NOTES

JACOPO DE' BARBARI'S APOLLO AND DÜRER'S EARLY MALE PROPORTION FIGURES

BY ALICE WOLF

Dürer himself connected his early studies in proportion with the names of Jacopo de' Barbari, the North Italian engraver, and the Roman writer, Vitruvius, whose famous work on architecture[1] contains a passage about the proportions of a well-formed human figure.[2] The nature of these connections and their relation to the effect of Gothic methods on Dürer's early constructed figures is one of the much discussed Dürer problems.[3] The chief aim of this essay is to call attention to a constructed figure by Barbari, the Apollo of the engraving B. 16, K. 14, its connections with Dürer, and, further, its debt to Leonardo da Vinci.

The Dürer material which has been discussed in the literature consists of a number of male and female figures most of which were collected by Ludwig Justi. Additional drawings were first dealt with by H. Tietze and E. Tietze-Conrat.[4] Justi demonstrated a system of construction which applies to all these figures with slight variations. He pointed to a system of straight lines and circles arranged around an axis the purpose of which is the indication of the posture, proportions, and some of the outline of the figure.

To these constructed figures belongs the so-called "Apollo group." An examination of its earliest examples, the Aesculapius (L. 181), and the two Apollos (L. 233, Fig. 1, and L. 179)[5] shows, as Justi also pointed out:

1. The measurements recommended by Vitruvius:
   (a) the length of the head (from the chin to the crown) = 1/8 of the total length;
   (b) the length of the face (from the chin to the top of the forehead or roots of the hair) = 1/10 of the total length;
   (c) in the Apollo (L. 233) (Fig. 1), and the Apollo (L. 179) the distance from the chin to the under side of the nostrils = the distance from the under side of the nostrils to the middle of the eyebrows; the distance from the middle of the eyebrows to the top of the forehead (roots of the hair) is the same.
   (d) the width of the shoulders = *ca.* 1/4 of the total length.
2. Measurements which have probably to be interpreted as an emendation of a corrupt passage in Vitruvius[6] and which are also used in Leonardo's Vitruvian man (Fig. 4).[7]
   (a) from the level of the nipples (middle of the breast) to the crown = 1/4 of the total length;
   (b) from the pit of the throat to the crown = 1/6 of the total length.
3. The crotch indicates the middle of the body, again as in Leonardo's Vitruvian man.

In the literature on the subject one characteristic of Dürer's early constructed figures has not been observed: either the outline of the figure in the finished work is intersected at certain points essential to the construction, by an object represented in the picture, or there is another way of pointing to the construction. In the Standard Bearer (B. 87) (Fig. 2), for instance, essential features of the construction can be discovered from Dürer's indications in the picture.[8] The lowest point of the hip on the side of the standing leg is cut by the lower outline of the sword blade. The lowest point of the hip on the side of the free leg is indicated by the lower end of the handle of the sword. Through the exact middle of the line connecting these two points runs the central line of the abdomen linking the crotch and the middle of the waist line. For this and other features of the construction to which we shall refer one may compare Justi's reconstruction of the construction of the Apollo (L. 233) (Fig. 1). Proceeding further, if we describe a circle the center of which lies at the top point of the staff of the standard and the radius of which is equal to the length of the staff, the circumference touches the central line of the abdomen at the crotch. We obtain the middle of the waist line on the abdominal central line by describing a circle from the same center with a radius the length of which is equal to the length of the staff from

1. Writing about twenty-three years later, Dürer recalls that in his youth Jacopo de' Barbari had shown him the figures of a man and woman which he had drawn according to a canon of proportions. Dürer "understood how such things could be done," but he could also "well observe" that Barbari would not explain "clearly" the underlying principles. So he set to work on his own and read Vitruvius "who writes somewhat about the human figure." Thus he took his start from Barbari and Vitruvius. See Dürer's drafts for his dedication to Pirkheimer of his *Four Books of Human Proportions* in *Albrecht Dürer's schriftlicher Nachlass*, ed. E. Heidrich, Berlin, 1910, pp. 252 ff.; also William M. Conway, *Literary Remains of Albrecht Dürer*, Cambridge, 1889, pp. 165, 253 ff.

2. *Vitruvius, The Ten Books on Architecture*, translated by Morris Hicky Morgan, Cambridge, 1926, Bk. III, Ch. 1, pp. 73–75.

3. See Ludwig Justi, *Konstruierte Figuren und Köpfe unter den Werken Albrecht Dürers*, Leipzig, 1902; Hans Klaiber, *Beiträge zu Dürers Kunsttheorie*, Blaubeuren, 1903, pp. 14 ff.; Ludwig Justi, "Dürers Dresdner Skizzenbuch," *Repertorium für Kunstwissenschaft*, XXVIII, 1905, pp. 369 ff.; Arpad Weixlgärtner in his review of the edition of Dürer's Dresden Sketch Book by R. Bruck, in *Kunstgeschichtliche Anzeigen*, III, 1906, p. 25; Erwin Panofsky, *Dürers Kunsttheorie*, Berlin, 1915, pp. 78 ff.; Hans Klaiber, "Die Entwicklung in Dürers theoretischen Studien," *Repertorium für Kunstwissenschaft*, XXXVIII, 1916, pp. 240 ff.; H. Tietze and E. Tietze-Conrat, *Kritisches Verzeichnis der Werke Albrecht Dürers*, vol. I (*Der junge Dürer*), Augsburg, 1928, pp. 395 ff.; A. M. Friend, Jr., "Dürer and the Hercules Borghese-Piccolomini," ART BULLETIN, XXV, 1943, pp. 40 ff.

4. For Justi and Tietze-Conrat see note 3.

5. The "Apollo group" comprises in addition the Adam of the drawing L. 475 and the drawing of the so-called Bonnat Warrior, L. 351. The name "Apollo group" originates from the supposed connection of the group with the Apollo Belvedere (see Justi, *Konstruierte Figuren*, pp. 5, 10). For the chronology of the group, see E. Panofsky, "Dürers Darstellungen des Apollo und ihr Verhältnis zu Barbari," *Jahrbuch der Königlichen preussischen Kunstsammlungen*, XLI, 1920, pp. 359–377.

6. The corrupt passage in Vitruvius runs: "From the upper part of the breast to the roots of the hair a sixth; to the crown of the head a fourth [of the total length]."

7. For the Vitruvian man by Leonardo see Figure 4 and *The Literary Works of Leonardo da Vinci*, ed. J. P. Richter, 2nd ed., London and New York, 1939, I, p. 255, No. 343.

8. That the Standard Bearer also belongs to Dürer's constructed figures has already been supposed, e.g., by Panofsky, *op. cit.*, p. 374, note 4.

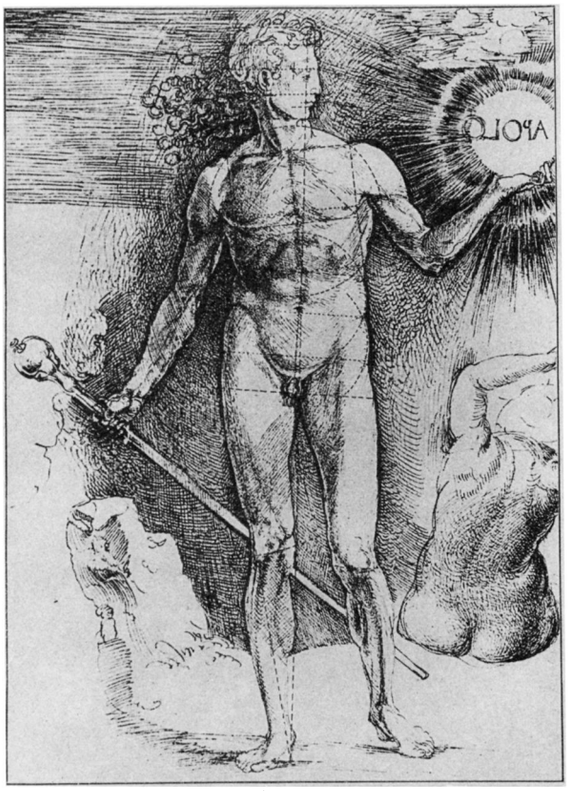

FIG. 1. London, British Museum: Dürer, Drawing of Apollo (L. 233)

FIG. 2. Dürer, Engraving, The Standard Bearer (B. 87)

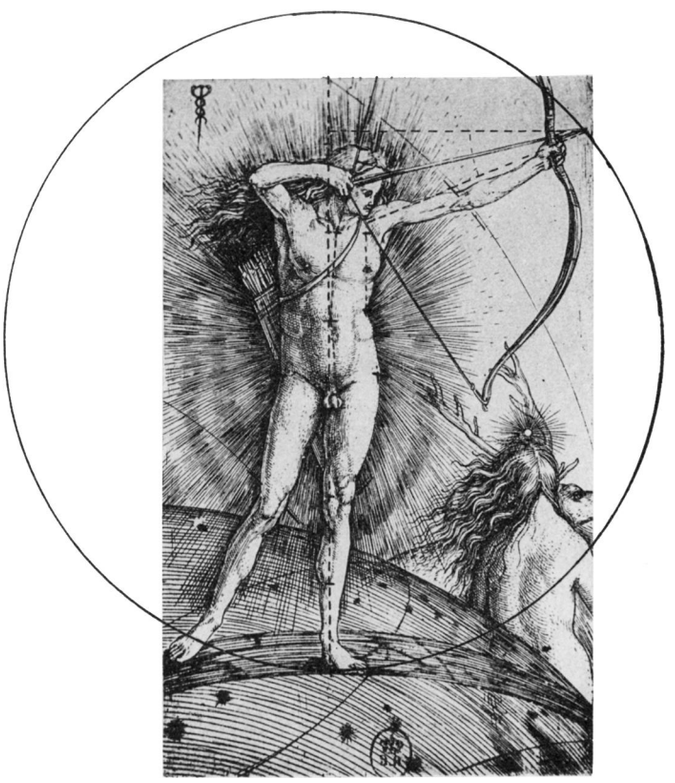

FIG. 3. Jacopo de' Barbari, Engraving, Apollo (B. 16) (K. 14)

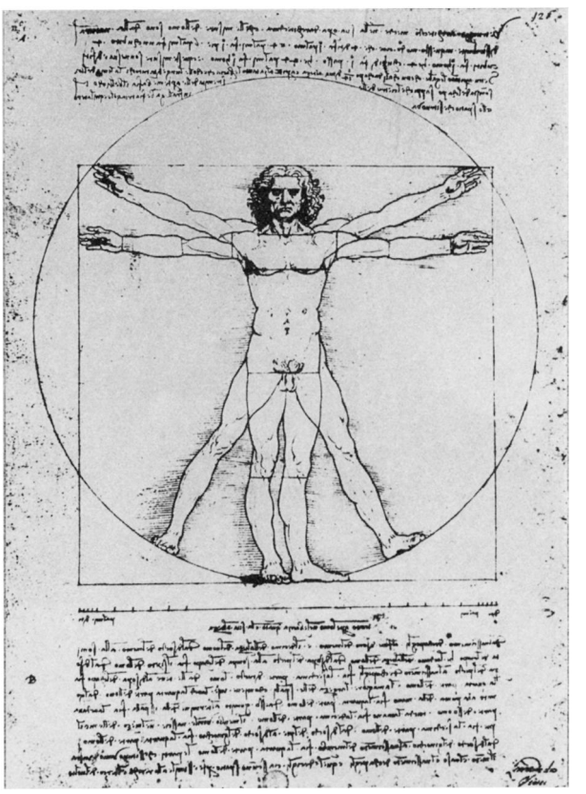

FIG. 4. Venice, Academy: Leonardo da Vinci, Drawing of Vitruvian Man

the point of the staff to the ring around it. In the middle of the waist line, furthermore, ends the central line of the breast which starts in the pit of the throat. We obtain the direction of this line by connecting the top point of the staff of the standard and the middle of the waist line. The continuation of the same line determines the direction of the thigh of the free leg. Dürer also points to the vertical axis of the figure. It runs through a vertical dark line in the little stone below the figure. The vertical axis is cut by the upper outline of the small hillock. This intersection indicates half of the distance from the ground (calculated from the toe of the figure) to the crotch and ¼ of the total length of the figure. In the Apollo (L. 233) (Fig. 1) the vertical axis is cut at the same point by the lower outline of the scepter Apollo is carrying where it passes behind the right leg (calculated, however, from the level of the heel of the figure). In the Man of Sorrows (B. 20) the left outline of the tree runs through the elbow of his right arm as if to point to the fact that the distance from the elbow to the shoulder joint equals the distance from the elbow to the top of the middle finger.[9] This relation between the length of the upper arm and forearm has its analogies in the raised arms of the Aesculapius (L. 181), and of the two Apollos (L. 233, Fig. 1, and L. 179).[10]

The influence of the engraving of Apollo and Diana by Jacopo de' Barbari (B. 16, K. 14) (Fig. 3) on Dürer in matters of form has been stressed repeatedly.[11] The Apollo of this engraving shows, like Dürer's Aesculapius (L. 181), and the two Apollos (L. 233 and L. 179):

1. The measurements of Vitruvius:
   (a) the length of the head = ⅛ of the total length;
   (b) the length of the face = 1/10 of the total length.
2. The "emended measurements of Vitruvius":
   (a) from the middle of the breast to the crown = ¼ of the total length;
   (b) from the pit of the throat to the crown = ⅙ of the total length.
3. In addition to the measurements above, Barbari's Apollo, like the Dürer figures, shows the following measurements:
   (a) the pit of the throat to the middle of the waist = ⅙ of the total length;
   (b) the middle of the waist to the crotch = ⅙ of the total length.
   Consequently the measurement for the distance from the crotch to the crown, and again from the ground to the crotch = ½ of the total length.

Both in Dürer's proportion figures, and in Barbari's Apollo essential points of the construction are pointed to. In the latter the lower border of the quiver cuts the knee of the standing leg so that the distance from this stressed point of the knee to the lowest point of the hip = ¼ of the total length.

The circumference of the celestial globe, on which Barbari's Apollo stands, passes behind his standing leg. At the point where it cuts the leg on the inside, it indicates, as does the lower outline of the sceptre in the Apollo (L. 233), ¼ of the total length calculated from the ground.

A curve passes behind the Barbari Apollo's free leg above the knee. The distance from the point where it cuts the leg on the inside to the lowest point of the hip = ¼ of the total length.

Another curve cuts the standing leg above the ankle so that the distance from the ankle to the lowest point of the hip = ½ of the total length.

A third curve cuts the outstretched arm at the elbow so that the distance from the point of intersection with the lower outline of the arm to the shoulder joint = the distance from the intersection to the fingers. This curve has the significance of the left outline of the trunk in Dürer's Man of Sorrows (B. 20) which, it will be remembered, cuts the arm at the elbow with like result. Barbari also shows in his picture the straight lines of his construction which indicate the position of the body. Thus the line representing the upper half of the string of the bow leads to the pit of the throat and determines the direction of the head.

Coincidences in the measurements, listed above, of the Vitruvian Apollo by Barbari and the Vitruvian man by Leonardo (Fig. 4) show the influence of Leonardo on Barbari. Barbari's Apollo indeed represents in some respects an artistic version of Leonardo's theoretical Vitruvian man. Besides Vitruvius' directions which Dürer followed in his Vitruvian figures, Leonardo's drawing illustrates the following passage from Vitruvius:

"Then again, in the human body the central point is naturally the navel. For if a man be placed flat on his back, with his hands and feet extended, and a pair of compasses centred at his navel, the fingers and toes of his two hands and feet will touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height, as in the case of plane surfaces which are perfectly square."[12]

In Leonardo's drawing the angle between the horizontal and the line linking the top of the middle finger of the diagonal arm and the shoulder joint equals 23°. In his drawing, furthermore, Leonardo marked certain points essential to the proportions of his figure. By a line, for example, on the vertical leg at the knee he indicated ¼ of the total length calculated from the base, and by another line on the horizontal arm he marked the hollow of the elbow, the point from which he measured ¼ of the total length both to the end of the middle finger and to the pit of the throat.

Barbari's Apollo not only contains the measurements of Vitruvius and the other measurements com-

9. As H. Tietze and E. Tietze-Conrat pointed out (*op. cit.*, No. 183) W. M. Conway had already observed that the Man of Sorrows was constructed.

10. See Justi, *op. cit.*, pls. II, III, and our Figure 1 from Justi's pl. IV.

11. See Panofsky, *loc. cit.*

12. Quoted from the translation by Morgan, p. 73.

mon to Dürer's and Leonardo's Vitruvian figures,[13] for he also paraphrases Leonardo's representation of the Vitruvian man inscribed in a circle and in a square, and the indications of his construction must also be derived from Leonardo. The navel of Barbari's Apollo is the center of a circle, which touches the standing leg at the heel and the point of the arrow. The point of the arrow replaces the top of the middle finger of the fully stretched arm of Leonardo's Vitruvian man. The heel of Barbari's figure touched by the circle's circumference corresponds to the heel of the vertical leg of the figure in Leonardo's drawing which is also touched by the circle. The angle between the horizontal and the line linking the point of the arrow and the shoulder joint in Barbari's Apollo equals 23°, like the angle between the horizontal and the line linking the top of the middle finger of the diagonal arm and the shoulder joint in Leonardo's figure. The position of Barbari's Apollo, however, is different; his head does not touch the horizontal line as the head of Leonardo's figure does. Barbari's curve which cuts the hollow of the elbow of the stretched arm repeats Leonardo's corresponding indication; likewise the point where the sphere cuts the standing leg on the inside resembles Leonardo's mark of ¼ of the total length on the vertical leg.

From the connections we have established we may conclude that Barbari used Vitruvian principles in the construction of his Apollo which is, in all likelihood, derived from Leonardo's Vitruvian man. The constructed male figure which was shown to Dürer by Barbari[14] was most probably a Vitruvian one and Barbari might have drawn Dürer's attention to Vitruvius' passage about a well-formed human figure. Barbari might also have communicated to Dürer Leonardo's emended Vitruvian measurements and the indications of construction which Leonardo had used in drawing his Vitruvian man.

Since the connections between Barbari and Leonardo are demonstrably so close, and since Dürer expressly states that in his youth Barbari had shown him figures which he had drawn according to a canon of proportions, it seems more likely that Barbari preceded Dürer in using indications of construction than vice versa. The definite answer to this question, however, must be postponed until we know more about Barbari's constructed figures and their chronology in relation to Dürer.

13. In Barbari's figure, however, as in Dürer's figures, the middle point of the length of the body as well as the point on the vertical leg which marks ¼ of the total length from the base are each placed a little lower than in Leonardo's figure.

14. See note 1.

YALE UNIVERSITY ART GALLERY