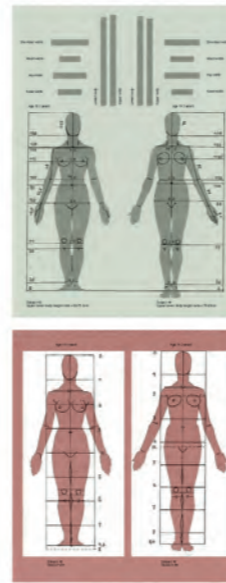


28 Study of proportion



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158 Torso and shoulder girdle

FURTHER ADVICE AND EXERCISES

It is necessary to depict the deltoid muscle and its collaborator, and antagonists in order to fill out the drawing of the torso. The deltoid muscle appears as a compact ring around the shoulder crest and operates the shoulder joint (shoulder and upper arm muscles) through its insertion in the outer side of the upper arm.

Opposite, top left
An inner vertical section of the deltoid is shown in a red position on both the inside and the outside of the right arm with black pencil or ink, whose function is to pull the arm horizontally and sideways, its antagonist pulling the arm up in the latissimus dorsi, as shown.

Opposite, right
Another section of the arm is the large major muscle with its origin at the point of the alar crest, which is also on the inside of the deltoid arm. Raising the arm vertically and horizontally moves the volume of the deltoid muscle in a swelling from the lower edge of the alar crest and around the shoulder crest. This creates the predictable muscle ball (see also page 147).

Opposite, bottom left
The vertical lift of the arm stretches the pectoralis major muscle of the chest and covers the deltoid muscle to a large degree by enveloping with it. The latissimus dorsi is shown in a swelling from the same stretched extension (shown in the arm from behind). The upper arm is enclosed on the front and back (important observation!).

Exercises on drawing the torso
1 Start by studying of function and construction in order to express these elements and compare them to the torso in their contrasting forms (page 148).

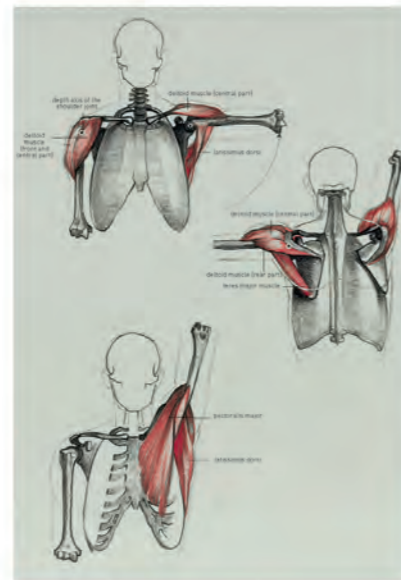
2 Develop spaces, paying particular attention to the abundant tensions in the arm (page 148).

3 When the torso and upper body are involved separately, emphasize the overall feeling of the soft shape (based) by extending them and making the three-dimensional cones visible (page 147 and 148).

4 Show the opposite by suspending the body between the supporting arms in a back-to-back leaning sitting position, for a decisive, primal expression (pages 145, 144 and 143).

5 Note that only after these aspects have been drawn will it be possible to develop the construction further (pages 143, bottom, and 144).

The basic elements such as the curve and the stepping of the back must be drawn along with these elements (page 143).



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Norman Paul (1988-1992) Study of a figure, 1994

THE MODELLING OF THE ARM BY THE MUSCLE GROUPS

Now that you have studied the muscle configurations and structural forms of the arm shown on pages 177 and 178, it is helpful to see the muscles grouped by function. As before, the idea here is to show awareness of the varying dimensions of the muscle volumes on the upper arm and forearm.

The raised arm shown from two viewpoints, opposite top, provides the opportunity to study the following:

- The transverse dimension of the deltoid muscle.
- The transverse dimension of the wrist flexors (flexor plus extensors) shown, greatly reinforced by the brachioradialis muscle (shown).

• Variations in the volume of the flexors (particularly evident in the right-hand illustration, superior position of the flexors of the hand and finger joints).

The volume of extensors and flexors tend to diminish almost immediately above the wrist, particularly on the ball of the forearm. The forearm extension of flexors, presented in the drawing opposite, bottom, in a Cubist fashion, and emerges now at the surface between the flexors and extensors.

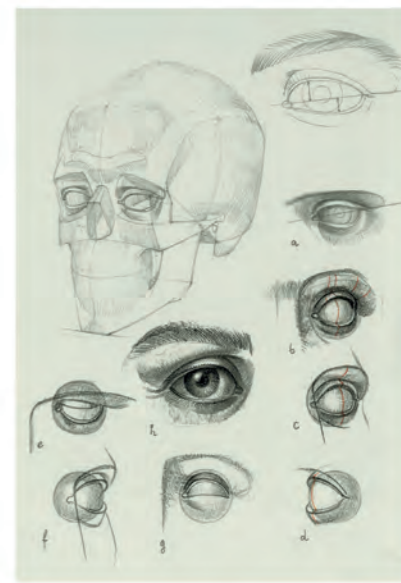
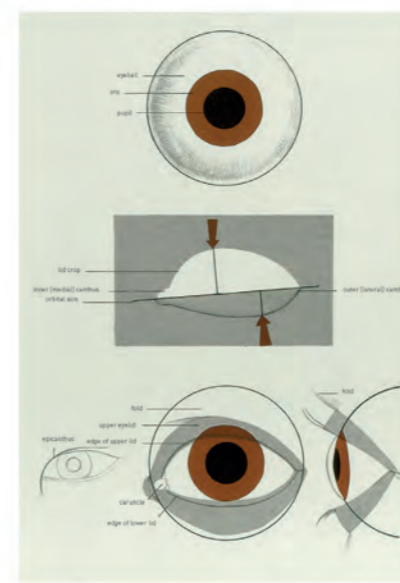
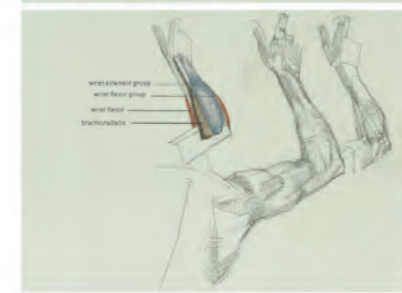
The connecting studies of the raised arm concentrate on the following points (opposite, bottom):

- Development of the structural interplay between the skeleton and muscle forming control.
- Consideration of the functional processes involved in raising the arm – compression of the deltoid muscles, with a compressed form at the shoulder crest.
- Dimensions of the upper arm volume as a narrow cube shape.
- Development of the muscle mass on the forearm, particularly near the elbow.
- Functional muscle groups on the forearm (ball) with coloured highlights.
- Illustration of the same issue in a semi-simplified manner, emphasizing how the extension of the forearm skeleton (rectangle) is distinguished from the surrounding flexor-extensor groups.

Now we have indicated the main features of studies of the arms.



180 Arms and hands



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244 Head and neck



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