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Series editor Ashok Roy

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Tintoretto's Underdrawing for *Saint George and the Dragon*

JILL DUNKERTON

JACOPO TINTORETTO's arch-topped painting of *Saint George and the Dragon* (NG 16; PLATE 1) is thought to be a small altarpiece, probably painted for a private chapel. It is first recorded by Carlo Ridolfi in 1648 in the palace of Pietro Correr (for whose family it may well originally have been painted). Ridolfi singled out for special praise 'alcuni corpi de' morti di rarissima forma', a prescient mistake since only one 'dead body' is visible. In recent National Gallery catalogues the painting has been dated to the 1560s, or even later, but many have placed it rather earlier and a good case can be made for a date of around 1555.¹ With its relatively light and brilliant palette and the dry zigzags of the brushwork on the draperies (especially the cloak of the princess), it seems to fit well in the group of paintings that demonstrate Tintoretto's response to the arrival and success in Venice of his great rival Veronese.

When Joyce Plesters came to study *Saint George and the Dragon* in the late 1970s as part of her pioneering investigation into Tintoretto's painting methods,² the technical photography available to her consisted of no more than a few X-ray plates of specific areas such as the figure of the princess and the spandrels in the upper corners, together with infrared photographs of the dragon and his victim. These were no doubt taken in the hope of revealing traces of underdrawing that might demonstrate the connection with the well-known and beautiful drawing for the dead man in the Cabinet des Dessins of the Musée du Louvre (see PLATE 3) which has long been recognised as a study for the National Gallery painting. However, as Joyce Plesters pointed out, the black pigment present in the final touches of paint around the contours of the figure was always likely to obscure any possible underdrawing in an infrared photograph, but she observed in a few cross-sections scattered particles of charcoal between the ground and the first paint layer, an indication of the existence of some form of underdrawing.

Although infrared reflectography with its better penetration of the paint layers has now been in use for some forty years, it is only latterly that improvements in the technology for scanning paintings have made it

practical for larger paintings to be investigated in this way³ – *Saint George and the Dragon* is of course a relatively small work in comparison with most of Tintoretto's output, but nevertheless an examination using earlier techniques based on mosaics of images would have been time-consuming and laborious. In addition, the general belief that drawing and underdrawing played a less important part in the production of paintings in sixteenth-century Venice than in paintings from the previous century has meant that paintings of this period have not usually been given priority for investigation by infrared reflectography. However, recent infrared examination of paintings by Titian has produced significant results, especially on earlier works. Since a much larger body of drawings on paper survives for Tintoretto than for Titian, his paintings become obvious candidates for the analysis of the relationship between preliminary studies and the execution of the painting itself. Unfortunately, much of Tintoretto's later output was painted on dark-coloured preparations, which makes detection with infrared methods of any underdrawing executed in a black material more problematic. In any case, on the darkest surfaces, for example the black ground of *Christ washing His Disciples' Feet* (NG 1130), black lines would never have shown and so Tintoretto sketched out and adjusted his design with lines of lead white paint, now revealed by X-radiography and in places visible on the surface of the painting itself.⁴

Saint George and the Dragon, as an earlier work, has a simple gesso ground, just sufficiently thick to cover the raised threads of the fine tabby-weave canvas.⁵ In addition, it is notably refined in execution and with relatively thin paint layers which improve the chances of penetration by infrared. Consequently the results of examination by infrared reflectography are remarkable, both for the clarity of the image and for the insights into Tintoretto's working process that they supply (FIG. 1). In order to understand the sequence of painting and the alterations to the design a full X-ray mosaic has also been made (FIG. 2).

Essentially the entire design was roughed out by drawing on the prepared canvas, the extent and char-



PLATE I Jacopo Tintoretto, *Saint George and the Dragon* (NG 16), c.1555–60. Oil on canvas, 158.3 × 100.5 cm.



FIG. 1 *Saint George and the Dragon*, digital infrared reflectogram.



FIG. 2 *Saint George and the Dragon*, X-ray mosaic.

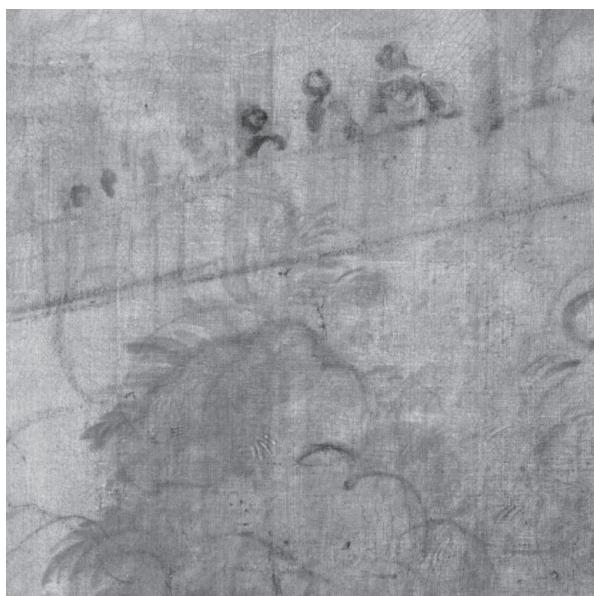


FIG. 3 *Saint George and the Dragon*, digital infrared reflectogram detail.

acter of the underdrawing seeming to vary according to Tintoretto's utilisation of studies on paper. The only detail that was not drawn is the figure of God the Father who emerges from the swirling clouds, either an afterthought or too evanescent to be fixed by drawing. The first lines to be drawn were probably those that mark out the picture area: the drawn curve of the arch can be seen on the right, as well as an intermittent line down the right side. The infrared image confirms that there is a black painted border as well as black paint in the spandrels, but mostly covered by later repaint, which was left following the last cleaning in 1962. Black borders, which may have been intended to be partly visible when the painting was framed or set in panelling, have been noted on works by several sixteenth-century Venetian painters, including Tintoretto.⁶

The principal orthogonals of the city walls were drawn approximately in perspective, the vanishing point actually just above the horizon and slightly to the right of the black border. These lines, in common with the rest of the underdrawing, seem to have been made with a brush and a black paint that presumably contains the charcoal noted in the cross-sections; accumulations of pigment occur at the ends of strokes, suggesting a wet medium, even if in many places the lines have a broken quality, which can be explained by the rapidity with which the brush skimmed over the uneven canvas texture (FIG. 3).⁷ Fainter orthogonals and horizontal and vertical lines appear in the sky above the present design, suggesting that Tintoretto experimented with structures that rose almost to the top of the arch of the canvas. The towers



PLATE 2 Attributed to Jacopo Tintoretto, *Saint George and the Dragon*, perhaps late 1440s. Oil on canvas, 122 × 92 cm. St Petersburg, The State Hermitage Museum (GE-194).

along the walls were eventually drawn in, crowned with vaguely oriental domes; these were mostly omitted in the painting where the city appears more western with its massive crenellated walls and ramparts. On the left in the underdrawing an extra tower, linked to the city by a causeway, was drawn but not painted and the city walls were populated by spectators, who appear delightfully animated in spite of their heads being no more than little circles. Two equally abbreviated figures appear below the walls, immediately to the left of Saint George's head. The trees in front of the walls were indicated with rapid loops and squiggles; they appear in the painting, with extra trees further into the distance, but all the little figures have disappeared.

The character of the underdrawn architecture raises the issue of the relationship of the National Gallery canvas with a painting of the same subject in St Petersburg (PLATE 2). This has not always been accepted as by Tintoretto, but the case for his authorship has recently been argued,⁸ and it seems plausible if the painting is dated a few years before the London version. The composition, with the princess in the background, is more conventional, but the walled city with its domed towers is strikingly close to the under-

drawing in the London painting. Moreover, the cramped appearance of the upper part of the St Petersburg canvas suggests that it may have been cut and that it too originally had an arched top.

In this version the dragon has a long snake-like tail that twists and curls above its body. In the underdrawing of the National Gallery canvas the dragon's tail was sketched in a similar attitude, but was eventually painted in a less prominent and less distracting position behind the legs of the saint's horse. Instead emphasis is given to the dragon's wonderfully painted head and claws (perhaps Tintoretto's most refined passage of painting) and to the wings, which may originally have been drawn in slightly different positions. There is a suggestion of an earlier wing to the left of the dragon's right wing, and the X-radiograph shows denser paint layers in this area, and also around the dragon's back (FIG. 4). The two straight lines that appear in the infrared reflectogram to be emerging from the dragon's body seem unlikely to be associated with it. They intersect at the same approximate vanishing point as the orthogonals of the city walls but do not extend beyond the dragon and so their

purpose is unclear. Although no drawing can be distinguished on the rest of the dragon, its very dark appearance in the X-radiograph confirms that it was thinly painted straight onto the gesso, using lead-containing pigments only for the highlights. In some areas the gesso was even left exposed to serve as a base colour (it remains relatively light and remarkably unstained by later varnish and lining adhesives). All the background paint goes around the dragon. The same applies to the horse, directly painted with great confidence in the placing of the first highlights on its quarters, later refined by carefully modelled shading. A few traces of a fine outline, most evident around its head and down its near foreleg, are all that can be seen of any underdrawing, although much of the drawing is likely to be obscured by the black pigment used to make the grey colour. Saint George's head, however, can be seen to have been sketched in a higher position in line with his back and then blocked in with paint as a simplified oval,⁹ and only later modified to its present determined tilt. Indeed, the paint of the head in its final position is so thin that it does not register in the infrared and X-ray images. The saint



FIG. 4 *Saint George and the Dragon*, X-ray mosaic detail.



FIG. 5 *Saint George and the Dragon*, digital infrared reflectogram detail.

also seems to have had some sort of swirling cape around his shoulders, which was wisely eliminated.¹⁰

If the lines of underdrawing are fine and delicate for Saint George and his horse, those for the princess are very different in technique. Here they are broadly brushed in with a dilute liquid paint. Her head was higher, directly above the painted head, and turned more in profile, her mouth open as she runs away in terror. The earlier position of her shoulders and outstretched arms can just be distinguished, and the legs that now appear to begin at her waistline must belong to this first taller and more upright version. Many of Tintoretto's 'underdrawings' made in lead white on canvases prepared with dark grounds show the naked limbs of draped figures, and the semicircular abbreviations for knees to be seen on the princess appear in these and in drawings on paper. Another more lightly drawn leg to the left of the very visible one suggests that the pose of this figure was largely being worked out on the canvas. The X-radiograph confirms that Tintoretto began to paint her in this

position – her head, shoulders and right arm are most clearly visible – and that before revising the design he scraped away some of the paint, which results in the darker patches with random broken edges that appear in the centre of the first head and also further down the figure. In moving her down the canvas he gained a separation between her head and the horse's hind legs, but the lack of space meant that she had to be painted apparently stumbling to her knees in an ambiguous pose that is deliberately obscured by the billows of drapery. The final figure appears very light in infrared because the pale pink and ultramarine blue of her costume are easily penetrated, allowing the infrared light easy passage to the white ground from which it is reflected. The green pigment of the landscape colours painted around her absorbs some of the infrared and so these areas appear darker.

The most radical and unexpected change to the painting is the discovery that originally there was to be a dead man in the lower left corner (FIG. 6), in the same position as the mangled foreshortened body in the St Petersburg canvas. The pose of the figure that was to be in the London version is highly ambitious and was clearly studied from life. It is easy to imagine the model posing, slumped on a pile of cushions or filled sacks, his arm hooked around a support that becomes the tree. This tree trunk actually survives into the final painting, whereas three more that feature in the underdrawing (two to the left and one to the right of the painted one) were eliminated. Although the drawing seems to have been made with a brush, the treatment of line echoes closely Tintoretto's drawing techniques on paper, for which his favoured medium was black chalk. Many of Tintoretto's figure studies have squared grids in order to enlarge them for transfer to paintings, and even though the drawing for the hidden figure in the National Gallery painting does not appear to have survived, the grid that appears in the underdrawing – marked out with heavy painted black lines – confirms that the figure study was enlarged in this way.¹¹ The spacing of the grid, with eight vertical and seven horizontal lines, is consistent with those on squared figure drawings on paper.

The resemblance of the underdrawing as it appears in the infrared reflectogram to some of Tintoretto's studies on paper is increased by the fact that he began to paint this figure before he abandoned it. This gives the impression that it has white heightening. The X-radiograph confirms that the whole figure, including his legs and outstretched left arm, was underpainted using flesh tints containing plenty of lead white, and, with knowledge of the presence of the figure, it is in

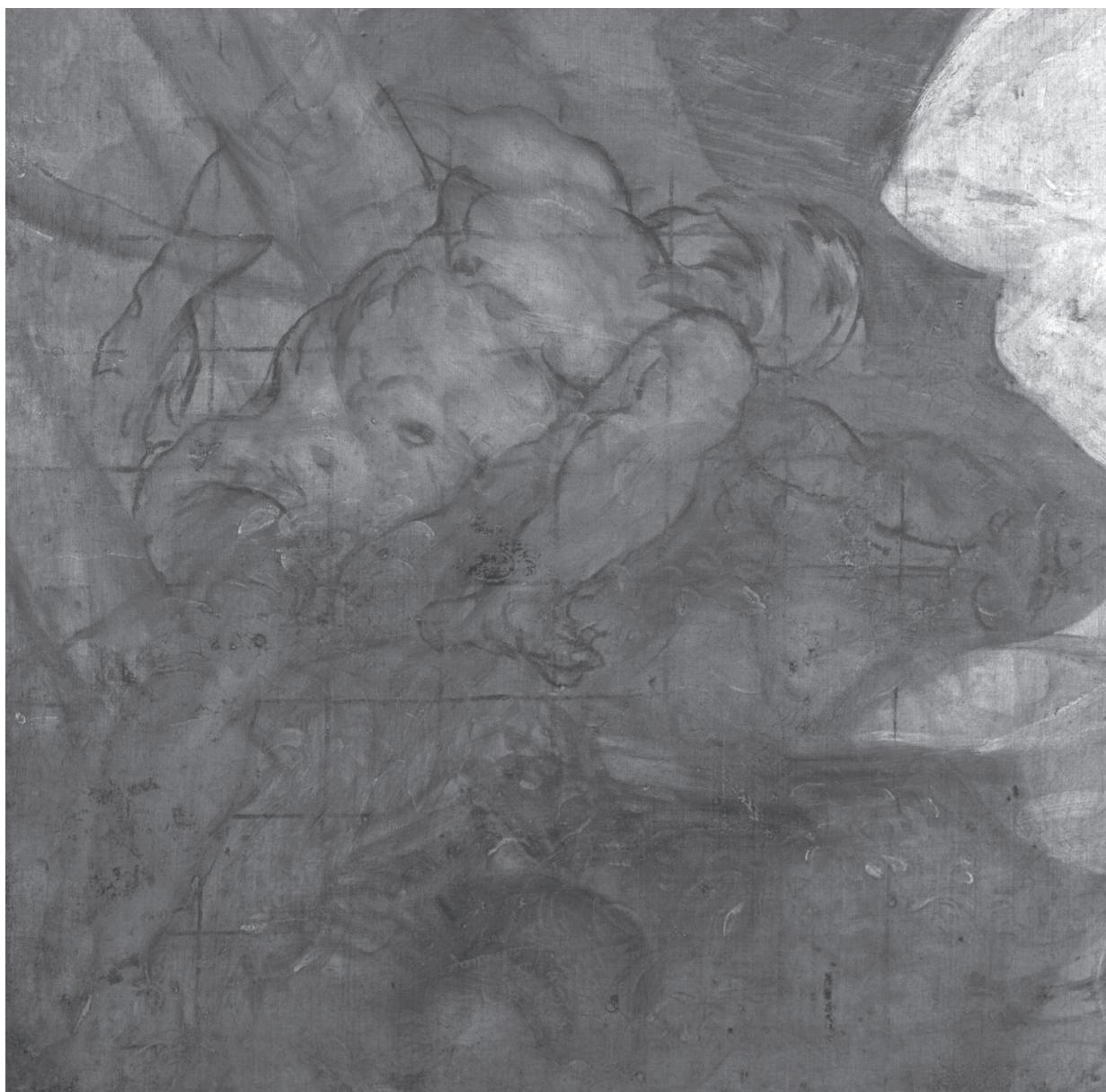


FIG. 6 *Saint George and the Dragon*, digital infrared reflectogram detail.

fact possible to see the foreshortened head and raised right shoulder with the naked eye. Tintoretto may have decided to eliminate the dead body because it was too close to the princess, and a distraction from her, especially in her revised pose. It might be thought that he would reuse this splendid study for another work, for example the huge canvases of the *Last Judgement* in the Church of the Madonna dell'Orto in Venice or *The Brazen Serpent* in the Scuola di San Rocco, but he seems to have been profligate with his designs. Instead he set out to make a new figure study, the drawing that is now in the Louvre (PLATE 3).

The present painted figure appears to cover, at least in part, brushstrokes from the paint of the background and so it is unlikely that Tintoretto ever

intended there to be two dead bodies. The Louvre drawing, in black chalk with lead-white heightening on blue-grey paper, was transferred to the canvas by squaring, but in this instance the grid is ruled obliquely. Several of Tintoretto's drawings have oblique grids. In some cases this was to rotate them clockwise to the correct angle when the figure had been sketched diagonally across the corner of the paper, the base line inclining from bottom left to top right, as can easily happen with a right-handed draughtsman.¹² In others, however, the grid was intended to rotate into a more dynamic position a drawing from a model, whether human or sculpted, which could only be posed in a more stable and static way: for example, the study for the flying angel in the



FIG. 7 *Saint George and the Dragon*, digital infrared reflectogram detail.



PLATE 3 Jacopo Tintoretto, *Study for Saint George and the Dragon*, c.1555–60. Black chalk with white heightening on grey-blue paper, 25.5 × 41.7 cm. Paris, Musée du Louvre, Cabinet des Dessins (5382).

San Rocco *Elijah and the Angel*, which must have been made from a clay model or a jointed lay figure suspended by its left foot, has a grid that enables it to be rotated anticlockwise to become the plunging angel.¹³ The angle of the grid on the Louvre drawing indicates that an anticlockwise rotation was also intended. However, the presence of the oblique grid in the underdrawing on the canvas (FIG. 7), with the fine lines registering exactly with those on the paper study, shows that Tintoretto must have changed his mind, perhaps in order to avoid the curve of the dead body following too closely that of the fluttering cloak of the princess – indeed, a late adjustment with a structurally illogical flap of cloak extended over the completed green of the grassy slope suggests that he was aware of this danger.

The infrared examination has revealed how, even within a relatively small and by his standards simple composition, Tintoretto worked out his design and applied drawings of different types and in different ways, ranging from the apparently freehand creation on the canvas of the figure of the princess to the careful transfer of the studies of male nudes with which he proclaimed his status as a master of *disegno*. Yet *Saint George and the Dragon* is also thoroughly Venetian, both in the richness and handling of colours and in the painter's willingness to improvise in the course of execution, even if it meant the sacrifice of a fine invention.

Notes

- 1 For a full discussion of the provenance and date see N. Penny, *National Gallery Catalogues: The Sixteenth Century Italian Paintings*, Vol. II, London 2008, forthcoming. A date of c.1553 is suggested in the catalogue entry in M. Falomir (ed.), *Tintoretto*, exh. cat., Museo Nacional del Prado, Madrid 2007, cat. no. 26, pp. 270–4.
- 2 J. Pesters, 'Tintoretto's Paintings in the National Gallery' Part I, *National Gallery Technical Bulletin*, 3, 1979, pp. 3–24, and Part II, *National Gallery Technical Bulletin*, 4, 1980, pp. 32–47.
- 3 Infrared reflectography was carried out by Rachel Billinge using the National Gallery's new digital infrared scanning camera SIRIS (Scanning InfraRed Imaging System) which uses a 320×256 pixel indium gallium arsenide (InGaAs) array sensor. The sensor is mounted on two orthogonal translation stages within the camera body which allows it to be scanned across the focal plane of a specially developed large-format lens to produce images up to 5000×5000 pixels at three possible resolutions. For rapid examination of large paintings, images of areas of up to $2m \times 2m$ can be recorded at around 2.5 pixels per mm, while for smaller paintings or areas of fine detail, images of an area $50cm \times 50cm$ can be recorded at 10 pixels per mm. The infrared reflectograms in this article were recorded at the intermediate resolution of 5 pixels per mm, the full mosaic being constructed from 6 sub-images, recorded in studio conditions, after an initial survey of the whole painting, on the wall in the Gallery (at the lower resolution of 2.5 pixels per mm). For further details about the camera see D. Saunders, R. Billinge, J. Cupitt, N. Atkinson and H. Laing, 'A New Camera for High-Resolution Infrared Imaging of Works of Art', in *Studies in Conservation*, 51, No. 4, 2006, pp. 277–90.
- 4 For a general discussion of Tintoretto's underdrawing and painting practice see J. Dunkerton, 'Tintoretto's Painting Technique' in Falomir (ed.) 2007 (cited in note 1), pp. 139–58.
- 5 For the painting technique and materials see Pesters 1980 (cited in note 2), pp. 32–6.

6 A black border surrounds *Susannah and the Elders* (Vienna, Kunsthistorisches Museum), usually dated to about 1555 and therefore probably close in date to *Saint George and the Dragon*. It also exhibits many similarities in the underdrawing and we are very grateful to Robert Wald of the Paintings Conservation Department of the Kunsthistorisches Museum for sharing this information with us in advance of the publication of the infrared reflectogram in Falomir (ed.) 2007 (cited in note 1), cat. no. 31, pp. 298–303.

7 Confirmation that Tintoretto favoured a wet drawing medium is supplied by the fact that on some paintings the lines of underdrawing have soaked through to the back of the canvas and are revealed when the old lining canvas is removed. See, for example, G. Nepi Sciré, 'I dipinti votivi di Jacopo Tintoretto' in *Jacopo Tintoretto Ritratti*, exh. cat., Gallerie dell'Accademia, Venice, Milan 1994, pp. 39–49, esp. 44–6, and the catalogue entry for the 'Madonna dei Tesorieri', pp. 138–9; and R. Tardito, ed., *Il Ritrovamento del Corpo di San Marco del Tintoretto: Vicende e Restauri*, Florence 1990, pp. 22–3.

8 I. Artimieva, ed., *Cinquecento Veneto: Dipinti dall'Ermitage*, exh. cat., Museo Civico, Bassano del Grappa, Geneva and Milan 2001, cat. no. 22, pp. 92–3. See also Penny forthcoming (cited in note 1) and Falomir (ed.) 2007 (cited in note 1).

9 Heads that were drawn in white paint as simplified ovals are commonly seen in X-radiographs of later works by Tintoretto with white ground, but he sometimes also blocked in heads as solid ovals. An example that appears similar in the X-radiograph to the head of Saint George is the figure of Joseph in *Joseph and Potiphar's Wife*, in the Prado, Madrid, part of a ceiling painted in the early to mid-1550s and therefore close in date to the National Gallery canvas. See C. Garrido, 'El lavatorio di Tintoretto: la creación de un original', *Una obra maestra restaurada. El lavatorio de Jacopo Tintoretto*, exh. cat., Museo del Prado, Madrid 2000, p. 27, Fig. 31.

10 The X-radiograph also shows that the end of his fluttering cape terminated in a knot, a detail that appears to have been misunderstood and overpainted in the restoration of the small tear in this area. A corner of the bedsheet in *Venus and Mars surprised by Vulcan* (Munich, Alte Pinakothek), is similarly knotted.

11 Robert Wald (see note 6) has informed us that an enlarging grid was used for the underdrawing of the figure of Susannah in the Vienna canvas, although a great many alterations were then made in the course of painting. This painting also has in common with *Saint George and the Dragon* the use of several different types of underdrawing, with perspective lines (snapped with cord, a technique not apparently used in the London painting) and very loose freehand indications for foliage.

12 Examples include the male nude figure study for the Scuola di San Rocco *Felicità* and two male nudes, one apparently hammering in a nail, the other reclining (all Florence, Uffizi, Gabinetto dei Disegni); reproduced in P. Rossi (ed.), *I Disegni di Jacopo Tintoretto*, Florence 1975, Figs 77, 144 and 145.

13 The study is in the Hermitage, St Petersburg, illustrated in Rossi 1975 (cited in note 12), Fig. 107.