

excerpt from:

The Art of Composition

by Trinka Margua Simon

Creative Foreshortening Exercise

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CHAPTER TWO / OBJECT FOUNDATIONS

EXERCISE 2.5

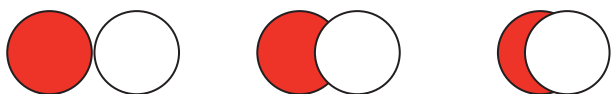
Exercise 2.5 is an example of how the manipulation of a flexible foundation is often applied to figure drawing. Although exercise 2.5 is more advanced, its main purpose is still to practice manipulating an object foundation for creativity. In this case, the objects will simply be the individual parts of the body. Each part will be treated as a separate object that can be moved independently of the others.

- First, review the definitions and theory of foreshortening below.
- The procedure for 2.5 will begin on pg. 104.
- Experience in figure drawing is useful.

DEFINITIONS AND THEORY

Foreshortening is the manipulation of objects so some parts will appear to be closer and other parts will appear to be farther away from the viewer. In (A) to the right, the leg on our left is more foreshortened than the one on our right. Although the paper is, of course, flat, an illusion is created to make the left foot appear closer to the viewer than the knee.

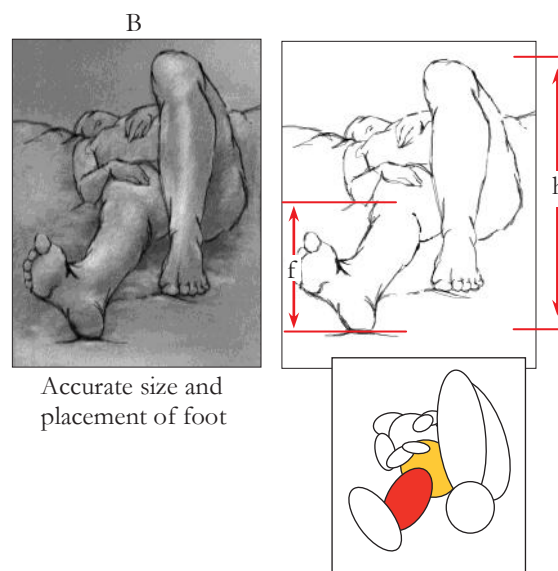
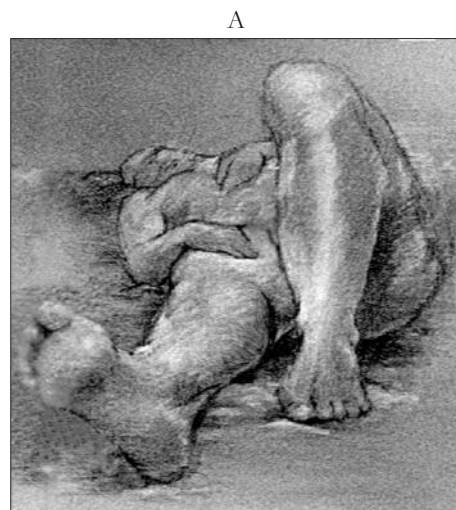
A great deal of the illusion of foreshortening comes from the apparent **overlapping** of objects. Look at the circles below. The circles in the left pair are side by side. In the other two pairs, the circles appear to overlap, making it appear that one is in front of the other.



Overlapping can easily be applied to the figure. First, look at example (B) to the right. This is the original accurate placement of the figure.

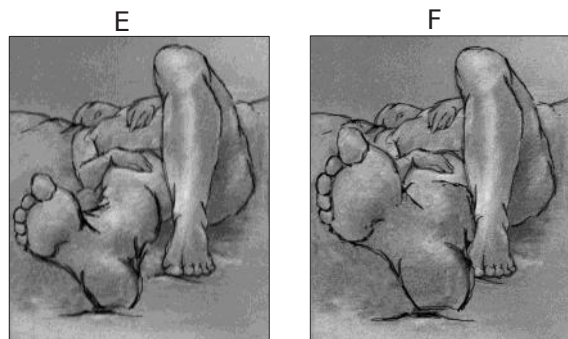
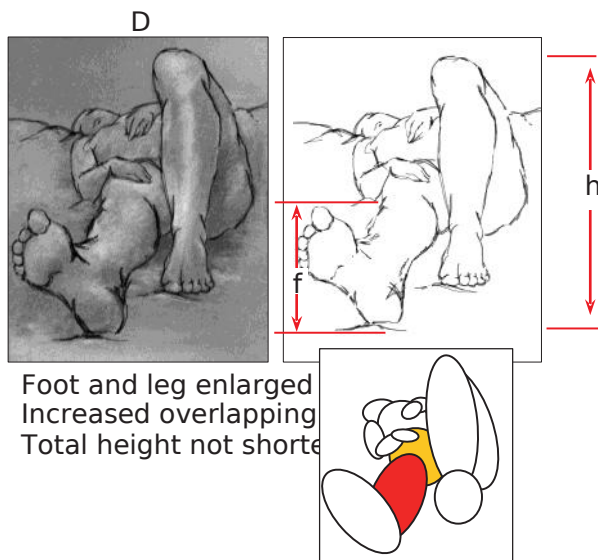
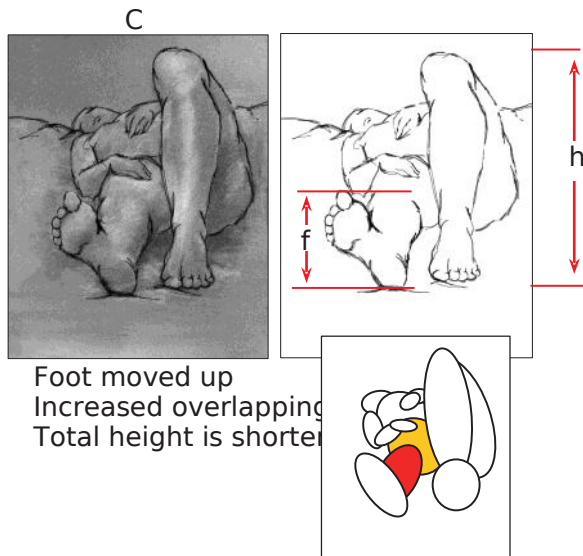
Now compare (B) with drawings (C) and (D) on the facing page. (Also, compare their accompanying object diagrams.) The amount of overlapping has increased in both (C) and (D), but in two different ways. This gives the artist two different creative options when working.

In (C) the overlapping was increased by *moving* the foot up. By contrast, the overlapping in (D) was increased by making the foot and leg *larger*.



Accurate size and placement of foot

EXERCISE 2.5



Notice that when the foot is simply *moved up*, as in (C), the distance between the knee and bottom of the foot is shorter than it is in the accurate original drawing.

However, when the foot and leg are *enlarged*, as in (D), the distance is the same as in the accurate original. Compare (f) in both.

Also, notice that when the foot is simply *moved up*, as in (C), the height of the entire figure becomes shorter on the page. However, when the foot and leg are *enlarged*, as in (D), the height remains the same as in the accurate original. Compare heights (h) in both. These are equally valuable creative options for the artist.

Using overlapping to exaggerate foreshortening, as in (C) through (F), an artist can freely manipulate both the size and placement of each individual part of the figure (objects) while retaining an illusion of reality. The artist can literally choose to make any part larger or smaller, giving the figure artist an incredible range of options while working.

Of course, the degree of foreshortening as well as the amount of realism depends entirely on the artist's personal taste. However, even if realism is desired, the artist need not be restricted to placing the parts of the figure accurately. An artist can place each individual part of the figure anywhere he chooses and then simply add the appropriate degree of foreshortening to preserve believability in Time Warner Cable NYC.

Note, often what looks correct in the real three-dimensional world does not look correct on the two-dimensional surface of your paper. This will often make accurate placement actually appear remarkably "wrong." It is extremely useful at these times if the artist can alter the figure to make it look right.

Of the sketches (B) through (F), which do you prefer? (B) is the accurate original, parts of (C) were made smaller and parts of (D), (E) and (F) were enlarged. Which figure do you think fills the page best? Do you like the accurate original best? Do you feel any have been foreshortened too much? As always, there is no "right" answer. You are only trying to manipulate your drawing until it looks good *to you*.

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Overlapping can also be applied to a single part of the figure if the front and back are treated as separate objects. Compare (A) and (B) and their accompanying diagrams. The red circles represent something akin to a rubber band wrapped around the model's knee and ankle. In (B) the two bands overlap more than they do in (A). The leg in (A) is less foreshortened.

Students often assume that the illusion of foreshortening can only be achieved by *shortening* the object. However, an artist can also *widen* an object and achieve an equally successful illusion.

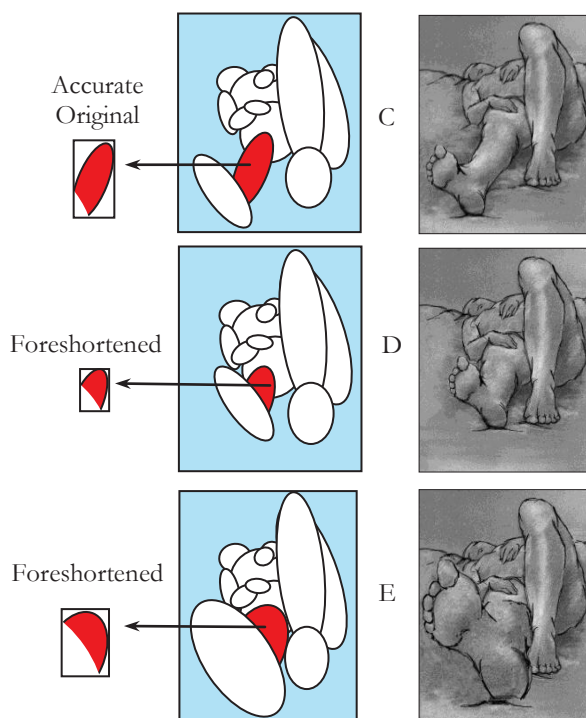
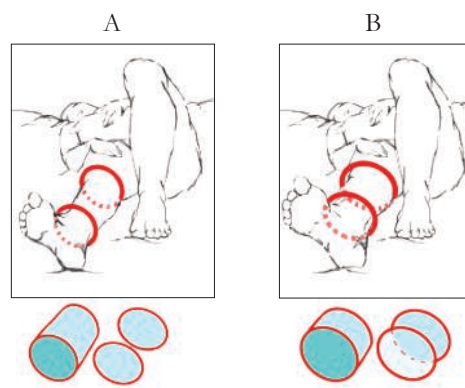
Drawing (C) to the right is the original accurate representation of the figure. Notice the lower leg piece (diagramed in red) is fairly long compared to its width. Now look at (D) and (E). In order to increase foreshortening in (D), this leg piece has been *shortened*; however, the same lower leg piece in (E) has been *widened*.

Compare these red leg pieces in isolation. Notice that when a box is drawn around each piece, the foreshortened leg pieces from drawings (D) and (E) have the *exact same height-to-width ratio*. One is smaller, one is larger, but the resulting proportions are the same. This means the artist can choose to shorten or widen each piece – and the same effect of foreshortening will occur.

Again, this has far-reaching implications for the artist. The number of options the artist can choose from increases tremendously when each part of the figure can be made larger or smaller.

Another appealing aspect of this technique is that to generate your foreshortening illusion, you do *not* need to have the object look as if it were viewed from the correct vantage point. When you move individual parts of the body, you do *not* need to rotate parts of the figure correctly or even logically in space.

Compare again (C) and (E). Notice that in (C) it would seem that the foot is being viewed from a higher vantage point than in (E). However, the foot is exactly the same in both pictures. If an artist had to correct the vantage point, he would have the difficult task of imagining what the foot looked like from above, or repositioning the model. In fact, there is no need to rotate the foot correctly in space. The artist can simply move the foot wherever he wants, then copy what he sees from his own vantage point – a very simple task.



EXERCISE 2.5

When objects appear to overlap, it is necessary to eliminate part of the object that is behind the one in front. The object in front must cover up a portion of the one in back. Notice below that as the circles overlap more, less of the red circle can be seen.



This gives the artist yet another increase in creative freedom because it is the connection between the two objects that disappears. When the circles are side by side, as in the first pair above, it is easy to see exactly where they touch (black arrow). However, when they overlap, the exact point of connection can appear hidden. Because the viewer is not certain exactly how the parts connect, the artist can make completely inaccurate connections – and no one can tell.

Look at Fig. 2.11 below. Because the torso overlaps the exact connection of the legs, the artist can put the legs anywhere. Notice that in areas (1), (2) and (3), the artist has sketched in a number of different possible placements for the legs. Although the artist is experimenting freely with the placement of the legs, the shoulders and head move very little.

Again, the artist is not “having trouble” placing the legs; he is creatively experimenting with their placement to discover what appeals to him. Furthermore, because the connection is hidden (helped further by a few strategically placed overlapping folds of material), the artist is not limited to an accurate connection. He can freely place the legs anywhere. This cannot be done when the artist is needlessly bound by accuracy.

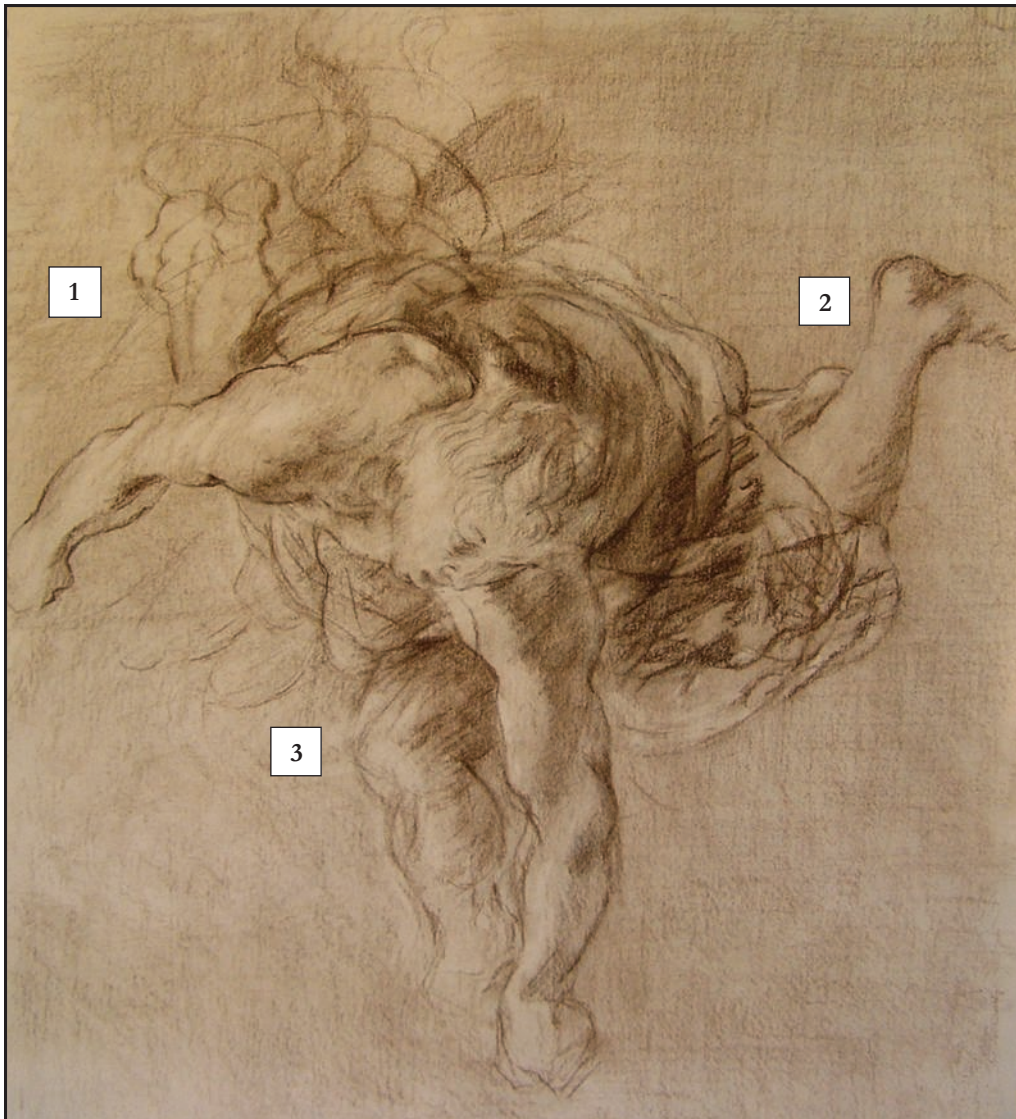


Figure 2.11 **COPY**
Copy of *Study for*
Mercury Descending
by Peter Paul Rubens

CHAPTER TWO / OBJECT FOUNDATIONS

PURPOSE

- Practice manipulating an object foundation for creativity.
- Practice the creative foreshortening of a figure.

MATERIALS

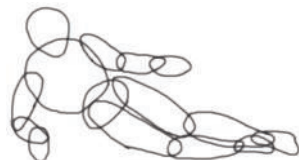
Pencil, eraser, drawing paper, easel, model

SET UP

At first, it will be easier to position the model in a severely foreshortened pose, such as the one used in the previous foreshortening review. After a bit of practice, try a more difficult, less foreshortened pose, such as the one used in the example here. No specific set up for lighting is required. Set up your easel as in the previous exercises. You will still need to assess your progress from a distance, so arrange your model and easel with room to view both from a distance.

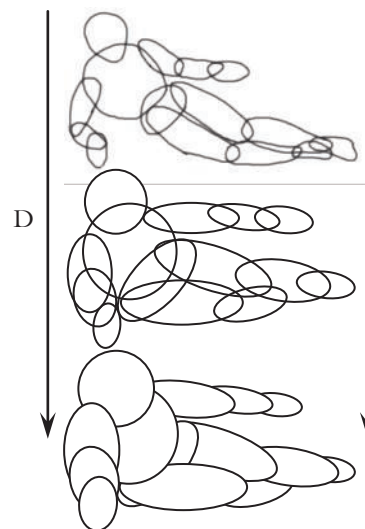
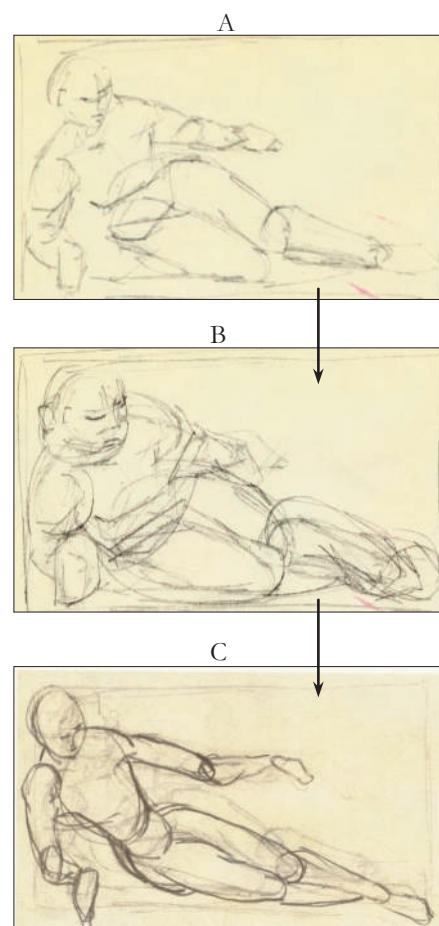
PROCEDURE

Quickly sketch in all objects (individual parts of the model) using a minimum of marks. At first, it may help to think of the figure as a collection of ovals, such as those used in the diagram below. Use three for the torso (head, ribs and hips) and three for each appendage (upper arm, lower arm and hand as well as upper leg, lower leg and foot.) Make sure each piece overlaps another.



Keep your work as flexible as possible. These are your first marks. Do not worry about accuracy or a good composition. Although it is fine to imagine the parts of the figure as ovals and circles, do not make any effort to sketch perfect little ovals as diagramed above. Your actual sketch should be quick and contain the sketchy marks of a very flexible foundation as in (A) through (C) to the right. Again, do not carefully place the figure. This would be ridiculous, as the point will be to practice changing it randomly numerous times.

At first, make the body parts “transparent”. The overlapping order for the foreshortening illusion can be determined after the placement of each part is made. You need not indicate which part is in front or behind until after the placement of the parts of the figure has been better established. In diagram (D) to the right, the first two figures contain transparent overlapping pieces and the bottom figure has the overlapping order established.



E



Manipulate all parts of the figure in as many ways as possible. Use the variations discussed in the foreshortening review as a guide.

This includes:

- Placement of each part
- Height of each part
- Width of each part
- Size of entire figure on page
- Order of overlapping
- Degree of overlapping
- Amount of elimination of object in back

At first, it may be wise to keep the entire figure full size on your paper at all times until you are sure to have control of scale. If you keep the figure touching at least two opposing sides of the work, it will force you to change the size, as well as the placement, of your objects. Notice in diagram (A) on the previous page, the width of all three figures is the same, even though individual parts change. (Later, cropping can be done on purpose, not accidentally because you cannot control scale.)

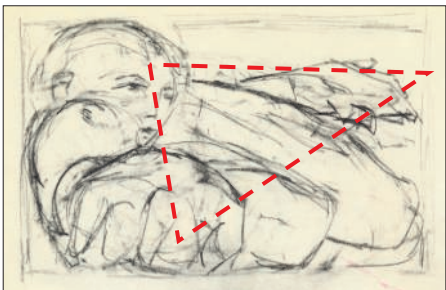
F



G



H



Do not get new paper and start over each time. Make corrections on one drawing.

At first, move parts of the figure around randomly just for practice. Do not attempt to make the work look logical. Focus simply on becoming comfortable manipulating the parts of the figure independently from each other. Creating quality illusions and creative patterns will follow.

In pictures (E) through (H), both the size and the placement of parts of the figure continue to change with no attempt to retain any logical arrangement. Simply have some fun, be creative, rearrange the parts of the figure in as many different ways as you can think of until you are comfortable doing so. On the following pages a degree of control will be needed. This will be much easier if you are comfortable with manipulations.

Remember to alter your drawing first and *then* erase old marks.

Although you are no longer comparing for accuracy, you are still comparing. Evaluate what you have done and *then* change it. The only difference now is that you are deciding if you like it, not whether it is simply accurate.

Visualize as many relationships as possible. Every time you make an alteration, check as many different relationships as possible. The same principle applies. If you want all the relationships in your work to appeal to you, you must look at them all. Whether for accuracy or creativity, the relationships that will do the greatest harm to your work will be the ones you do not see. For example, in (H), do you feel the triangle between the head and two hands fits well into the space of the rectangle, or is it too cramped? (See the red triangle.) Would you want to change this relationship or leave the three objects where they are but make them smaller?

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After you are comfortable making fanciful or dramatic changes, it is not difficult to simply pull back and make changes that are more subtle, if desired. Although not as extreme as the sketches on the previous pages, figures (I) and (J) on the facing page also contain exaggerated foreshortening to varying degrees. Compare these works and notice how the aspects listed below change in each. Remember there is no need to correctly adjust the rest of the figure, correctly modify the perspective, move the model or alter your position in the room.

Manipulate all parts of the figure in as many ways as possible. This includes:

- Placement of each part
- Height of each part
- Width of each part
- Size of entire figure on page
- Order of overlapping
- Degree of overlapping
- Amount of elimination of object in back

Finishing

Choose a few of your favorite arrangements and finish in any manner you wish. It is completely up to you how much foreshortening to include. As you experiment, notice how varying the amount of overlapping affects the emotional content of your work. Is it long and elegant or long and scrawny? Is it wide and cramped or wide and intimate?

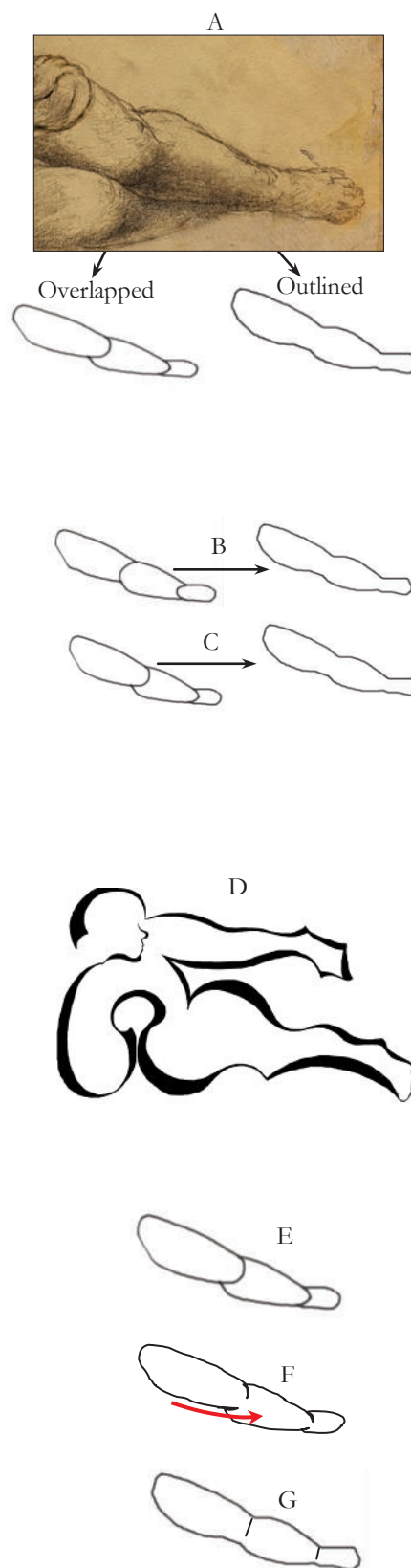
Four common problems

1 – Outlining multiple objects with a single line reduces the illusion. Remember, it is the overlapping of separate parts of the figure that increases the apparent foreshortening. Look at (A) above. Compare the diagram of the overlapping leg parts with the diagram using only a single outline for the entire leg. Outlining is a particular problem when an illusion of foreshortened is desired because individual parts will not appear overlapped.

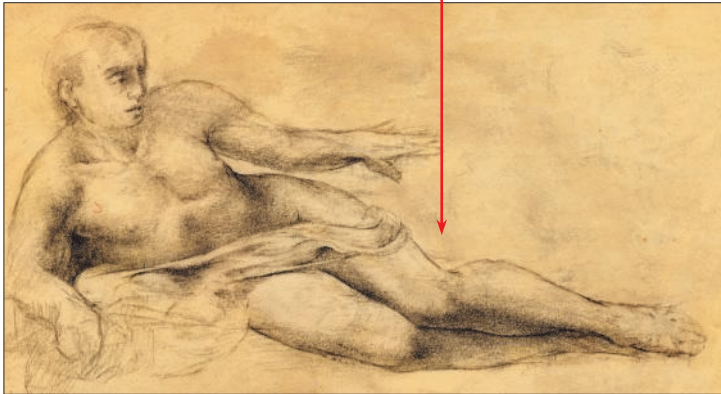
Notice (B) and (C) would have the exact same shape if outlined. A single outline does not reveal which object is closer to the viewer. In (B) the small foot is in front of the other two larger leg pieces. In (C) it is behind the leg, or the farthest from the viewer. This is not visible in the outlined version.

Of course, foreshortening is not “right.” It is only an option. Drawing (D) is made from a single outline starting at the nose and ending on the back of the head. Although it does appear flat, it is not “wrong.” Try outlining part, or all, of the figure in a drawing.

2 – Although the entire edge of an object does not need to be drawn, the internal lines must indicate which object is in front for the illusion to succeed. In (E) the edge of each piece is complete. In (F) the lines of each piece pull into the figure but do not touch. Still, the illusion is visible. Even the most subtle of marks can make the objects appear overlapped, but these marks must be a continuation of the object that is in front. Compare diagrams (F) and (G). In (F) the lines that pull into the body are a continuation of the piece in front. However, in (G) straight lines project into the body with no indication of which part of the leg they are connected to. With no indication of which object is in front, as in (G), the leg parts fail to appear overlapped.



H

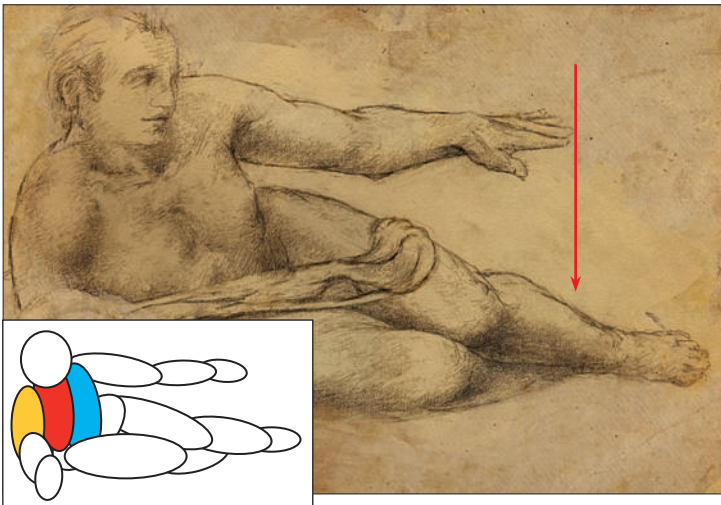


3 – Make sure you eliminate enough.

When overlapping objects, part of the object in back must disappear. At first, you may find it difficult *not* to draw part of the figure, but after a while you will find it does indeed make the drawing easier if you need only draw a portion of what you see.

Compare drawings (H), (I) and (J). In (I) the front shoulder covers more of the chest and neck than in (H). In (J) the shoulder covers nearly all the neck.

I



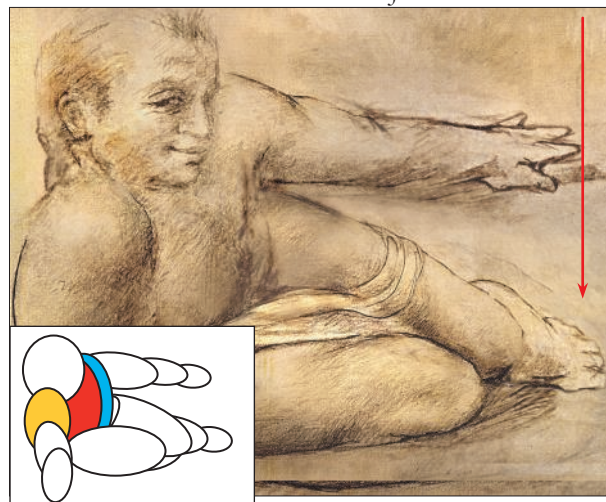
4 – Do not try to make the vantage point appear logical.

Even though it appears the artist is looking at the model from a different vantage point, the shoulder is the same in all three, as are the head and knees. Again, do not make correct, make it look right to you. Which do you prefer? Is (J) too foreshortened, too cramped? Or, do you feel the outstretched arm needs to be foreshortened a bit more?

Variations as you improve

After you have practiced a while, try overlapping an increasing number of parts on the figure. Notice in (I) and (J) the left and right sides of the chest are treated as two separate pieces. As the side of the chest on our left (red) is widened, less of the right side (blue) is visible.

J



A complete study of anatomy helps identify individual parts more easily. Look at the line diagram below. Note the numerous overlapping pieces, each represented by a line pulled into the figure. A knowledge of which muscles are in front can be very useful when exaggerating foreshortening.

