

Who was Pontormo's Halberdier? The evidence from pathology

George M. Weisz · W. R. Albury · Donatella Lippi ·
Marco Matucci-Cerinic

Received: 19 November 2010 / Accepted: 13 March 2011
© Springer-Verlag 2011

Abstract The identity of the young man in Jacopo Pontormo's *Portrait of a Halberdier* has long been disputed by art historians. Two probable candidates have been identified: Francesco Guardi, a Florentine nobleman, and Cosimo I de' Medici, Duke of Florence from 1537 and Grand Duke of Tuscany from 1569. The present study is intended to help resolve this controversy by providing evidence, based on pathological criteria, for the identification of Pontormo's *Halberdier*. Pathological anomalies of the finger joints in the left hand of the *Halberdier* are compared with those in three acknowledged portraits of Cosimo I de' Medici. These three portraits show the hands of Cosimo in approximately the same position as the *Halberdier's* hand, thus allowing a meaningful comparison. Detailed observation indicates that there is a close correspondence between the *Halberdier's* hand deformity and that of Cosimo I in the comparison portraits. This deformity is also consistent with what is known about the medical history of Cosimo I and with the skeletal remains of his left hand. The pathological evidence

supports the conclusion that Pontormo's *Halberdier* is Cosimo I as a young man and that the painting was done around 1537 when Cosimo first became Duke.

Keywords Rheumatic diseases ·
Medici syndrome · History of medicine

Introduction

Cultures do not impose uniform cognitive and reflective equipment on individuals. People differ in occupational experiences, for example. A medical man perceives a human body differently from the rest of us: he has learned certain kinds of alertness and discrimination and he has terms and categories to help him with many of them ... and under certain circumstances such a professional disposition and skill [will] transfer to other situations, such as the judgement of painting [1, 2].

As the comment above indicates, when medically trained observers see the human body depicted in a painting, they may well notice features which escape others—including art historians—who view the same work. Apparent deformities and signs of pathology are matters of particular interest to medical observers, both in the clinical setting and in paintings, but when they seek to interpret anatomically deformed images in paintings, they must always consider whether the deformity is a stylistic feature or a naturalistic attempt by the artist to represent the model's actual condition [3–5]. It would be naïve to treat an artist's depiction of someone as if it were a clinical photograph. Not only would the artist's style affect the portrayal, but considerations of decorum would also be in

G. M. Weisz
School of History and Philosophy
(Program in History of Medicine),
University of New South Wales, Sydney, NSW, Australia

G. M. Weisz (✉) · W. R. Albury
School of Humanities, University of New England,
Armidale, NSW 2351, Australia
e-mail: gmweisz@aol.com

D. Lippi
History of Medicine, Department of Anatomy,
Histology and Legal Medicine, University of Florence,
Florence, Italy

M. Matucci-Cerinic
Department of Biomedicine, Division of Rheumatology,
Denothe Centre, University of Florence, Florence, Italy

play. As one scholar has noted, ‘Toning down physical defects was habitual in Renaissance portraiture, but this became obligatory when dealing with a high-ranking sitter’ [6–8].

The variety of artists’ styles and our uncertainty about any particular artist’s medical knowledge can present serious problems for the interpretation of visible deformities in works of art. This kind of study must always, therefore, remain somewhat speculative; but when carefully done, it can nevertheless yield informative results. Some apparently pathological conditions depicted in portraits are identifiable on the basis of reliable written accounts—for example, when the identity and medical history of the model are known. But for the most part, these conditions require a medico-artistic interpretation. If the interpretation concludes that the painting shows a physical deformity in the subject and is not merely a distortion resulting from the artist’s style, then this conclusion may be combined with historical evidence of family diseases and other biographical data to assist in the identification of the person depicted.

In the present study, we apply these considerations to the *Portrait of a Halberdier* (Fig. 1) by Jacopo Pontormo (1494–1557). Painted in 1537–1539 according to one view [9–11], or in 1528–1530 according to another [12, 13], this portrait shows a young Florentine aristocrat in military dress. The identity of this figure has been the subject of



Fig. 1 Jacopo Pontormo (Jacopo Carucci) (Italian, 1494–1557). *Portrait of a Halberdier*, 1528–1530 (or 1537–1539), oil (or oil and tempera) on panel transferred to canvas, 92 × 72 cm (36.2 × 28.3 in.) unframed. Los Angeles, J. Paul Getty Museum. (By permission of the J. Paul Getty Museum)

intense debate in art-historical literature—with some scholars maintaining that it is Francesco Guardi (1514–1554) [13–15] and others that it is Duke (from 1569 Grand Duke) Cosimo I de’ Medici (1519–1574) [10, 11, 16–19]. Part of the interest in this controversy arises from its political dimensions. If the portrait shows Guardi around 1528–1530, then it is anti-Medicean in sentiment, since it commemorates those republican youth who resisted the forces which were besieging Florence at the time and seeking to re-impose Medici rule. On the other hand, if the portrait shows Cosimo I around 1537–1539, then it celebrates the consolidation of Medici power after the assassination of Cosimo’s predecessor, Alessandro de’ Medici, Duke of Florence [10, 20–23].

Using pathology as a clue

Art-historical attempts to resolve this matter have been based on a wide range of criteria such as the age of the sitter, his pike, his cap and the medallion on it, his beard or lack thereof, his belt and sword, the location in which he is portrayed, and the size, shape and provenance list of the painting. For each of the arguments on these grounds which some scholars have advanced in favour of one identification of the *Halberdier*, other scholars have advanced contrary arguments in favour of the alternative identification [24]. We believe that the matter is unlikely to be resolved unless new evidence is considered, and in that spirit we suggest that a hitherto overlooked clue to the identity of the *Halberdier* can be obtained by concentrating on a specific hand anomaly [25].

We compare the left hand of Pontormo’s *Halberdier* (Fig. 2) with the hands in three paintings widely accepted as portraits of Cosimo I de’ Medici, in order to support the



Fig. 2 Detail of Fig. 1

conclusion that he is the person depicted. In this comparison of images, we must first distinguish between the overall position of the hand and the position of specific joints of the fingers. The position of the *Halberdier's* left hand involves a lateral spread of the four fingers, with the second and third fingers pressed together, almost as if they were fused (a condition known as syndactyly), and the first and fourth fingers separated from the two central ones. This hand position occurs very frequently in Renaissance art, in the works of many different painters, and must be understood as a stylistic feature rather than the representation of a deformity in the model [26]. Our specific focus, however, is the position of the joints of the fingers, not the overall hand position (although the similarity of the overall hand position is methodologically relevant in that it makes comparison of the finger joints meaningful). Unlike the overall position of the hand, the specific joint deformity identified here is not widespread in art works of the period.

The following portraits (viewable online) are used as the basis of our comparison because they are accepted by most art historians as portraits of Duke Cosimo I, and they also show one of the duke's hands in the same position as the *Halberdier's* left hand.

- *Young Man in a Spanish Jacket* by Pontormo, dated 1538. (Formerly in the Piasecka Johnson Collection, Princeton; auctioned by Sotheby's July 2009. http://www.sothebys.com/app/live/lot/LotDetail.jsp?lot_id=159537665. Accessed September 8, 2009).
- *Portrait of a Young Man with a Book* by Agnolo Bronzino (1503–1572), dated 1540. (Metropolitan Museum, New York. http://www.wga.hu/cgi-bin/highlight.cgi?file=html/b/bronzino/2/young_ma.html&find=book. Accessed September 8, 2009).
- *Cosimo I in Armour* by Bronzino, dated 1545. (Uffizi Gallery, Florence. <http://www.wga.hu/cgi-bin/highlight.cgi?file=html/b/bronzino/1/cosimo.html&find=cosimo>. Accessed September 8, 2009).

Results of the comparison

Pontormo's portrait of a *Young Man in a Spanish Jacket* and Bronzino's *Portrait of a Young Man with a Book* have often been compared to Pontormo's *Portrait of a Halberdier* because of the similarity of the figure's pose in each painting [27]. We note particularly that the left hand is positioned in nearly the same way in all three cases and that the specific anomaly of the finger joints recently identified in the *Halberdier* [28] is also found in the left hand of the other two figures.

The specific joints concerned are the metacarpo-phalangeal (MP) joints that connect the fingers to the hand; the

proximal interphalangeal (PIP) joints at the middle of each finger; and the distal interphalangeal (DIP) joints near the end of each finger. In Pontormo's *Portrait of a Halberdier* and *Young Man in a Spanish Jacket*, and in Bronzino's *Portrait of a Young Man with a Book*, the PIP joints of the four fingers of the left hand are swollen and flexed, while the MP joints are depressed. The DIP joints also appear to be somewhat extended. It would be very painful for someone with normal hands to hold the finger joints in this position voluntarily for any length of time. This is not a natural position for the fingers, and it is not one that would be forced by the subject's hand resting on his hip with the wrist flexed upward.

In the case of Bronzino's *Cosimo I in Armour* (Fig. 3), an official portrait of which Cosimo had at least 28 copies made [29], it is Cosimo's right hand which is positioned in the same way as the left hands of the other paintings considered above and which shows the same anomaly of the finger joints as previously described. The similarity is even more apparent when the picture of the hand is reversed, left to right (Fig. 4). Note also that the wrist is not flexed upward in this portrait—a confirmation that wrist flexion is not the cause of the anomalous appearance of the finger joints.

This particular representation of the joints of the fingers is not found in Pontormo's and Bronzino's portraits of other figures, so we conclude that it is not a stylistic preference on the part of these artists but the representation of a condition existing in the model. We can see this contrast especially



Fig. 3 Agnolo Bronzino (Italian, 1503–1572). *Cosimo I de' Medici in Armour*, ca. 1545, oil on poplar, 86 × 67 cm (33.9 × 26.4 in.) panel. Sydney, Art Gallery of New South Wales (Foundation Purchase 1996, Collection: Art Gallery of New South Wales). (By permission of the Art Gallery of New South Wales)



Fig. 4 Detail of Fig. 2 (reversed left to right)

clearly in a recently rediscovered portrait by Pontormo of another young Florentine, Carlo Neroni (b. 1511), dating from 1530. (Private collection; on long loan to the National Gallery, London. http://www.thearttribune.com/spip.php?page=docbig&id_document=1432. Accessed September 8, 2009). Here, the figure's pose and the position of his left hand again resemble that of the *Halberdier* [30]. Neroni's index fingers appear swollen but his MP, PIP and DIP joints do not have the specific deformities shown in the *Halberdier's* portrait.

A final issue to be considered is the depiction of Cosimo's eyes with divergent strabismus (wall-eye or outward squint) in the two portraits by Bronzino which we have examined. This condition is not present in Pontormo's *Halberdier* or his *Young Man in a Spanish Jacket*, so it is reasonable to ask whether its presence in Bronzino's portraits of Cosimo might suggest that neither the *Halberdier* nor the *Young Man in a Spanish Jacket* is Cosimo.

Simon notes, however, that divergent strabismus appears in 'so many of Bronzino's subjects' that 'I can only suggest that this defect was considered in cinquecento Florence a desirable trait—a sign of uniqueness, distinction, perhaps even beauty' [31]. It can, for example, be seen very clearly in the following paintings by Bronzino showing Florentine dignitaries other than Cosimo.

- *Portrait of Bartolomeo Panciatichi*, dated 1540. (Uffizi Gallery, Florence. <http://www.wga.hu/html/b/bronzino/2/panciat1.html>. Accessed September 8, 2009).
- *Portrait of Ludovico Capponi*, dated 1551. (Frick Collection, New York. <http://www.wga.hu/html/b/bronzino/2/capponi.html>. Accessed September 8, 2009).

So here we have in all likelihood a stylistic feature—in this case one that appears to be unique to Bronzino rather than widespread in Renaissance art. The absence of divergent strabismus in Pontormo's *Halberdier* therefore does not outweigh the evidence of the specific joint anomalies discussed above.

Conclusion

The most probable conclusion based on the hands in the paintings discussed is that Pontormo's *Portrait of a Halberdier* depicts Cosimo I de' Medici. Cosimo's appearance in the portrait would suggest that he was about age 18 and that the portrait was therefore done around 1537, the year in which he became Duke. This identification on the basis of a hand deformity is consistent with what is known about Cosimo's medical history. Like many other members of the Medici family, he had a genetic predisposition to joint problems and suffered greatly from a painful condition interpreted by his contemporaries as 'gout'—a process that eventually led to him becoming a total invalid [32].

A recent study of adult males in the senior branch of the family found evidence of a 'Medici syndrome,' consisting of a psoriatic-DISH arthropathy, extending across five generations [33, 34]. Although Cosimo I was born into the cadet branch of the family and was only distantly related to the senior branch through his paternal ancestors, his mother was a member of the senior Medici line. Thus, he may well have suffered in later life from some of the features of this syndrome.

An investigation of the skeleton of Cosimo I, while finding no evidence of gout in the modern sense of the term, identified a number of arthritic and other pathological changes in the spine and leg bones [35]. Although the article reported no findings on Cosimo's hands, an X-ray of the bones in his left hand has been examined by the present authors. This image also shows no signs of gout, but it does reveal significant deterioration of the PIP joint of the index finger (Fig. 5)—precisely the joint that appears most swollen in the left hand of Pontormo's *Halberdier*.

It is possible that the damage to this joint may have been caused by the ravages of time during the 400+ years since Cosimo's death, rather than by a pathological process occurring while he was alive. For this reason, the X-ray evidence cannot be taken as conclusive; but it is nevertheless entirely consistent with our interpretation of the *Halberdier's* identity and highly suggestive because of the specific joint affected. Assuming that this joint deterioration was pathological and that the pathology was present in the young Cosimo's hand as depicted by Pontormo, we would propose juvenile rheumatoid arthritis or another seronegative joint disease (such as psoriatic arthritis) as the explanation for these phenomena.

Unfortunately, nothing is known of Francesco Guardi's medical history, or of other portraits that may have depicted him, such as the one mentioned by Giorgio Vasari (1511–1574) in his biography of Pontormo [36]. So we cannot eliminate the possibility that Guardi also had deformed finger joints. But it is extremely unlikely that Guardi's deformities, if they existed, would have been



Fig. 5 Bones of Cosimo I's left hand, showing deterioration of the PIP joint in the index finger. X-ray by N. Villari. (By permission of the Special Superintendence of the Polo Museale Fiorentino)

exactly the same as those shown in the acknowledged portraits of Cosimo. If the *Halberdier* is Cosimo, his finger deformities are to be expected, whereas if the *Halberdier* is Guardi, then the similarity of these deformities to the ones shown in acknowledged portraits of Cosimo can only be explained as an extraordinary coincidence.

Finally, we propose that the methodology applied here could be used for the identification of other unknown figures in paintings, where a specific anatomical deformity can be found in the picture and there is evidence to suggest that it is not a stylistic distortion by the artist. In practice, the most promising conditions for using this approach would be those where the possible identity of the figure has already been limited to a few alternatives by conventional art-historical analysis and where there is supplementary information available about the health of the individuals concerned.

References

1. Baxandall M (1985) Patterns of intention: on the historical explanation of pictures. Yale University Press, New Haven, p 107
2. Baxandall M (1972) Painting and experience in fifteenth century Italy: a primer in the social history of pictorial style. Oxford University Press, Oxford, p 39
3. Rothschild B (2005) Style versus substance in artistic depiction. *Rheumatology* 44:1464–1465
4. Appelboom T (2005) Style versus substance in artistic depiction: reply. *Rheumatology* 44:1465

5. Philippot P (1987) Stylistic and documentary understanding of fine arts. In: Appelboom T (ed) Art, history and antiquity of rheumatic diseases. Elsevier, Brussels, pp 12–16
6. Falomir M (2008) The court portrait. In: Campbell L, Falomir M, Fletcher J, Syson L (eds) Renaissance faces: Van Eyck to Titian. National Gallery Company, London, pp 66–79
7. Campbell L (2008) The making of portraits. In: Campbell, Falomir, Fletcher, Syson (eds) pp 32–45, esp at 41–42
8. Greer E (2008) Domenico Ghirlandaio (1449–1494). In: Campbell, Falomir, Fletcher, Syson (eds) pp 244–247, at 245
9. Nigro SS (1994) Pontorno: paintings and frescos. Harry N. Abrams, New York, pp 57–58, 156
10. Pinelli A (2002) Tiranno o difensore della libertà? L'enigma dell'alabardiere Getty. In: Schianchi LF (ed) Parmigianino e il manierismo Europeo. Silvana, Milan, pp 342–356
11. Pinelli (2004) La bellezza impura: arte e politica nell'Italia del rinascimento. Laterza, Rome, pp 123–154
12. Mather FJ (1922) The halberdier by Pontorno. *Art in America* 10:66–69
13. Cropper E (1997) Pontorno: portrait of a halberdier. Getty Museum Studies on Art, Los Angeles
14. Brock M (2002) Bronzino. Flammarion, Paris, pp 52–54
15. McCorquodale C (1981) Bronzino. Jupiter Books, London, pp 23–27
16. Langedijk K (1981) The portraits of the Medici, 15th–18th centuries. Studio per Edizioni Scelte, Florence, pp 79–120
17. Costamagna P (1994) Pontorno: l'opera completa. Electa, Milano, p 90
18. Simon RB (1982) Bronzino's portraits of Cosimo I de' Medici. PhD dissertation, Columbia University, p 187
19. Simon (1987) 'Blessed be the hand of Bronzino': the portrait of Cosimo I in armour. *Burlington Magazine* 129(1011):387–388
20. Strehlke CB (2004) Pontorno and Bronzino, for and against the Medici. In: Strehlke (ed) Pontorno, Bronzino, and the Medici: the transformation of the renaissance portrait in Florence. Philadelphia Museum of Art, Philadelphia, pp xi–xiii, at xii
21. Strehlke follows Cropper in identifying the *Halberdier* as Guardi, to the extent of calling the painting *Francesco Guardi as a Halberdier*, as does Cropper herself in her contribution to the book
22. Cropper (2004) Pontorno and Bronzino in Philadelphia: a double portrait. In: Strehlke (ed) (note 20), pp 1–33, at 13–24
23. Strehlke (2004) Pontorno: Francesco Guardi as a halberdier, 1529–30. In: Strehlke (ed) (note 20), pp 92–95
24. Compare, for example, Cropper, Pontorno (note 13) with Pinelli, Tiranno o difensore (note 10) and Belezza impura (note 11)
25. Weisz GM, Albury WR (2008) The hands of the halberdier. *Clin Exp Rheumatol* 26(3):508
26. Hermans PJ (1987) A systematic study of the pictorial hand from Botticelli to Rembrandt. In: Appelboom (ed), art, history and antiquity of rheumatic diseases (note 5), pp 38–40, at 38
27. See, for example, Cropper, Pontorno (note 13) and Pinelli, Tiranno o difensore (note 10) and Belezza impura (note 11)
28. Weisz, Albury (note 25)
29. Simon (1983) Bronzino's portrait of Cosimo I in armour. *Burlington Magazine* 125 (966): 527–539, at 536, 539
30. Plazzotta C (2008) Pontorno (1494–1556): portrait of a young man in a red cap (Carlo Neroni), 1530. In: Campbell, Falomir, Fletcher, Syson (eds) (note 6), pp 224–227
31. Simon, Bronzino's portrait (note 29), p 535, n 43
32. Guarini EF (1984) Cosimo I de' Medici, duca di Firenze, granduca di Toscana. In: Dizionario biografico degli Italiani. Istituto della Enciclopedia Italiana, Rome, 30: 30–48, at 46
33. Weisz GM, Matucci-Cerinic M, Albury WR, Lippi D (2010) The Medici syndrome: a medico-historical puzzle. *Int J Rheumatic Dis* 13:125–131

-
34. Weisz GM, Matucci-Cerinic M, Lippi D, Albury WR (2011) The ossification diathesis in the medici family: dish and other features. *Rheumatol Int* 31. doi:[10.1007/s00296-010-1563-6](https://doi.org/10.1007/s00296-010-1563-6)
 35. Fornaciari G, Giuffra V (2009) Le malattie reumatiche alla corte medicea di Firenze: la cosiddetta 'gota' dei Medici (Rheumatic diseases at the court of the Medici of Florence: the so-called "gout" of the Medici). *Reumatismo* 61(3): 229–237, at 230–231
 36. Vasari G (1851) *Lives of the most eminent painters, sculptors and architects*. Foster J (tr). Bohn, London, 4:368