted his two little daughters chasing a brimstone butterfly (Fig. 56).

The presence of a fragment of blue crystals in Roger Hiorns's Seizure of 2008 added a contemporary component and another aspect to the exhibition's title, Making Colour, since the theme of this work is creating the colour. Nevertheless, it was somewhat isolated in the exhibition: Hiorns's art functions in a different frame of reference to that of earlier exhibits, and without addressing the modernist break in artistic conventions or offering examples of more recent works of art to provide a context, the shift of intention was not easy to follow. To use chemical processes to create colours was already a theme in Andy Warhol's Oxidation paintings of the late 1970s, albeit with a more radical and less enchanting effect.

The exhibition was compelling in bringing together wonderful objects and transmitting theoretical ideas in a vivid yet informative way. It was an engaging show about the uses of pigments and their behaviour, about the achievements of chemistry and the advancement of scientific research in the field of conservation. Fascinating as is it, much of what could be learned was somewhat on the technical side. Specific art-historical issues, and in particular the artists' intentions, were dealt with less extensively. Making colour also involves colouring, making choices of colours and colour combinations to give a certain appearance and atmosphere to a painting. Yet it is easy to find aspects that have not been covered in an exhibition on a topic as multifaceted as colour. The curators put together a sound presentation on 'this complex hymn [that] is called colour',4 as Baudelaire put it, and they deserve much credit.

¹ J. Gage: Colour and Culture. Practice and Meaning from Antiquity to Abstraction, London 1993; and R.D. Harley: Artists' Pigments c.1600–1835. A Study in English Documentary Sources, London 1970.

² D. Bomford and A. Roy, eds.: *A Closer Look: Colour*, London 2009.

³ J. Kirby: 'Fading and Colour Change of Prussian Blue: Occurrences and Early Reports', *National Gallery Technical Bulletin* 14 (1993), pp.62–71.

⁴ C. Baudelaire: 'On Colour', in J. Mayne, transl. and ed.: *The Mirror of Art*, Oxford 1955, p.49.

57. Still life with a pewter flagon and two Ming bowls, by Jan Janz Treck. 1651. Canvas, 76.5 by 63.8 cm. (National Gallery, London).