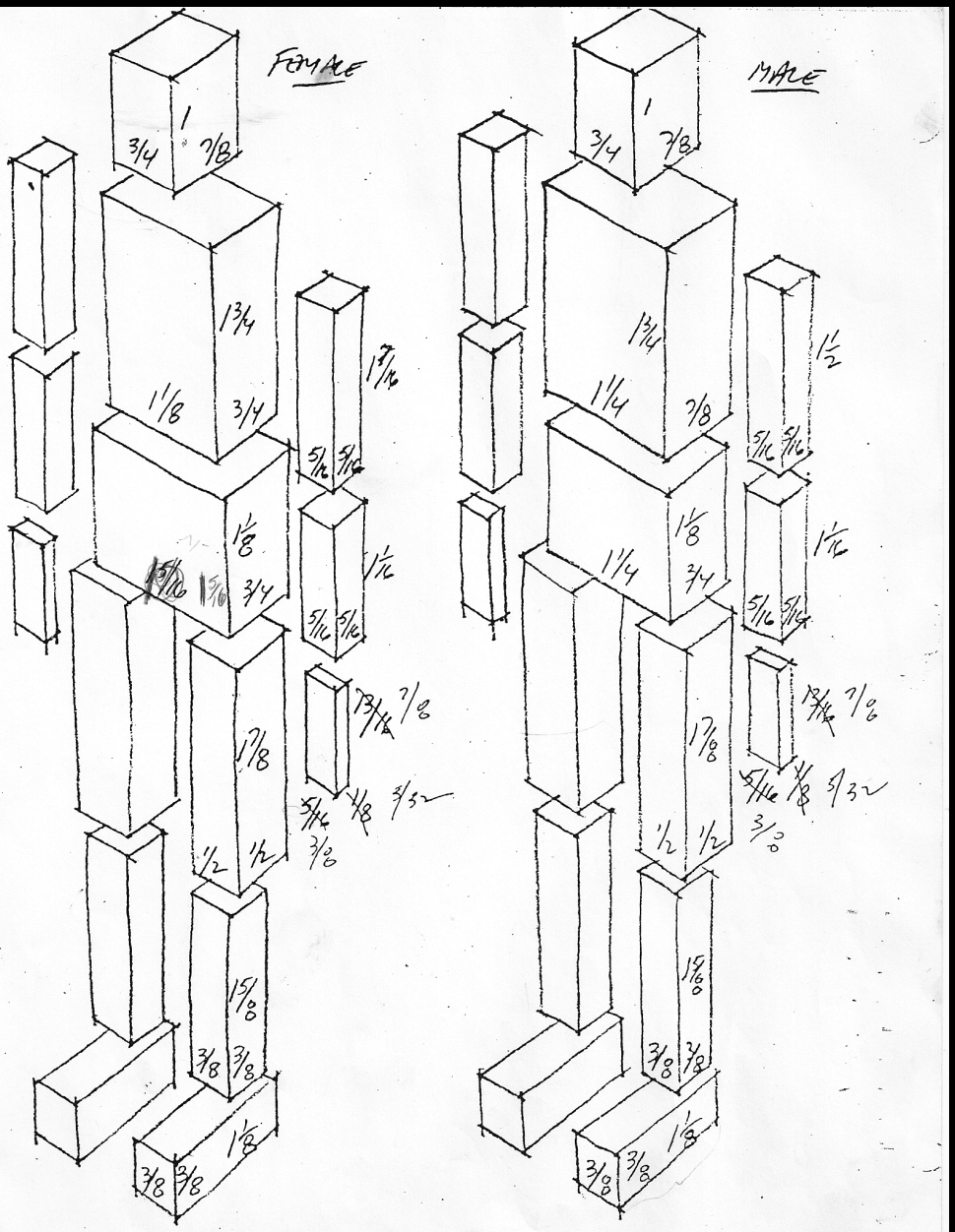
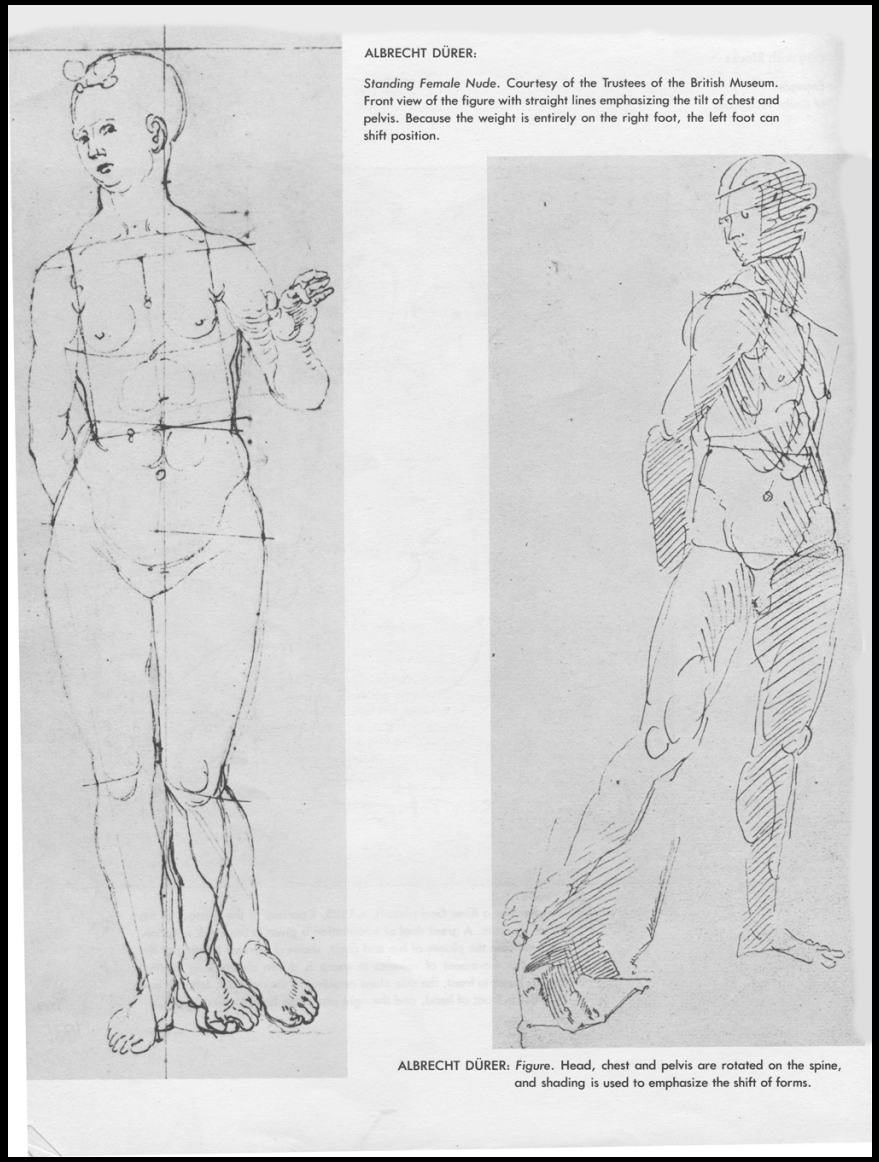
Basic Figure Structure



(c) PROPORTIONS OF THE FIFTEEN BASIC RECTANGULAR VOLUMES.

Construction lines support and inform contour lines and shapes. **Appraisal and revisions** of the drawing should be made at an early stage such as is represented here. Many refinements of these first lines are certainly required but the principal structure is sought at this stage.

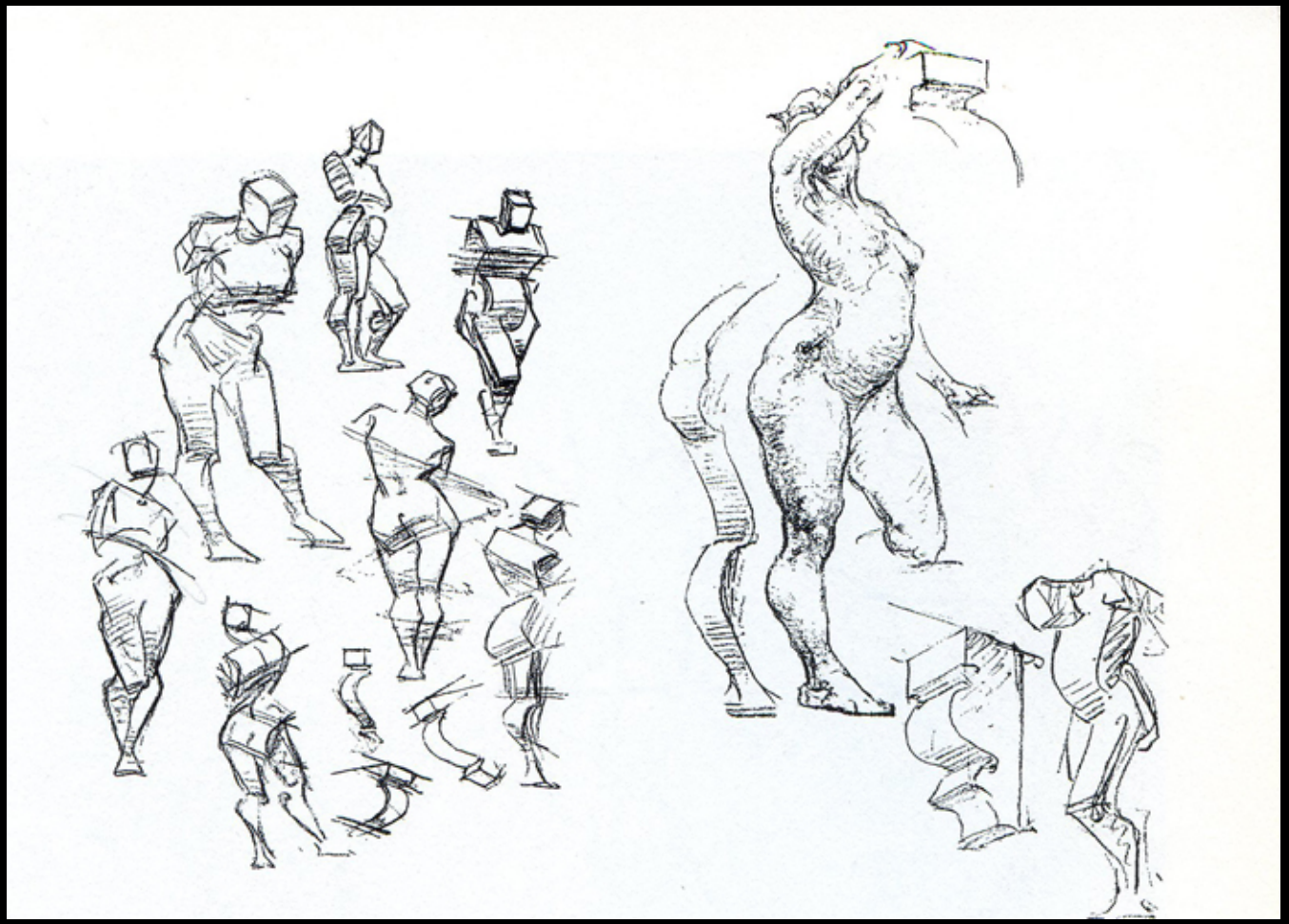


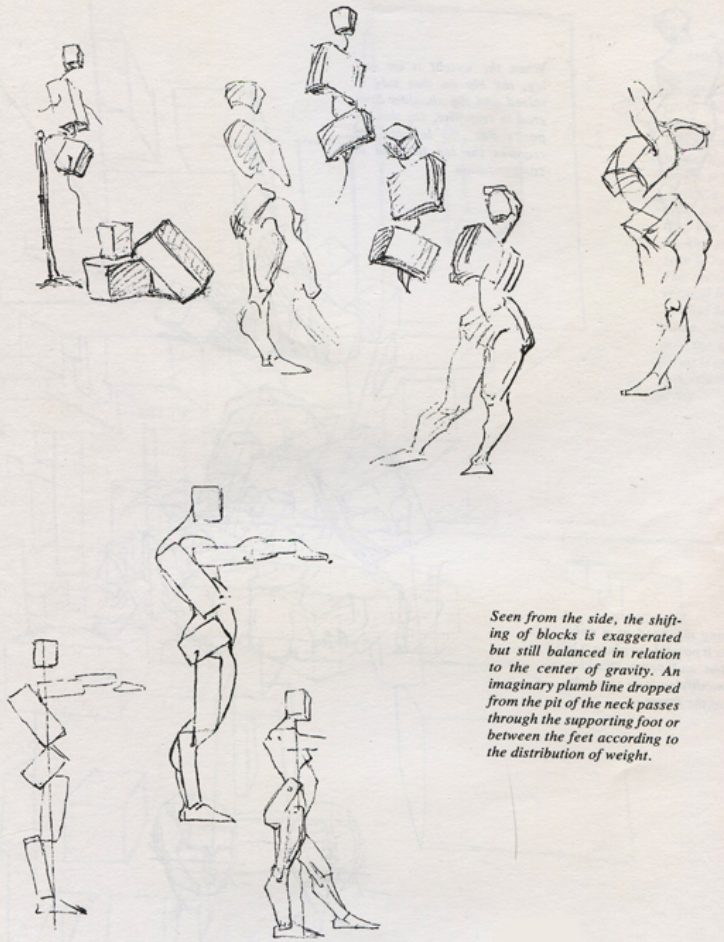
ALBRECHT DÜRER:

Standing Female Nude. Courtesy of the Trustees of the British Museum. Front view of the figure with straight lines emphasizing the tilt of chest and pelvis. Because the weight is entirely on the right foot, the left foot can shift position.

ALBRECHT DÜRER: *Figure*. Head, chest and pelvis are rotated on the spine, and shading is used to emphasize the shift of forms.

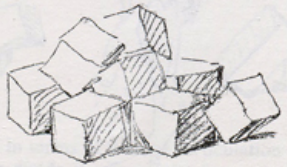
Contrapposto is an Italian term meaning "counterpoise" used in the to describe a human figure standing with most of its weight on one foot so that its shoulders and arms twist off-axis from the hips and legs.

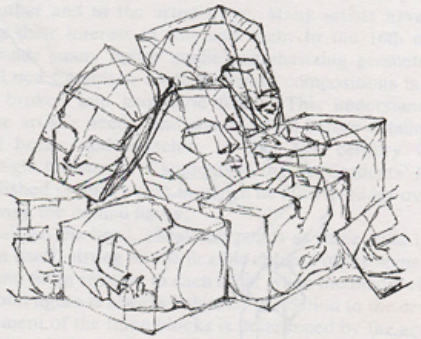




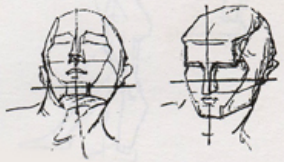
Seen from the side, the shifting of blocks is exaggerated but still balanced in relation to the center of gravity. An imaginary plumb line dropped from the pit of the neck passes through the supporting foot or between the feet according to the distribution of weight.

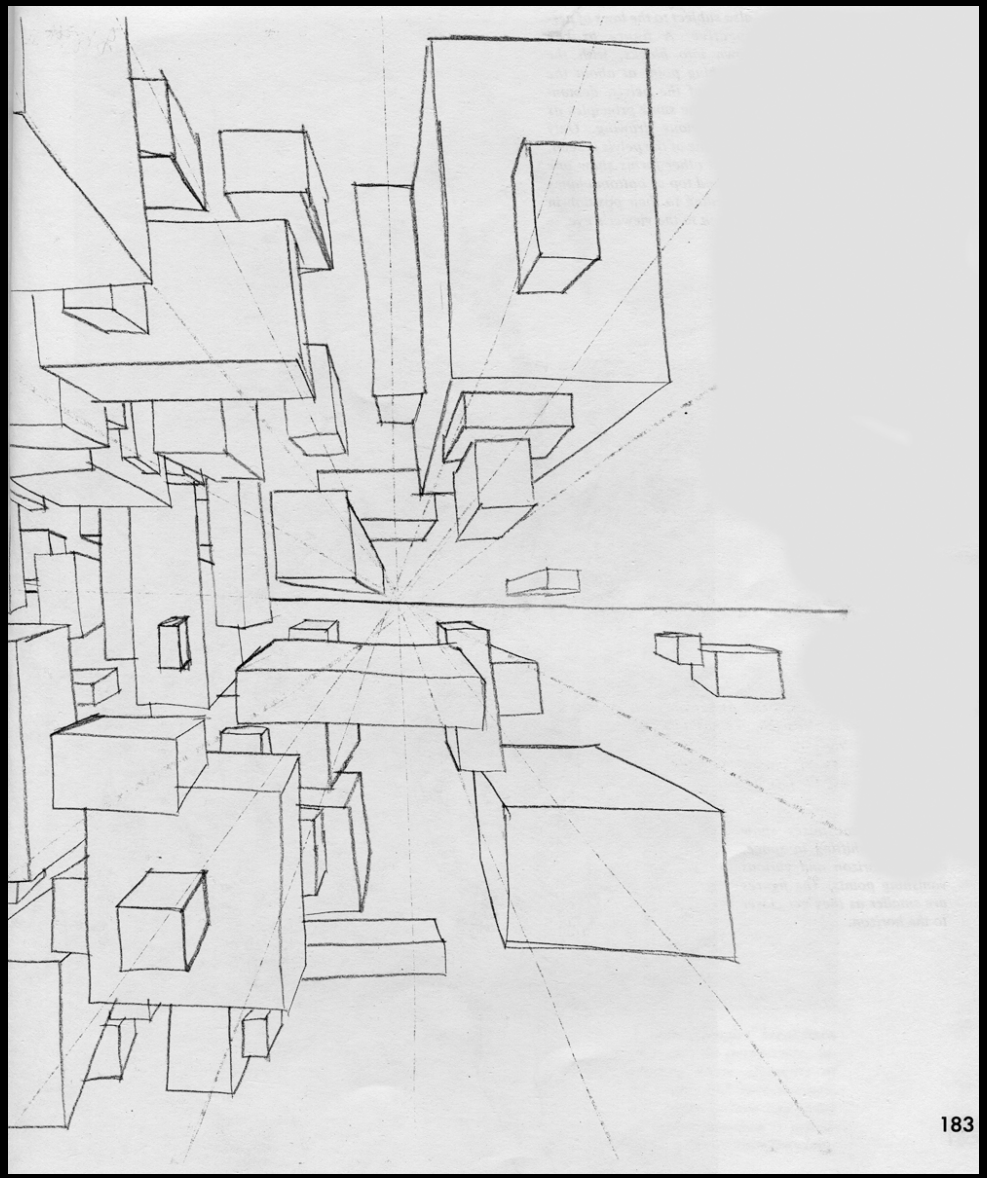
When the weight is on one leg, the hip on that side is raised and the shoulder lowered in response. On the opposite side, the lowered hip requires the leg to bend in compensation.

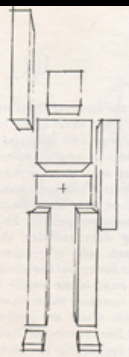




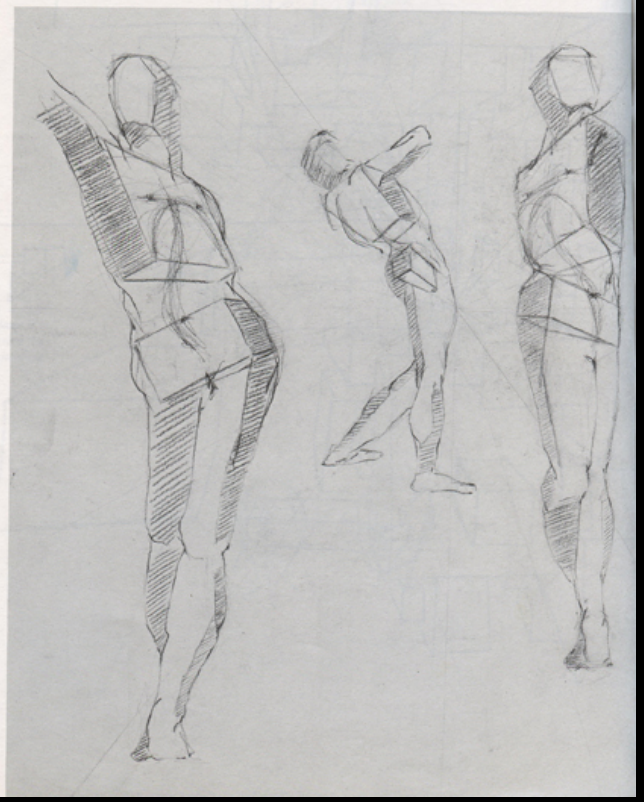
Drawing the head as a cube makes it possible to place it in position and perspective before modifying it to show details of the forms.





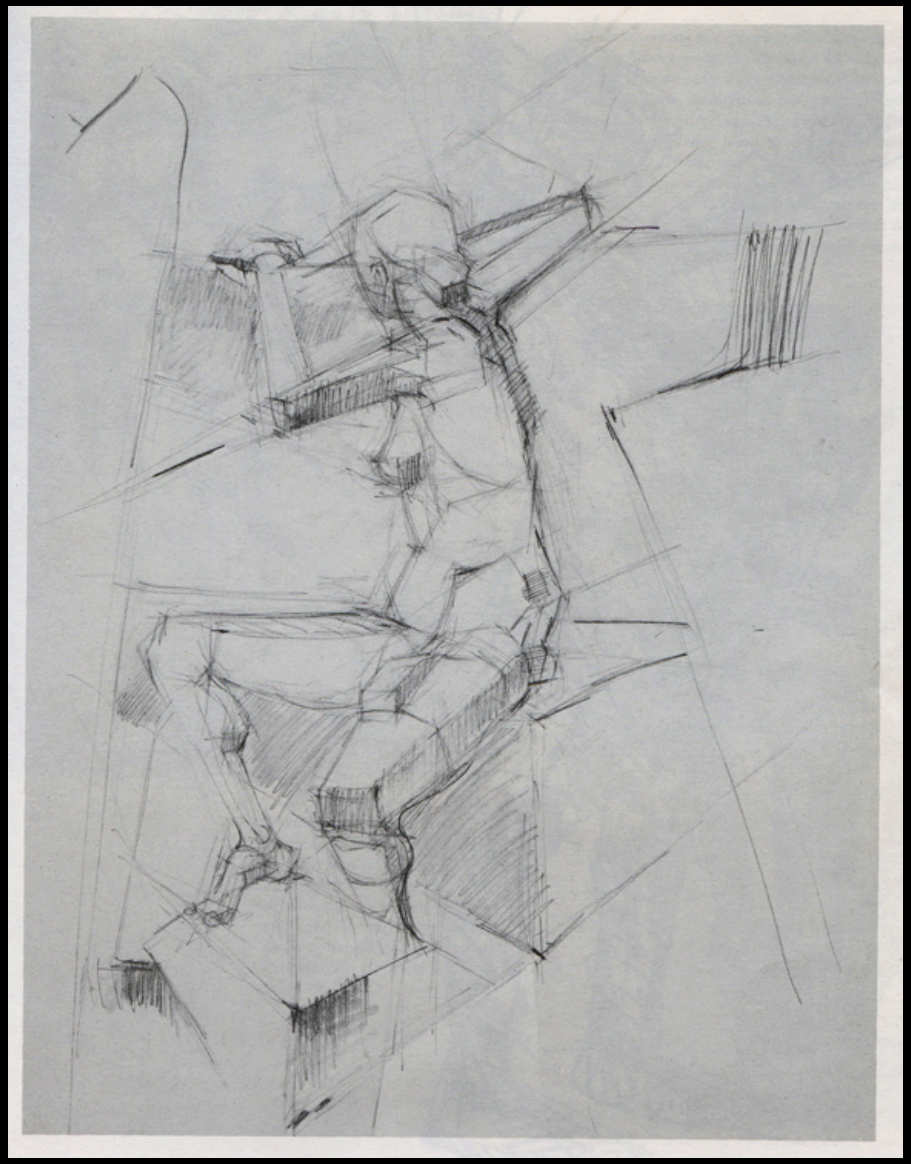


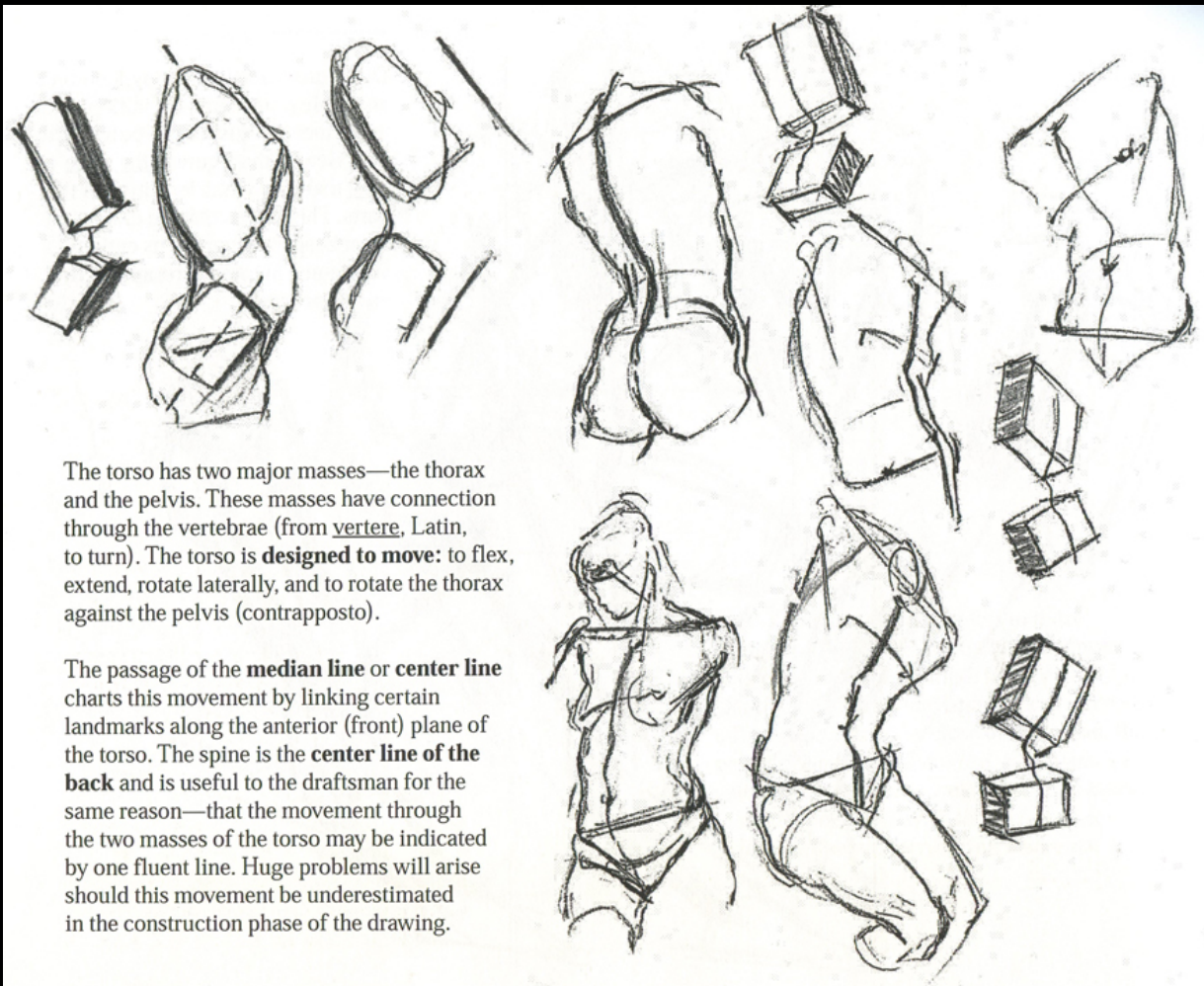
The volumes of the figure are also subject to the laws of perspective. A figure broken down into blocks, with the vanishing point at about the center of the pelvis, demonstrates the same principles as the previous drawing. Only one plane of the pelvis is seen, but all other forms show one side and top or bottom planes according to their position in relation to the viewer's eye.



Three different poses show the blocks shifting in space, using a horizon and various vanishing points. The figures are smaller as they get closer to the horizon.

CALVIN ALBERT: *Walking Woman*, pen and ink on blotting paper, 1952. Courtesy of Ingber Gallery, New York. A figure in extreme perspective with eye level at the right knee. Head, chest and pelvis are seen from below, towering into space. The diagram clarifies the perspective implied in the drawing.





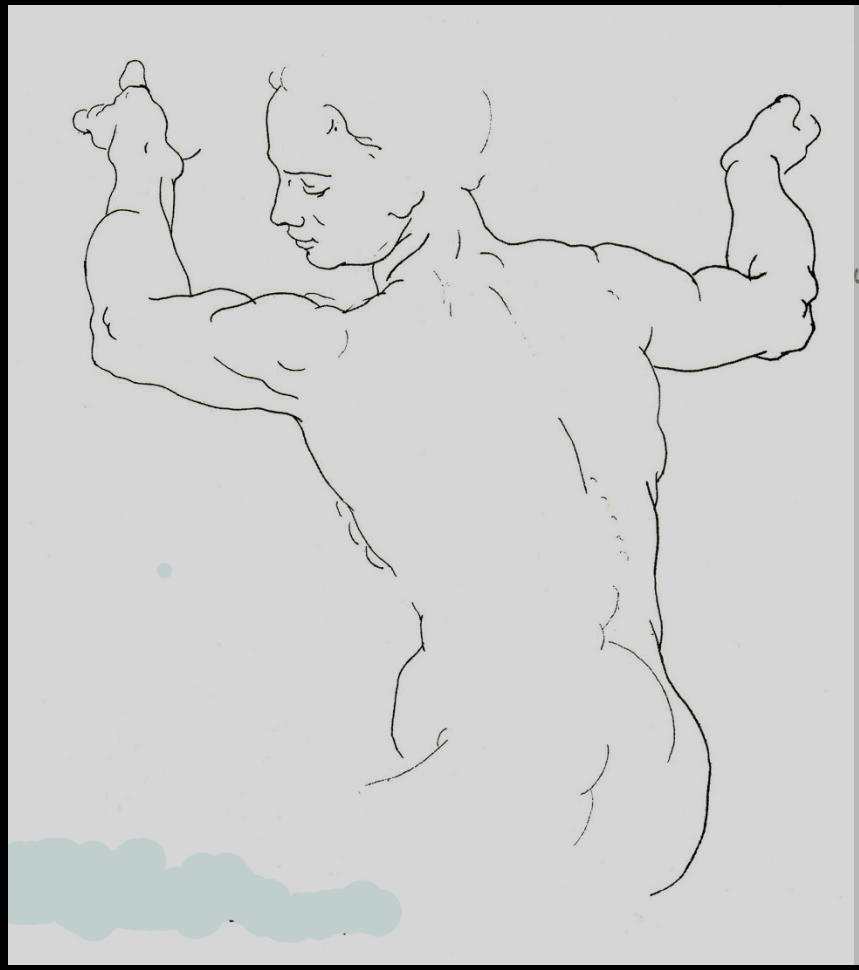
The torso has two major masses—the thorax and the pelvis. These masses have connection through the vertebrae (from vertere, Latin, to turn). The torso is **designed to move:** to flex, extend, rotate laterally, and to rotate the thorax against the pelvis (contrapposto).

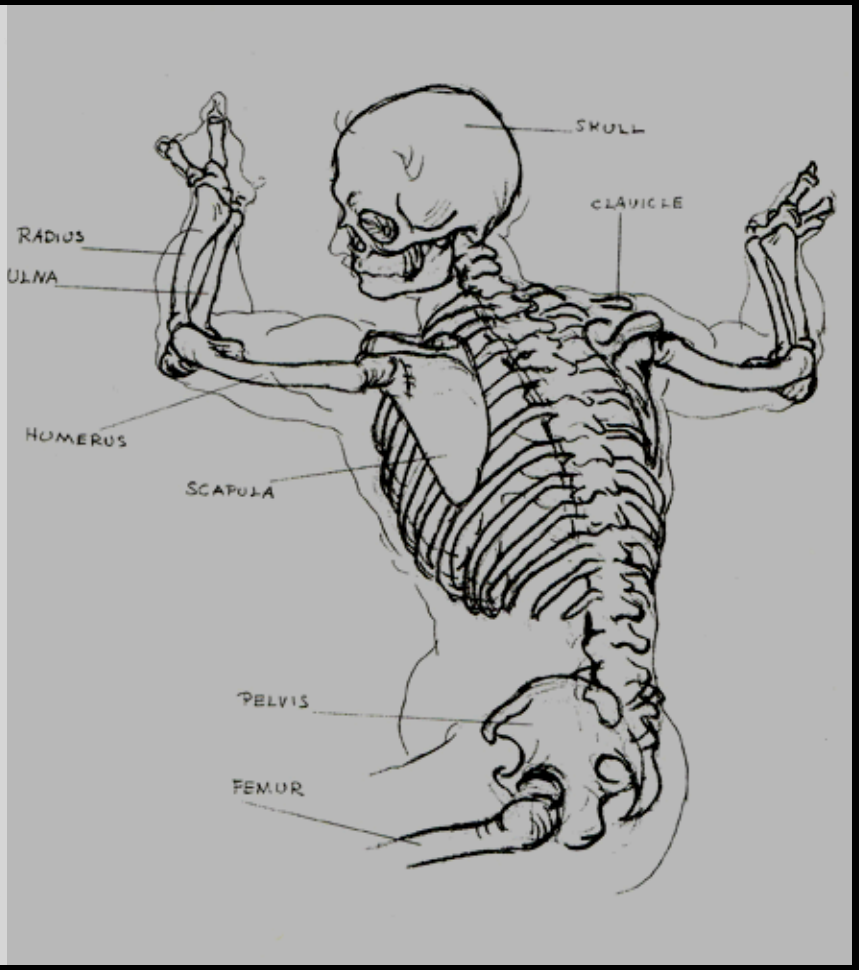
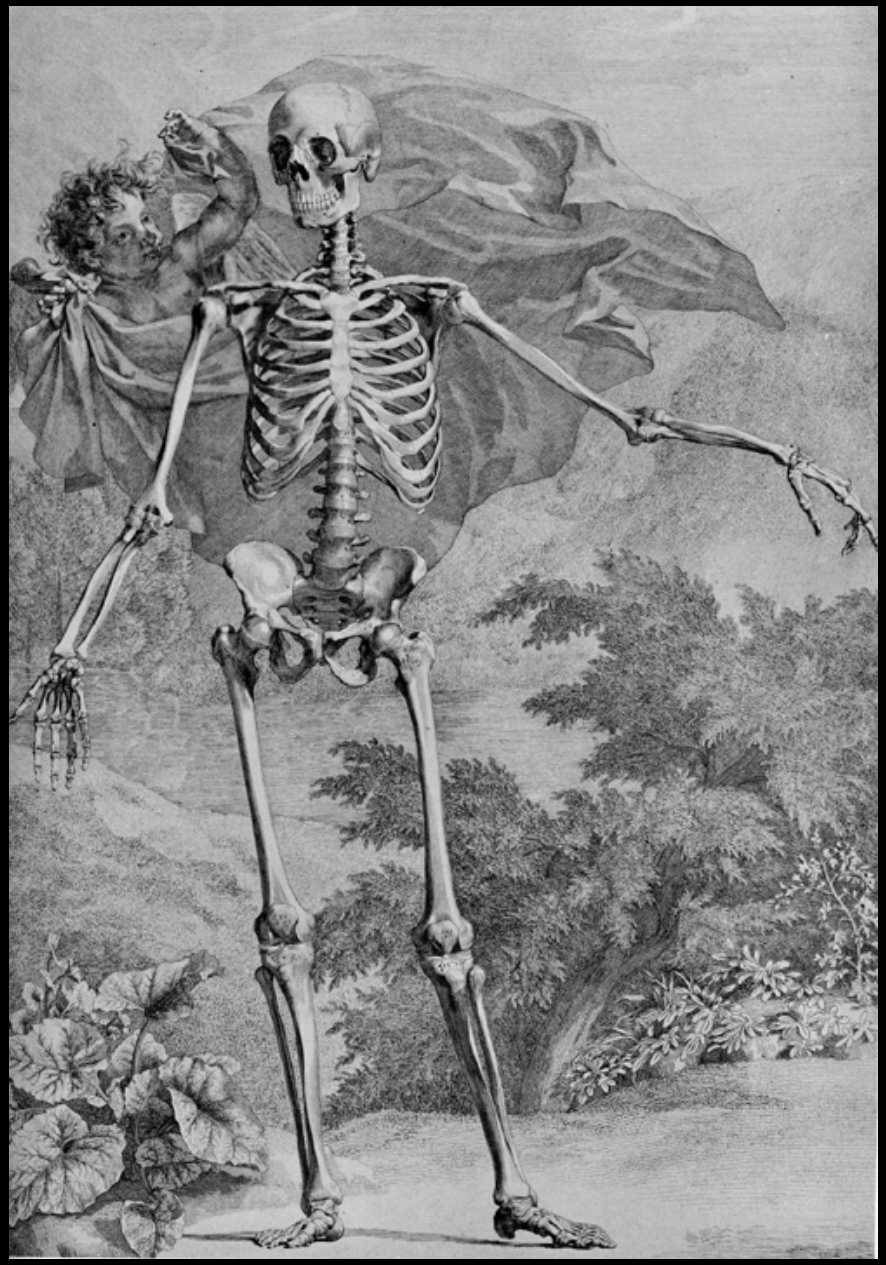
The passage of the **median line** or **center line** charts this movement by linking certain landmarks along the anterior (front) plane of the torso. The spine is the **center line of the back** and is useful to the draftsman for the same reason—that the movement through the two masses of the torso may be indicated by one fluent line. Huge problems will arise should this movement be underestimated in the construction phase of the drawing.

A

Notice how the planes of the wall (A) meet in the same way the planes do on the boys leg (B).

Light source helps to define block-like
structure. Cylindrical forms help define volume. Inner hamstring B and outer hamstring C




SKULL
CLAVICLE
RADIUS
ULNA
HUMERUS
SCAPULA
PELVIS
FEMUR