

## TIPS FOR ART EDUCATORS FROM



### “Measuring Tilts and Distances in Figure Drawing”

*Lesson plan designed for DVI by  
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Bargue Plate III, 19

#### SUMMARY

There exists a romantic notion that artists are born with the ability to sit down and draw perfectly proportioned figures with effortless grace. Trained artists know that this misinformed belief could not be farther from the truth.

Students who aspire to draw realistically must learn skill-based methods in order to translate what they see in three dimensions onto a two dimensional surface. Students must learn how to observe carefully, revise their drawings, and put forth much time and effort in order to achieve skilled results.

This tip sheet includes various ways to approach the measurement of the tilts (angles) and distances (lengths and widths) of the figure when drawing. With consistency in practice, students will be able to observe more carefully and achieve realistic results.

**STANDARDS**

**NATIONAL ART CONTENT STANDARDS:**

- VA:Cr3.1.6a
- VA:Cr3.1.7a
- VA:Cr3.1.8a
- VA:Cr3.1.1a
- VA:Cr3.1.1la
- VA:Cr3.1.1lla

Enduring Understanding: Artists and designers develop excellence through practice and constructive critique, reflecting on, revising, and refining work over time.

**OBJECTIVES**

- Practice consistent methods of drawing that lend structure to self-critique and revision
- Develop criteria for critique using the structured methods of the Old Masters
- Discover that the time-tested methods are as relevant in figure drawing today as they were during the Renaissance
- Understand how to self-reflect for revision and refinement of figure drawing

**GENERAL TIPS FOR MEASURING USING A SKEWER**

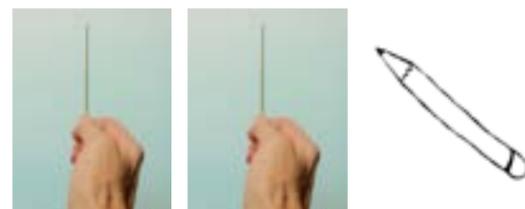
Skewers are an excellent tool for measuring because they are cheap to buy in bulk on a limited art budget, and they are sturdy and thin.

When measuring be sure that you lock your elbow on the extended arm holding the skewer. This will provide consistency of measure. If your elbow bends you are altering the distance between your eye, the skewer and the model.



It can be helpful to close one eye when measuring. This varies from person to person, so try eyes open and one eye closed to see what works best for you.

There is a phrase among carpenters to “measure twice, cut once.” This is a good piece of advice for artists drawing the figure too. It is not unusual to measure 3-4 times before drawing a line on your paper as it certainly cannot hurt to feel more secure about what you are seeing.



Be prepared to erase! This is complicated business you are engaging in, expect to make more mistakes than anyone wants to. Once you realize that you will be doing this, you have freed yourself to make revisions and refinements over and over....and over and over, and then some.



Draw lightly! This can save you from burnishing the surface of the paper to the point where it affects any mark you then try to make on the surface. There is a tooth to the paper (imagine a microscopic mountain range that most of the mountains are a strangely consistent height). When you keep the graphite on the tips of the mountains (like where the snow caps are) you can easily erase the marks without wearing down the mount peaks. If you press hard you are wearing away the peaks to rounded mounds and eventually flattening the mountains to near molehills by pressing hard with your pencil which then requires vigorous erasing. The moral of this story is to draw lightly.

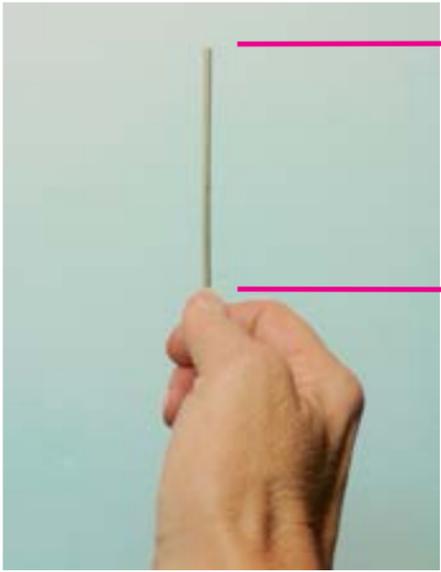
**MEASURING DISTANCE HEIGHT AND WIDTH NOTIONAL SPACE**



Using a skewer to measure the distance of the height of the figure.



Using a skewer to measure the distance of the width of the figure.

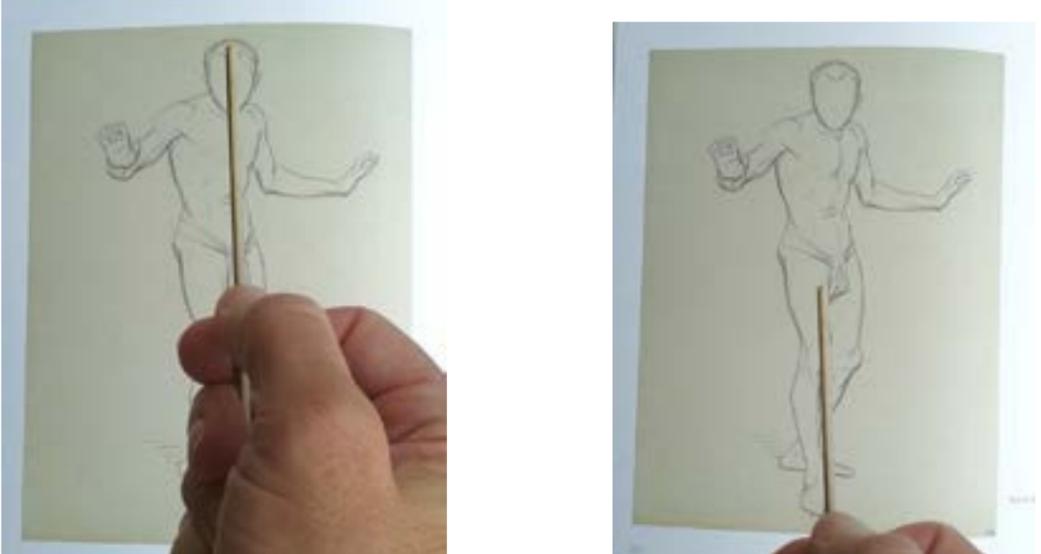
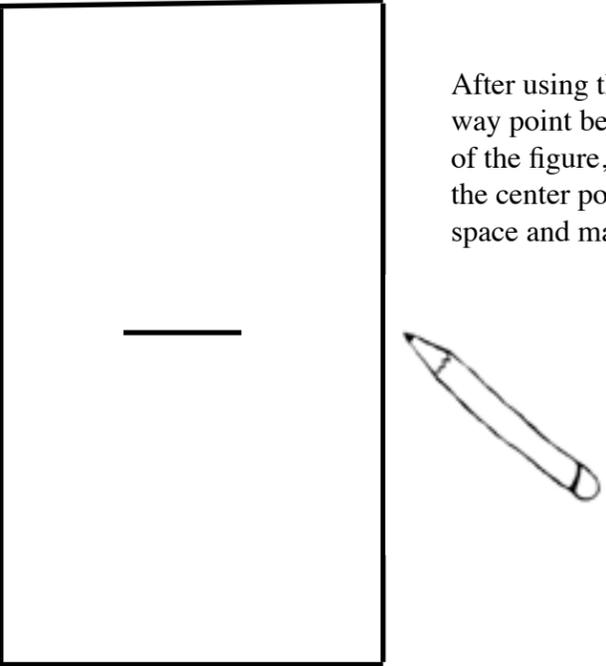


**TOP OF MEASURED OBJECT STARTS AT THE END OF THE SKEWER**

**BOTTOM OF MEASURED OBJECT MARKED WITH THUMB**

Notice that using the end of the skewer for the top of the measurement and your thumb for the bottom of the measurement is a way of keep things consistent. Develop habits like this and they will become comfortable and reliable for better drawing practice.

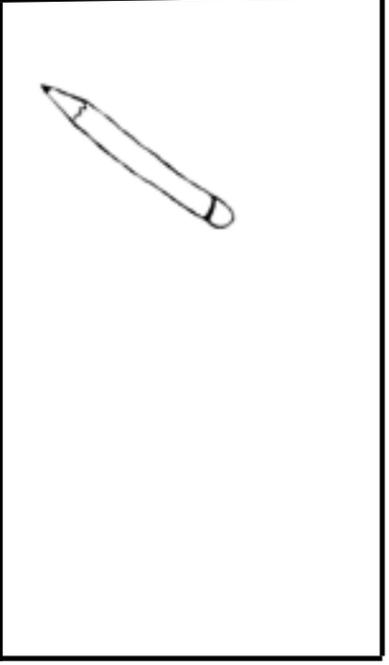
**MEASURING DISTANCE HALFWAY POINT**

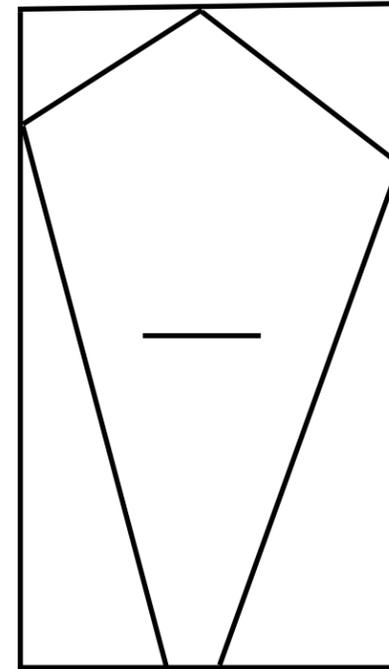
After using the skewer to find the half-way point between the top and bottom of the figure, you can estimate where the center point is in your notional space and mark it lightly in pencil.

**NOTIONAL SPACE**

Once you have your height and width measurements, then you can estimate the rectangle that the figure fits within on your drawing paper. This is a notional space.

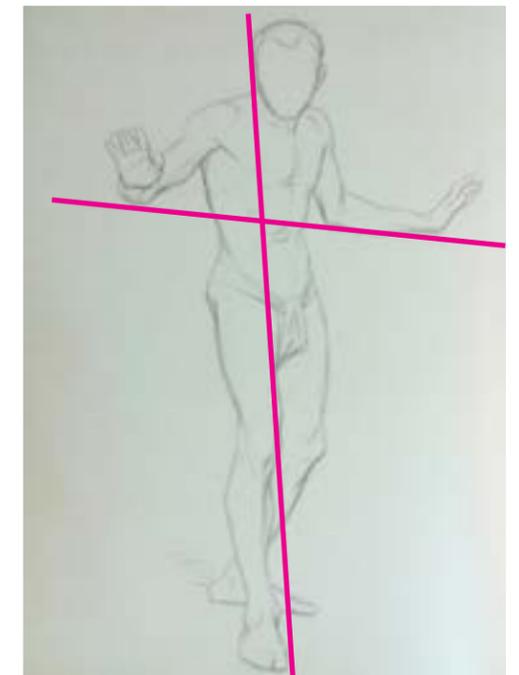
FINDING TILTS  
ENVELOPE ANGLES

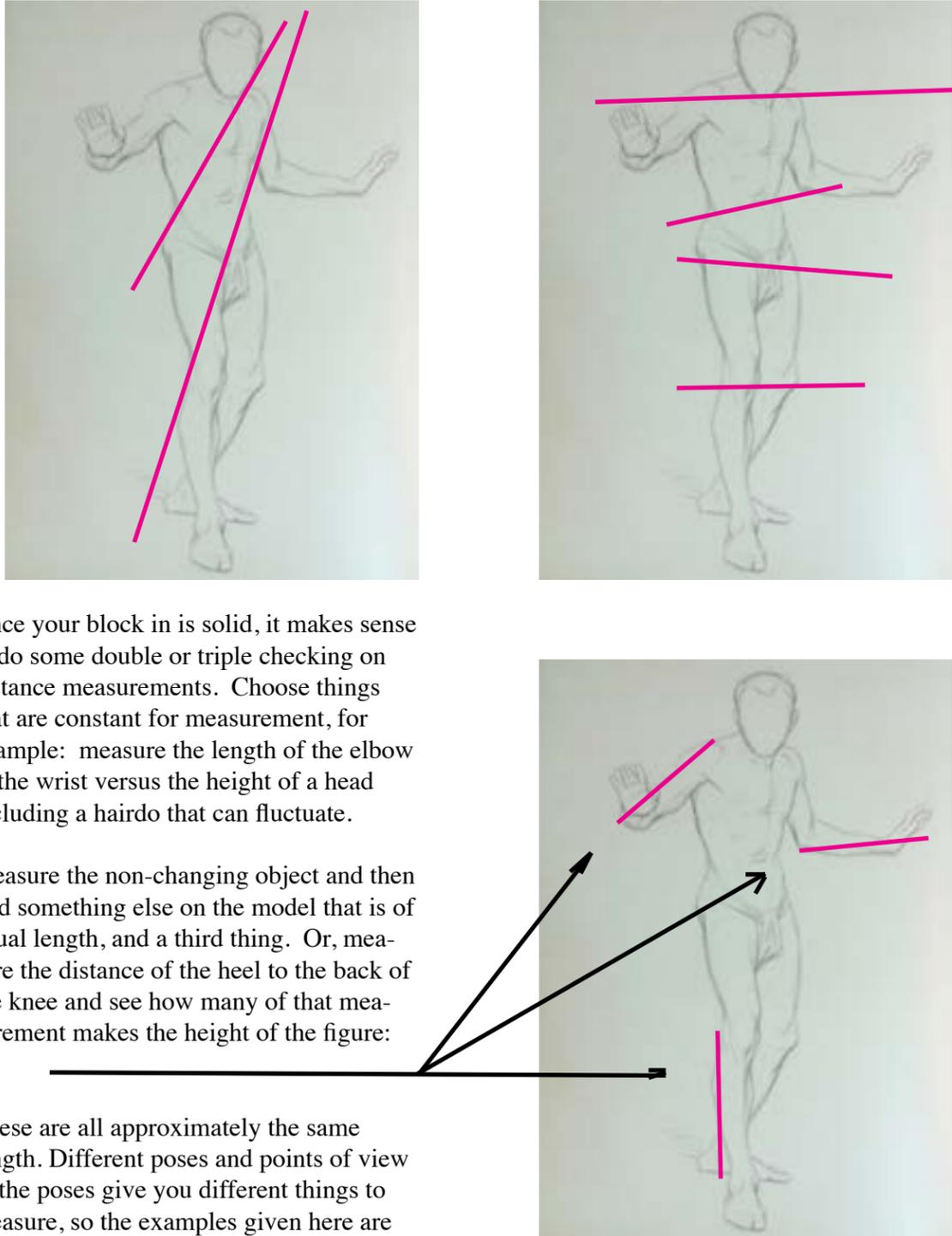


Using the angles you see with your skewer, connect the outermost points of the figure with as few straight lines as possible. Estimate where the angles fit within your notional box, using the midpoint as a reference. This is an envelope.

From the envelope you can use your skewer to measure tilts/angles across the form, meaning visual connections that span the width or height of the figure. Using these helps to keep the focus on the bigger picture, rather than to concentrate on one or two areas with detail when the proportion of the block in may not yet be accurate.

Here are some examples of some tilts/angles that span across the form:





Once your block in is solid, it makes sense to do some double or triple checking on distance measurements. Choose things that are constant for measurement, for example: measure the length of the elbow to the wrist versus the height of a head including a hairdo that can fluctuate.

Measure the non-changing object and then find something else on the model that is of equal length, and a third thing. Or, measure the distance of the heel to the back of the knee and see how many of that measurement makes the height of the figure:

These are all approximately the same length. Different poses and points of view of the poses give you different things to measure, so the examples given here are specific to this image. Look around the model you are drawing and try to find the patterns of things that may be the same length.

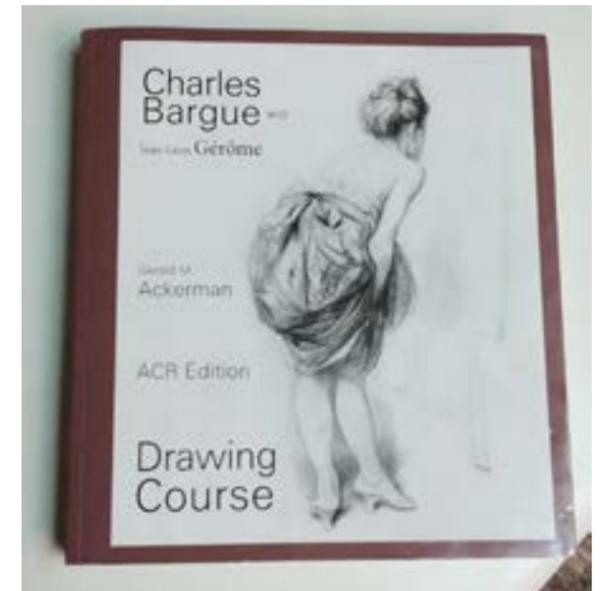
The steps that follow involve smaller and smaller tilt and distance measurements that will eventually become a contour of the figure, as you can see in this detail of the hand and arm.



**BARGUE PLATES**

The images in this lesson plan/tip sheet are all taken from the book, *Charles Bague and Jean-Leon Gerome Drawing Course*. The ISBN number is 978-2-86770-203-7.

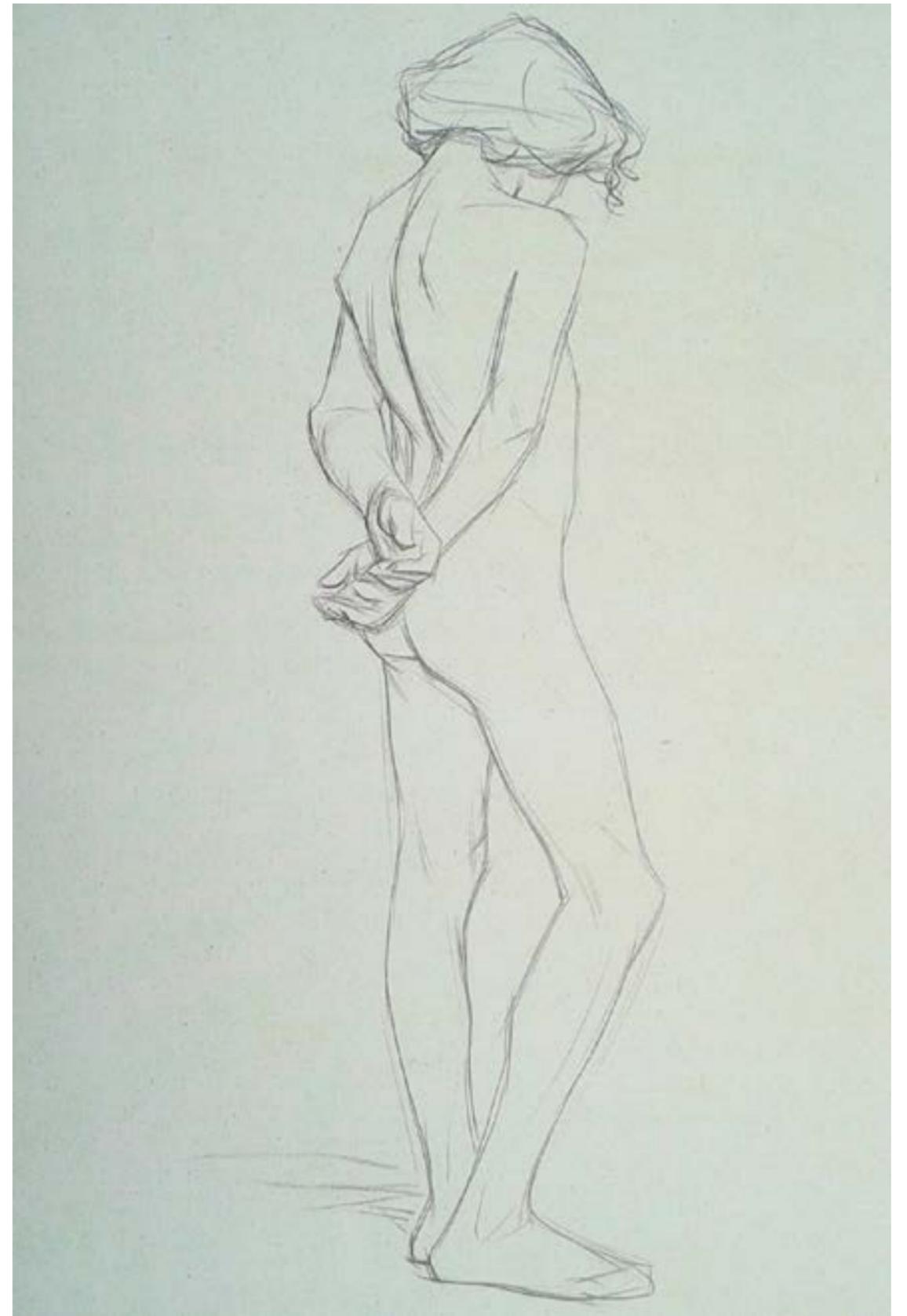
This book is an invaluable resource for figure drawing and provides much more than what you see in this lesson plan. In the book there are plenty of images for students to copy and included in this plan are six of them for your use. The book addresses how to render form with shading, although this lesson plan is addressing only measuring tilts and distances.



*“With the Bague drawing and your drawing side by side, you will soon learn to see errors. Remember, if these drawings were to be used as models for painting, any inaccuracies would be compounded once you tried to fill in the interior. Such strictness is necessary both to teach you how to see and transcribe a human being’s form correctly and to purge your own practice of any mannerisms or impreciseness that you may have already acquired.”*



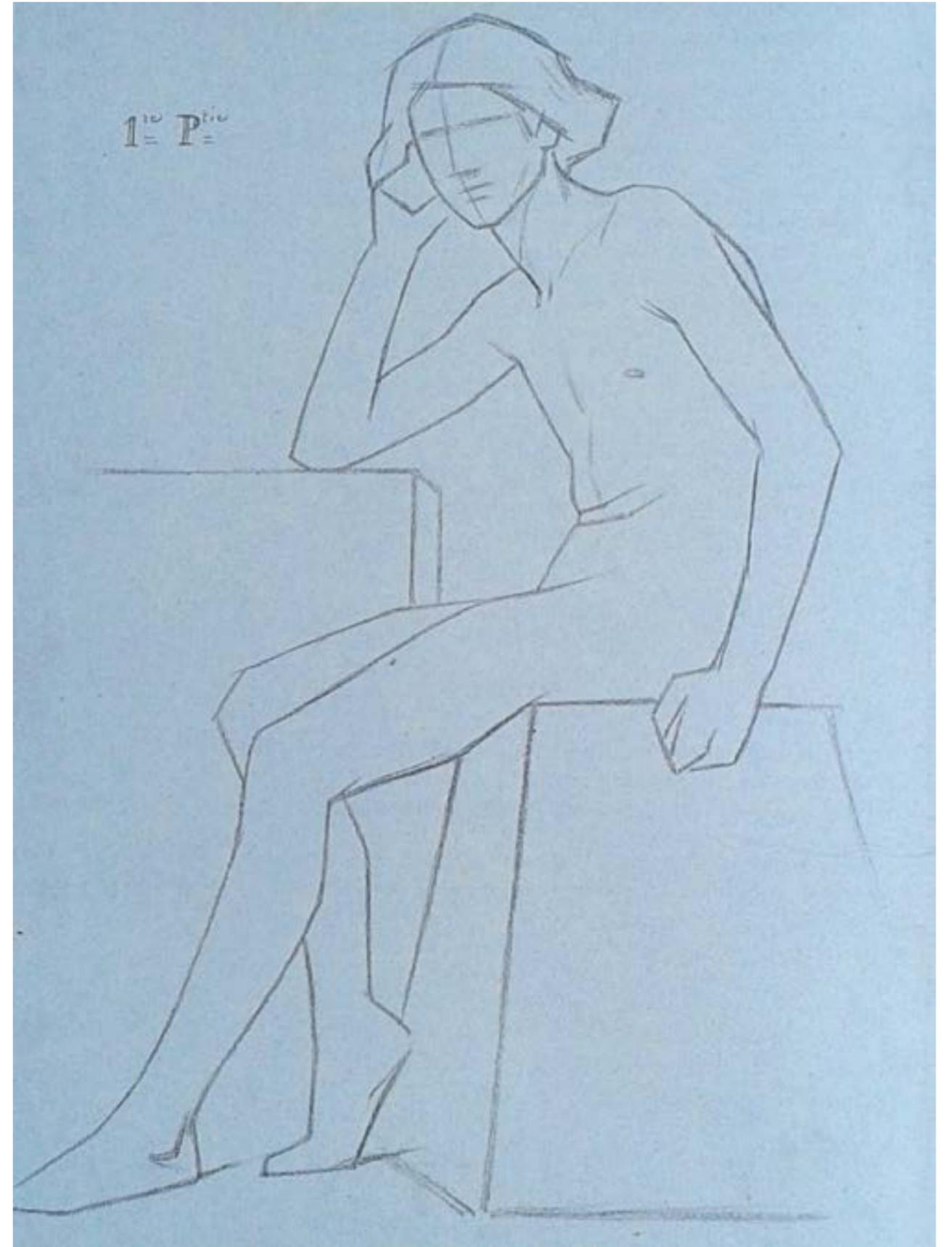
Bargue Plate III, 19



Bargue Plate III, 14



Bargue Plate III, 16



Bargue Plate III, 1



Bargue Plate III, 28



Bargue Plate III, 51