1986

A comparison of the effects of the blocking-in and sketching methods of teaching drawing on the proportionality of human figure drawings by community college students

John Carol Rider
University of Northern Iowa

A comparison of the effects of the blocking-in and sketching methods of teaching drawing on the proportionality of human figure drawings by community college students

Abstract

Over the years, the primary method of teaching human figure drawing has involved instruction in free-hand sketching. Students using this method are usually instructed to stand at an easel at a right angle to the model to gain the best vantage point, and to study the model while squinting their eyes before beginning to draw. The squinting of the eyes allows the students to lessen the distracting visual detail and see the body as an undifferentiated mass. This enables them to achieve better-proportioned drawings. Although such claims are commonly made by teachers of figure drawing, many artists and art critics oppose what they see as too much attention to proportion. They claim this leads to stiff and lifeless drawings. Goldstein (1981), for example, states, "Still, no matter how plain or misshapen the forms, the best figure drawings always impart some degree of psychological or spiritual attraction, as in Grunewald's study 'An Old Woman With Closed Eyes'" (see figure 1). In this drawing, we see the effects of the free-hand sketching method in the sensitivity of line. Attention is given to an attitude of life in, "An Old Woman With Closed Eyes." One can "feel," as it were, the drama in this drawing. Here is an example of how the free-hand sketching method permits the artist to capture life's troubles, joys, and changes.

A COMPARISON OF THE EFFECTS OF THE BLOCKING-IN AND SKETCHING METHODS OF TEACHING DRAWING ON THE PROPORTIONALITY OF HUMAN FIGURE DRAWINGS BY COMMUNITY COLLEGE STUDENTS

A Research Paper

Presented to

The Department of Educational Psychology and Foundations

University of Northern Iowa

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts: Educational Psychology: Teaching Major

---

by

John Carol Rider

April 1986

This is to certify that

JOHN CAROL RIDER

✓ satisfactorily completed the comprehensive oral examination

____ did not satisfactorily complete the comprehensive oral examination

for the Master of Arts in Education degree with a major in Educational Psychology: Teaching at the University of Northern Iowa at Cedar Falls on April 24, 1986.

Examining Committee

Stephen Fortgang

Chairperson Dr. Stephen Fortgang

Charles V. L. Dedrick

Member

Jo Siddens

Member

Bruce G. Rogers

Member

Transmitted by:

Lawrence L. Kavich, Head
Department of Educational
Psychology and Foundations

Table of Contents

Chapter I

Introduction

Over the years, the primary method of teaching human figure drawing has involved instruction in free-hand sketching. Students using this method are usually instructed to stand at an easel at a right angle to the model to gain the best vantage point, and to study the model while squinting their eyes before beginning to draw. The squinting of the eyes allows the students to lessen the distracting visual detail and see the body as an undifferentiated mass. This enables them to achieve better-proportioned drawings. Although such claims are commonly made by teachers of figure drawing, many artists and art critics oppose what they see as too much attention to proportion. They claim this leads to stiff and lifeless drawings. Goldstein (1981), for example, states, "Still, no matter how plain or mishapen the forms, the best figure drawings always impart some degree of psychological or spiritual attraction, as in Grunewald's study 'An Old Woman With Closed Eyes'" (see figure 1). In this drawing, we see the effects of the free-hand sketching method in the sensitivity of line. Attention is given to an attitude of life in, "An Old Woman With Closed Eyes." One can "feel," as it were, the drama in this drawing. Here is an example of how the free-hand sketching method permits the artist to capture life's troubles, joys, and changes. Advocates of the free-hand sketching method of learning to draw the human figure claim that it helps the student become able to observe the model, and capture its

Figure 1

"action" or "pose." The free-hand sketching method has the artist/ student draw or sketch with free motion of the whole arm, not just the wrist, giving a looseness to the drawing and control to the artist. There is no concerns with geometric shapes. Both methods are illustrated (see Figures 2 & 3). Even though the free-hand sketching method of drawing was successfully employed for large numbers of years, another method emerged (around 1949) (Haldorson, 1949) as a direct means of individualized classroom instruction: the blocking-in method.

The blocking in method employs guidelines and a more mechanical approach. This method utilizes the four basic geometric shapes: the cone, sphere, cube, and cylinder. These provide the necessary framework for constructing an illustration of the human figure. The blocking-in procedure, unlike the free-hand sketching procedure, enables the student to visualize the back side of the model being studied as well as the front (see Figure 4). This is referred to as "drawing through to the other side," (Famous Artists Course, Workbook 1, p. 12). The geometric shapes provide the perspective lines which help create an illusion of transparency as well as three-dimensionaltiy. These equip the art student with the necessary means for checking and rechecking the proportions in his/her study even when the drawing is constructed on a flat two-dimensional surface.

In constructing a human figure in a drawing using the blocking-in method, there are several things to keep in mind. The basic measure

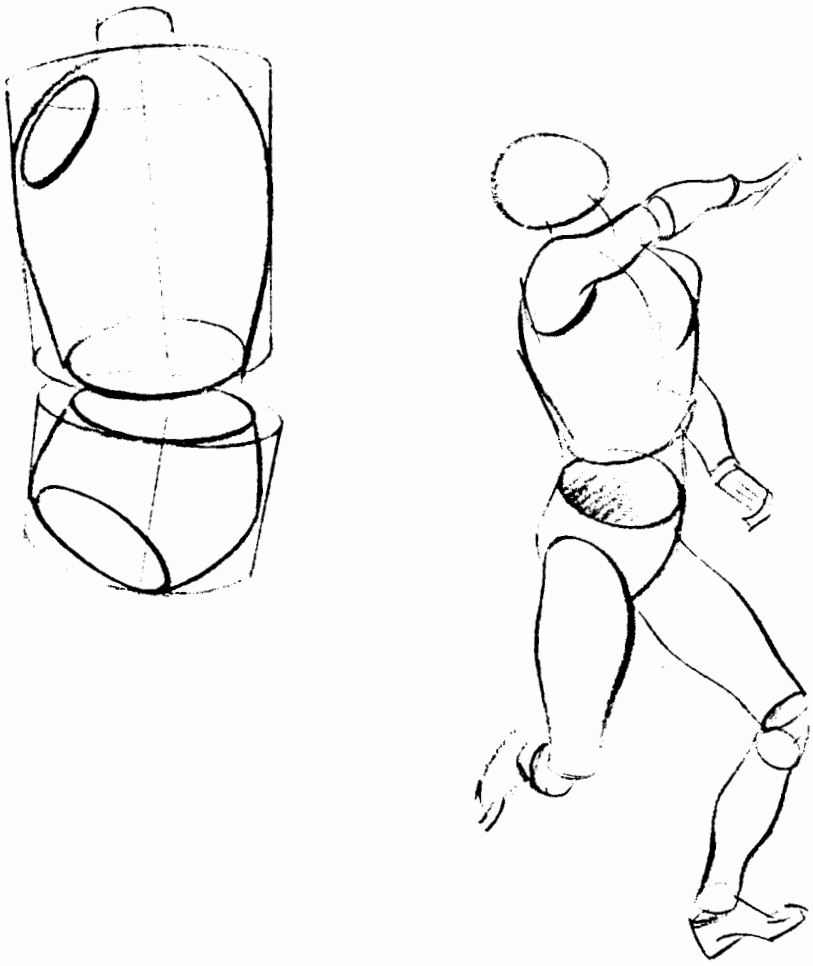
Figure 2

Blocking-In Method

Figure 3

Free-Hand Sketching Method

Figure 4



of the human form is 7 to 7½ heads tall (Famous Artists Course, Lesson 3, p. 6). One constructs the head in a spherical shape and the upper and lower torsos, arms and legs in cylindrical shapes. The feet and hands are blocked-in using a cone shape. All these body parts are then modified to resemble the actual part. Also, one must keep in mind the "action" or "position" the body is in. Good examples of this are found in Lesson Three, page 12 of the Famous Artists Course (see Figure 5). To construct a well-proportioned figure, one must take into consideration such things as movable parts, balance of the figure and body parts' relationships (see Figure 6). After the initial drawing is well underway the study of planes of the body is considered. Understanding the anatomy of the human figure is essential to "hold the basic form together and make it move" (Famous Artists Course, Lesson 4, p. 1).

After having taught for eleven years in a midwestern technical college, the author of this paper has observed that the majority of students, upon entering the commercial art program, utilize the free-hand sketching method, as opposed to the blocking-in or any other method. It was discovered that few had been taught and/or self taught, prior to college, to use geometric shapes to assist them in the construction of a human figure drawing. Possibly because of this, arms and legs would often be drawn too short or too long and sometimes the neck would be omitted or drawn too short. In addition, the feet and hands were generally too small. The author, after reflecting upon these errors, decided to try a

Figure 5

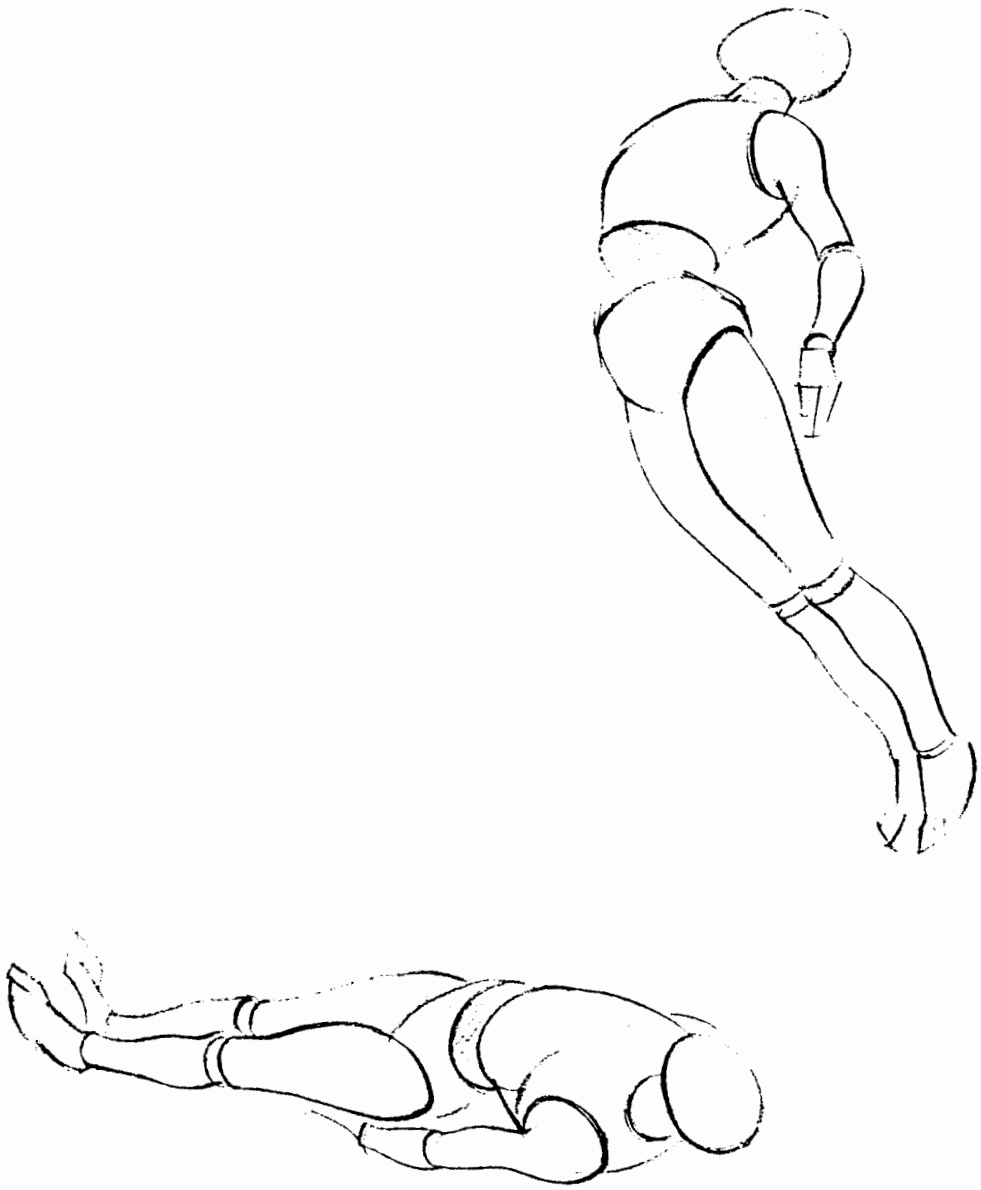
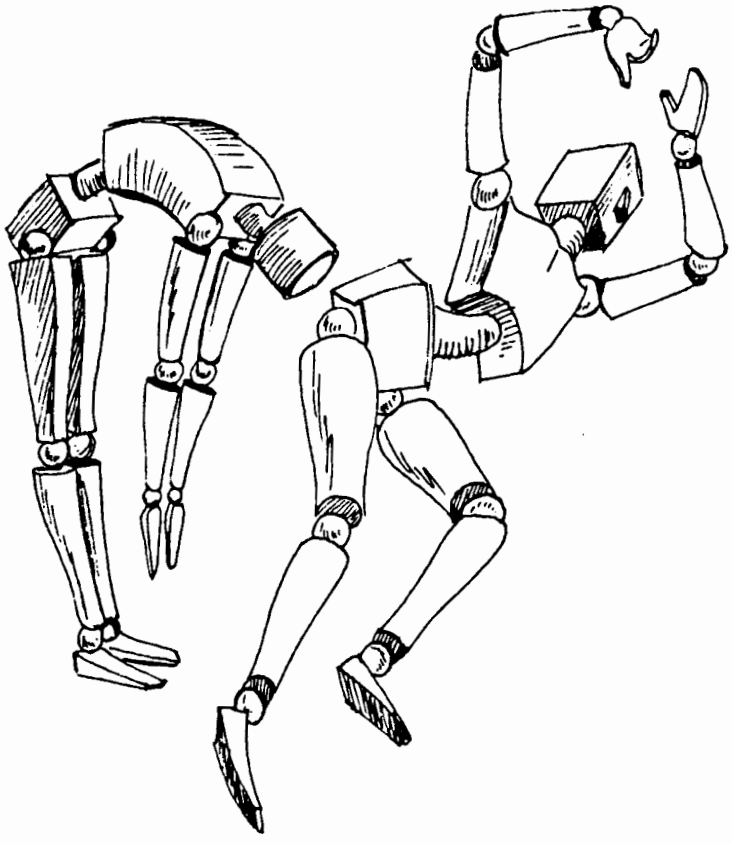


Figure 6



teaching approach in which the two procedures were both utilized.

Figure drawing classes were begun with the blocking-in method and then the more commonly practiced free-hand sketching method was introduced in order to help make the drawings less mechanical. This appeared to produce successful results in the quest for proportional, life-like drawings. After noting the apparent success of the merger of these two methods and the low entry level skills of the commercial art students, it was wondered whether the comparative effects of the use of these two methods had been studied in a systematic way. It was hoped at this time that a way of contributing to the age-old quest for better drawings of the human figure could be developed. A review of the literature turned up virtually no empirical research on the topic. Furthermore, no references to the blocking-in method were found in the articles reviewed, but references were found in two workbooks of teaching programs, Art Instruction, Inc. and The Famous Artists Course, as well as two books, Hale (no date) and Blake, (1951).

Given the absence of prior research, it was decided to embark upon a study whose central question was whether a single presentation of the blocking-in method would prove superior at producing the drawing of well-proportioned figures to a similar introduction via the free-hand sketching method. It was hoped that such a study would generate findings which would be of value to the large number of teachers concerned with the teaching of human

figure drawing everywhere and lead to further research on a topic of great importance to anyone who teaches drawing.

Statement of the Problem

Will the employment of the blocking-in method in the teaching of figure drawing to adults produce drawings that are in better proportion than those produced by the free-hand sketching method?

Hypothesis

If a class of art students are given a method of instruction in the blocking-in method and a similar class is given instruction in the free-hand sketching method, the class that has been taught the blocking-in method will produce better proportioned figures.

Definitions

Free-hand sketching - Drawing without the use of guidelines.

Blocking-In - The use of guidelines and geometric shapes in drawing.

Proportion - Relative size or measure.

Plane - A surface area of a form approximating a flat surface.

Chapter II

Review of Related Literature

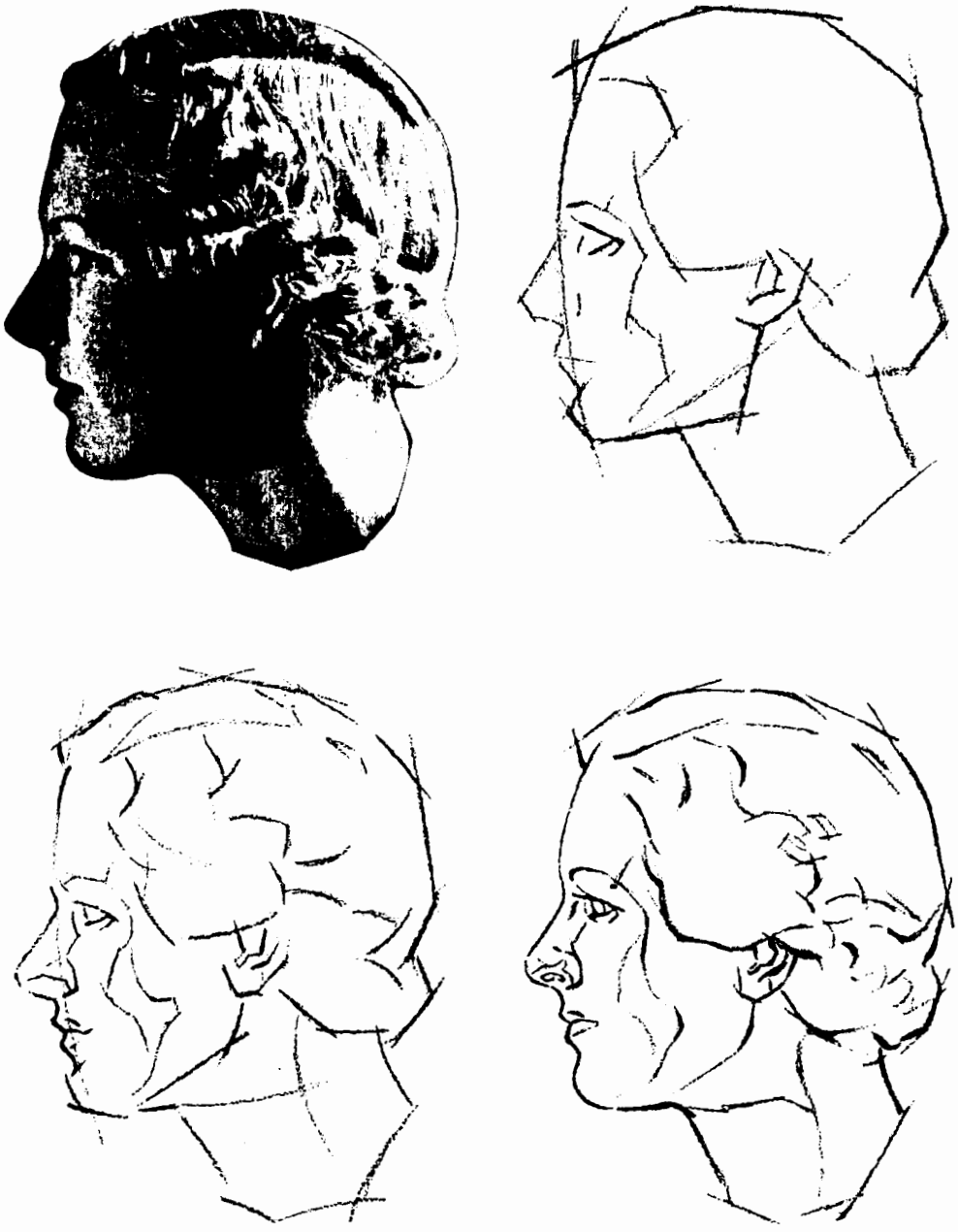
In reviewing the related literature, studies were sought which compared the two methods of teaching the drawing of the human figure described in Chapter One. Research on the two methods was sought in a computer search. Such descriptors as "figure drawing," "free-hand sketching," "drawing," and "the human figure" were employed. No descriptors were found for the term "blocking-in" in the art field. Forty-six titles were retrieved. Only seven seemed to apply somewhat to the methods in question. These seven included no empirical studies comparing the blocking-in method and the free-hand sketching method. Neither was there research on either separately. Several of the seven articles seemed to apply in a broad sense. Only two articles seemed somewhat related to the blocking-in method. These two provided descriptions of activities used by art teachers in their classrooms. Study of these two articles led to the conclusion that the authors, although not using the term, reported on their uses of related forms of the blocking-in method. The free-hand method, although not discussed as a "method" as such, appeared to be the subject of most of the other articles.

It was speculated as to whether some of the early great artists or art teachers had used the blocking-in method, only under different names. It was found that in 1949, the blocking-in method was used, under that name, in a workbook (Haldorson, 1949, pp. 10-17). Later the use of the drinking glass was used because of its shape

to block-in the human figure, particularly the upper and lower torsos. Its rim represented the shoulders of the human body and tapered to the waist. The lower torso was sketched in a smaller inverted glass to represent the lower torso. It is speculated that the reason art teachers went to the glass-inverted glass procedure was because the curved lines of the glass resembled the curves of the human figure. Indeed, it is a form of blocking-in and probably an evolution of a block-type construction. It was noted by this researcher that these methods came from technical manuals or workbooks used in the field of graphic arts and not from the field of fine arts. Perhaps this is because of a greater emphasis on proportionality in commercial art and illustration. After review of the literature on these topics, it seemed apparent that the blocking-in method may well have been used by artists of antiquity, but appeared as a refined tool of teaching drawing only in recent times.

In the Art Instruction, Inc. course of study, Haldorson gives a series of step-by-step procedures in building up a drawing. These are done in what he calls the "blocking-in way." He continues by talking about "good guidelines upon which to build" (p. 11). A good example of the blocking-in method can be seen in the diagram showing the complexity of the human head which can be found in this workbook. Haldorson presents a photograph of a woman's head and drawings in sequence which illustrate the building up of the planes of the face (p. 13) (see Figure 7). In studying the many planes of the entire

Figure 7



human figure, one can use blocking-in guidelines as seen in the drawing from page 16 in Haldorson's workbook (see Figure 8).

In The Famous Artists Course, Workbook Number One, Lesson Three, pages 1 through 26, is a vast amount of art instruction on the human figure. The authors go into the basic forms: the cube, cone, cylinder and sphere and relate them to each part of the human figure. In this study, the human head is called the "basic unit" by which to measure the entire body. In real life, the human body is 7 to 7½ heads tall. In the "ideal figure," it is 8 heads tall (Famous Artists Course, Lesson Three, p. 6) (see Figure 9). There is a glossary of terms used in this workbook (p. 4) (see Appendix 4). Another emphasis presented in this workbook is the "vertical axis," something which gives balance to the standing figure (p. 7) (see Figure 10). Comparisons of body part relationships are graphically illustrated along with a comparison between male and female figures (pp. 8-10) (see Figures 11, 12, and 13). The relative proportions at various ages are considered on page 11. On pages 12 and 13 are the presentation of the glass-inverted glass body construction (see Figure 14). About the drawing of the human figure, a summary from page 19 reads as follows:

> Remember to visualize the various parts of the form figure in terms of the basic simple forms of cylinder, cube, and sphere. Remember to use ordinary glasses to help you see how the ellipses look in the simple cylinders of the upper and lower torso, the upper and

Figure 8

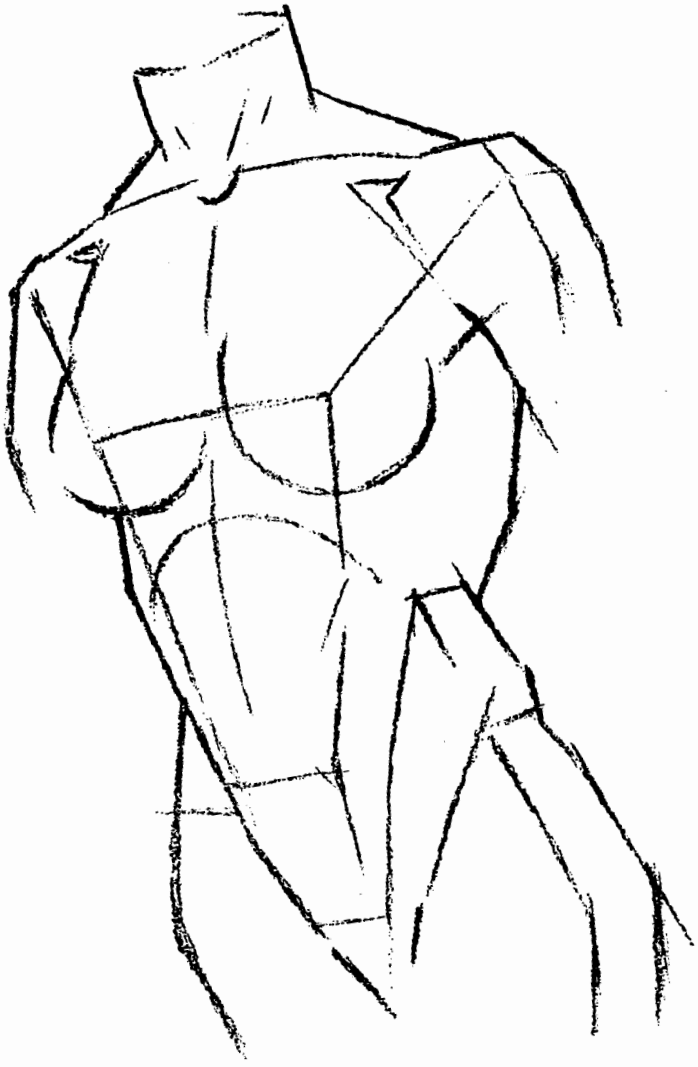
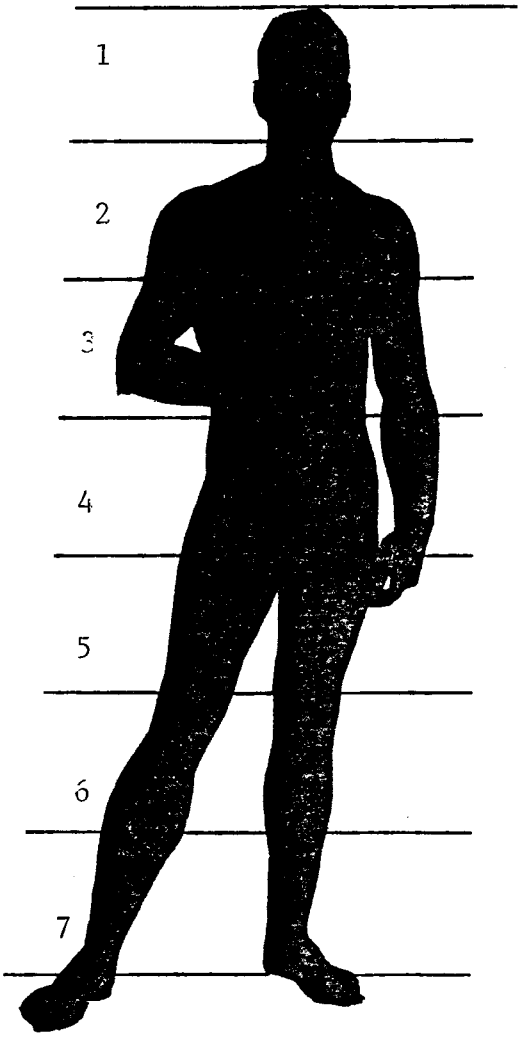


Figure 9

7-Head Division



8-Head Division

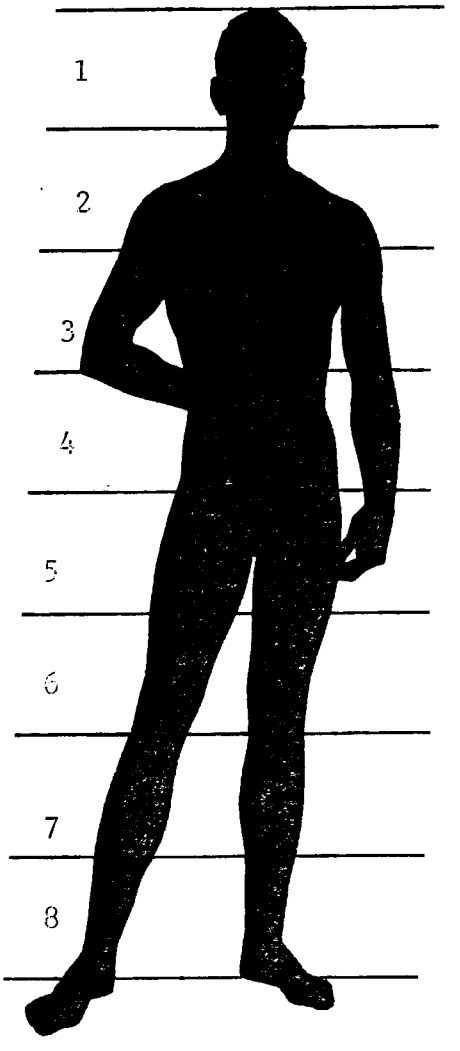


Figure 10

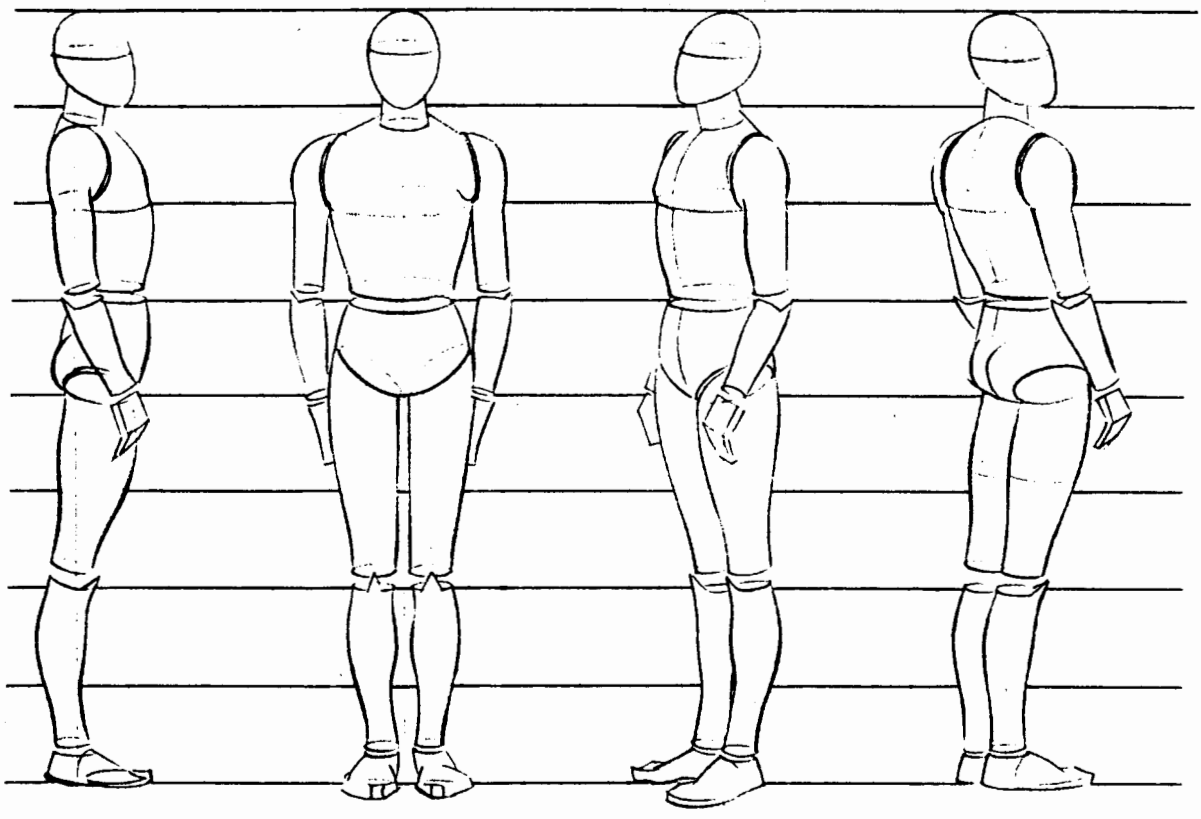


Figure 11

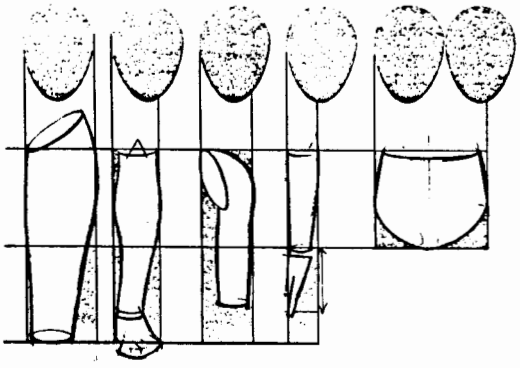


Figure 12

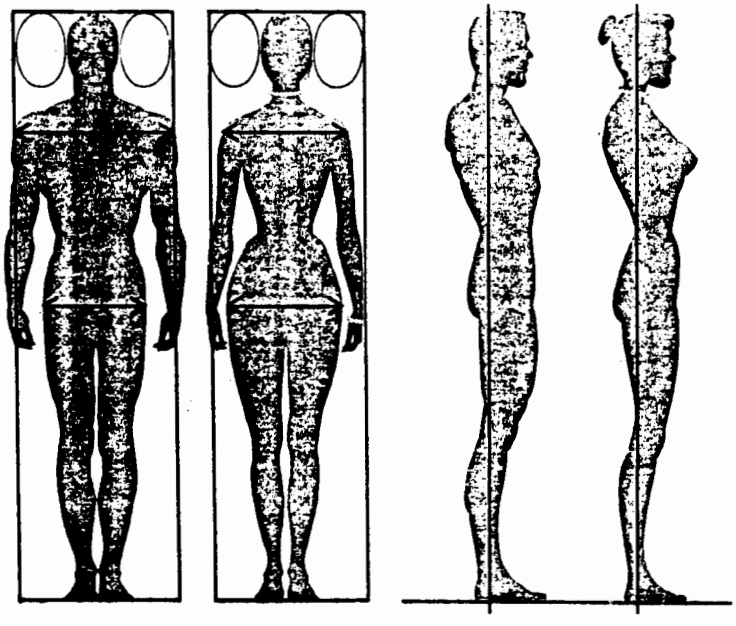


Figure 13

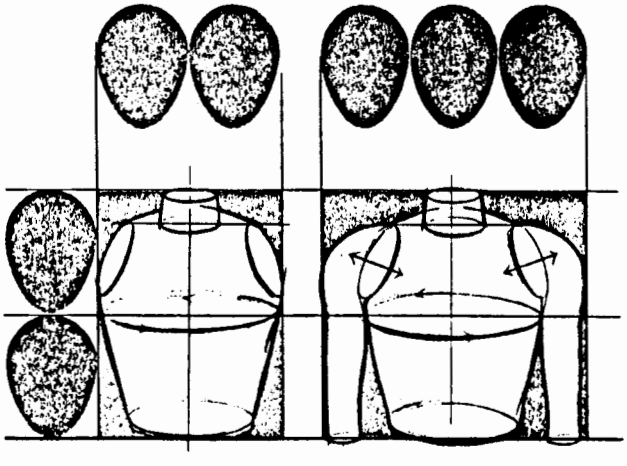
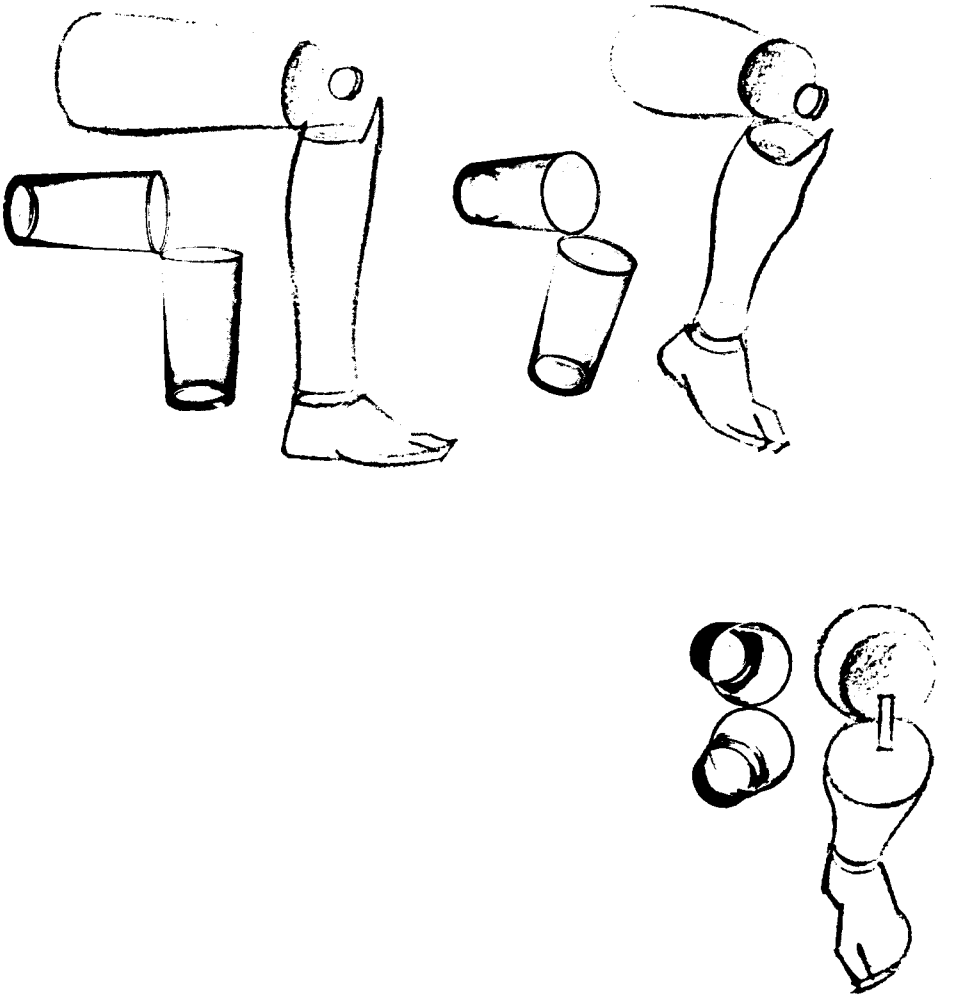


Figure 14

Glass-Inverted Glass Body Construction

Using The Leg As An Example



lower arms, and the upper and lower legs. Remember to think of the head as a simple sphere. Remember to draw all of these forms through to the other side. If you follow these principles, you will find it very easy to develop convincing drawings of the human figure in action.

Having discussed the only two available direct sources on the teaching of human figure drawing by means of the blocking-in method, a review of other literature that is indirectly related to the blocking-in method follows. Similarly in the absence of located empirical studies on the sketching method, indirect sources are reviewed with an eye toward providing as full a picture as possible of the two methods of teaching human figure drawing studied herein.

Townley (1983) discussed the teaching of the drawing of the human figure. Although providing no empirical data, she does present some descriptive material suggestive of the use of teaching methods similar to those in the blocking-in method. She describes having taught her sixth grade students to draw human figures from the center outwards. This involves focusing on one body part, drawing it to its completion, observing the spaces between it and the next body part, drawing the neighboring body part and so on until the drawing is completed. Although this method is not technically the blocking-in method of instruction, it is related in that one body part is drawn at a time. It differs from the blocking-in method in that geometric shapes are not used as guidelines to insure proportionality. Townley

refers to proportionality as "relationship" (1983, p. 35). The figure is drawn in comparison to all body parts using the blocking-in method, the head is sketched in a spherical shape without regard to the eyes, nose, etc. Then the neck is sketched in the shape of a cylinder and the upper torso in the shape of a drinking glass or even a cube. When the whole body has been sketched, the student goes back and puts in various details, modifying each shape to more perfectly resemble the model being studied. None of these steps are part of Townley's technique of teaching students to draw from the center outward.

Townley reports that her students were more successful and confident with her method as opposed to a method of instruction which entails viewing the body as a whole unit, such as is the case with free-hand sketching. In fact, she stated that when the free-hand sketching method of instruction was utilized, her students would become overwhelmed and often not complete their assignments. Thus, Townley found this facsimile of the blocking-in method superior to the free-hand sketching method of instruction, although not specifically with respect to proportionality of the drawings produced. Another difference from the problem under consideration here is that her report concerns elementary students while the present study involves subjects who are technical college students.

Interestingly, Townley observes that various artists use the grid method, particularly in painting. Here a grid is used to break up the image area that is to be painted. The artist (or

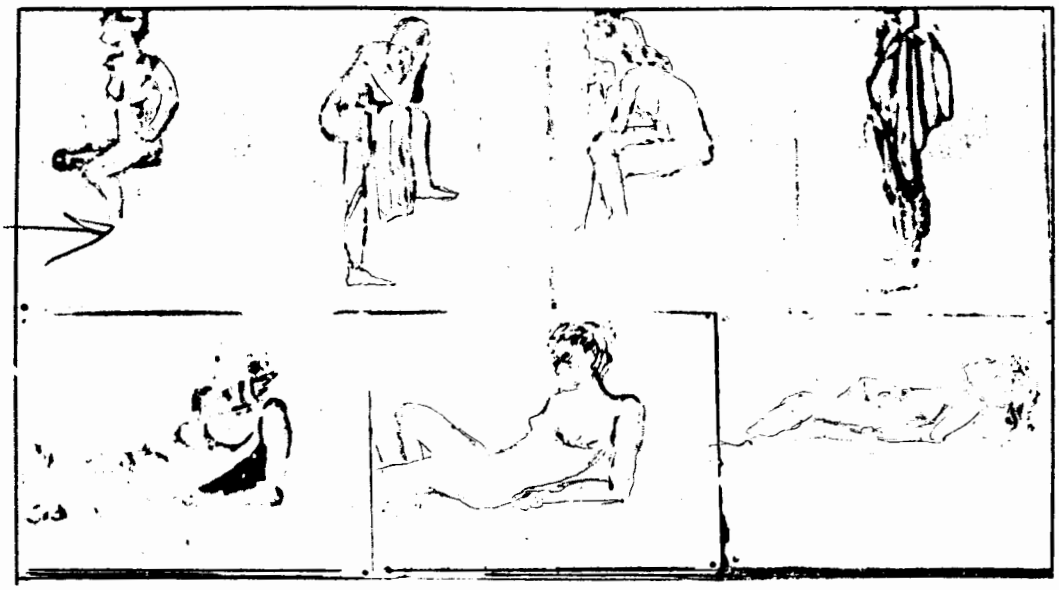
student) then works successively on certain ways to be sure proportions are developed accurately. These procedures also compare with those of the blocking-in method.

Unlike Townley, Burton (1983), in a similarly descriptive article, reports finding the sketching method of instruction a means of obtaining positive artistic gains in her students. She purports that fostering creativity via instructing students to "go with their feelings" (p. 35), without regard to realism or proportionality, to be a highly effective means of instruction. Her students focus on "exploration" as she puts it (p. 33). There is variety, placement and organization of lines and marks which allow the student to interact with the paper surface (p. 33). She includes many activities on contour drawing in her lessons. She has the class do quick sketches from short poses by looking at the action of the pose and quickly sketching it in whole.

Although Burton does not promote stressing proportionality, she uses marks and lines as a subtle means of aiding her students in obtaining a well-proportioned drawing of the human figure (see Figure 15). Although she infers realism should not be a direct objective, she teaches spatial relationships in order to guide her students toward realism and mentions the need for thoughtful observation, practice and questioning the evidence of one's senses.

In summary, it is Burton's opinion that sketching is the preferred method and is most successful when instruction in both short and long poses, together with contour drawings precede any

Figure 15



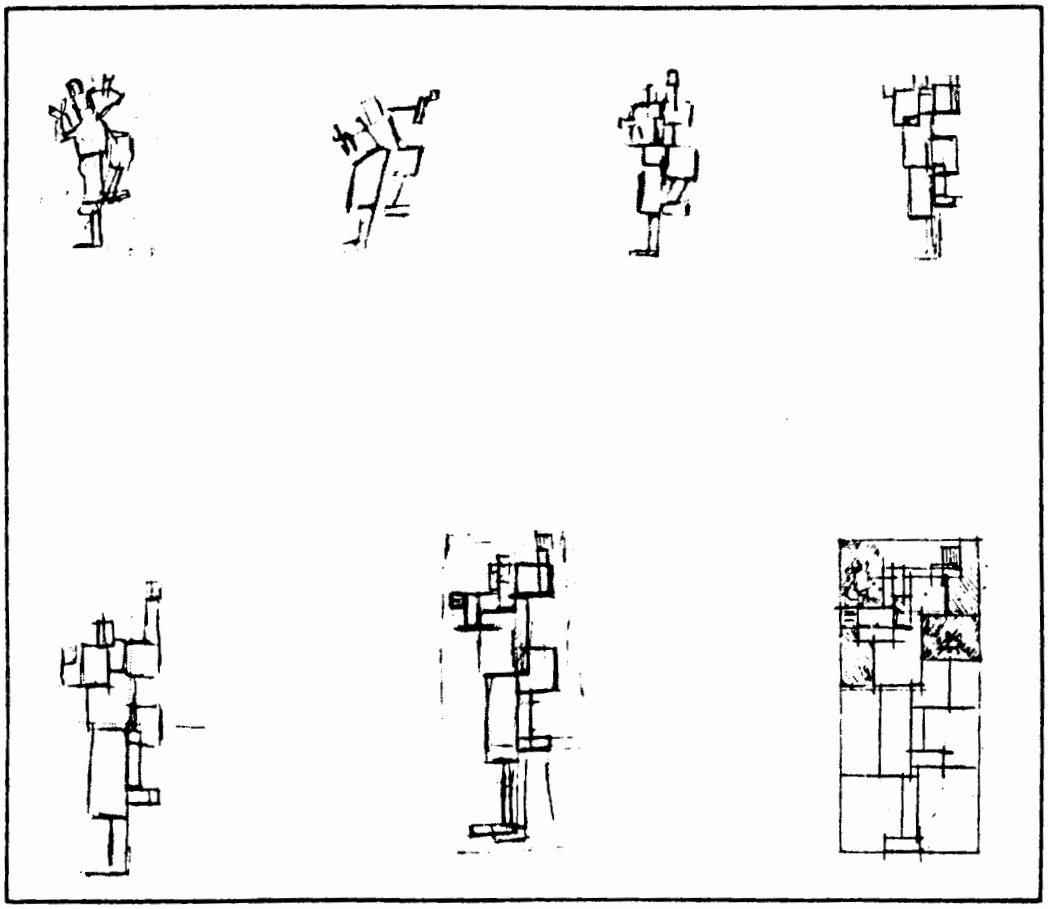
instruction in spatial relationships and/or use of guidelines/marks. While Townley's students were sixth graders, Burton's were adults.

In a historical account the conclusions of which are at variance with Burton's Troy (1982) found the work of a blocking-in style artist to be highly creative and ingeneous. However, according to Troy, Theo Van Doesberg's work was not accepted during his time, the early 1900's, precisely because of its unrefined blocking-in type of style. For example, Doesberg's human figure drawings were often bold abstract shapes because he used pure geometric figures in his life drawings. The purity of these shapes portrayed a more nonrealistic representation of the human figure and it was this lack of realism in his life drawings to which the public objected, according to Troy. He was denied recognition even though today he is recognized as having been capable of representing human figures in such a manner that they appeared to twist and turn as in the dance (see Figure 16) and as having been a great artist.

Although Doesberg did not use the blocking-in method in its strictest form, his use of geometric shapes to create great works of art suggests that the blocking-in method can be a vehicle to successful figure drawing.

Troy's article, while neither a report of an experiment nor a descriptive account of a teacher, presents some indirect evidence that a method resembling blocking-in has been used by a prominent artist. She does not pursue the question of whether a blocking-in style of teaching the drawing of the human figure is desirable.

Figure 16



Another historical analysis is provided by Moorman (1985). It has been chosen because it reports on a study of Picasso by Leo Steinberg, a study which has implications about the background of the blocking-in method.

As previously noted, in the blocking-in method of drawing, simple shapes are first drawn in and then modified to look like the object being drawn. Cubists, similarly, start with basic shapes and then construct and refine them into their final state. Steinberg explains that Picasso was accepted as a great artist and thinker who became the father of Cubism. His new approach to artistic expression gave rise to blocks, planes and surfaces which help us to see objects in new and different ways. In Cubism there is a total adherence to angles, planes and surfaces. All appearances of realism have vanished. Were we to take the cylindrical shape of the common bucket and render it in a cubist form, we would see the difference immediately. Its vertical lines would be interpreted in the forms of cubes and angles. The elliptical shape of its rim would be placed at odd angles to the verticals, resulting in an unusual drawing or painting (see Figure 17).

Picasso, as a great thinker and artist, could move from one major problem to another and keep his artistic equilibrium. The sketching method was also used by Picasso, and is readily observed in his drawings (see Figure 18). However, the final rendering of his works would eliminate all appearances of sketching.

Figure 17

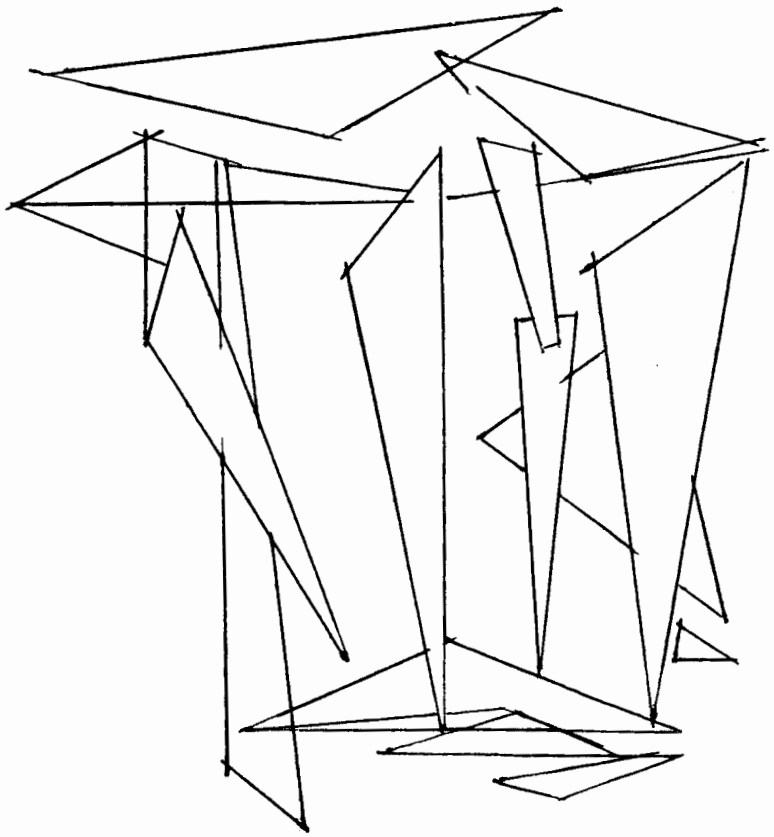


Figure 18

Cubism could well have been an outgrowth of the artist's early drawing procedures. It was not Picasso's only stage of artistic development. He passed through many stages of artistic expression, including both methods of drawing the human figure under study, the blocking-in and the free-hand sketching methods. But it is the blocking-in method, or at least a very similar one, which seems evident in the very nature of cubism.

Cornwell (1981) provides further evidence of the use of a blocking-in style of drawing, this time in the work of the famous cartoonist, Walt Disney. Cornwell went into great detail about the background and early history of Disney Productions. She discussed film production and modern technology in the field of animation. Disney Productions was a large operation and there were problems in the workforce. Much of the article addressed these problems. Although drawing and techniques of drawing cartoons were only touched upon, there is sufficient content included from which relevant inferences can be made. It is apparent that Disney's cartoons had been blocked-in at the outset. A drawing of Bugs Bunny (see Figure 19) makes this apparent. If one focuses upon the lines in the form of the face, one finds no leftover lines which would indicate a sketching procedure had been used. In many instances, the free-hand sketching artist leaves tell-tale lines in as part of the drawing. However, in cartooning these could be erased just before color is added to that particular cell. Also, Bugs Bunny is a cartoon character and Loomis (1939, pp. 74-93) illustrates a progression of

Figure 19

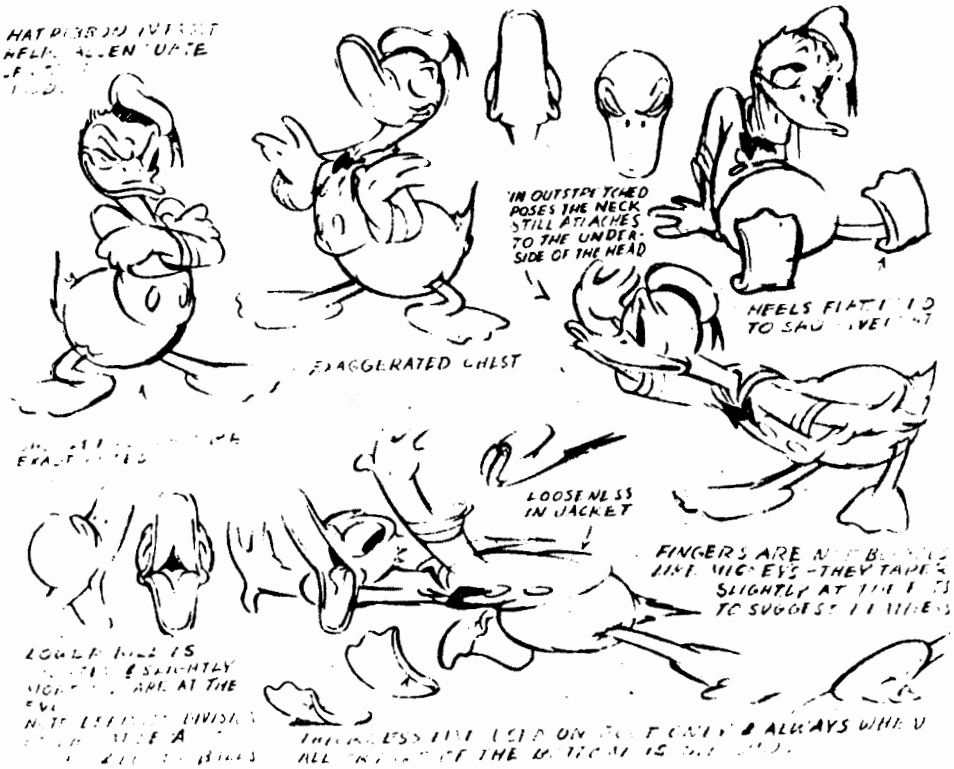
blocking-in procedures used by most cartoonists. If Loomis is correct, it is probable that Disney used such procedures.

Indeed, there is evidence from this latter source (Loomis, 1939) that the method most frequently used to teach cartooning utilizes the blocking-in procedure. According to Loomis, the cartoonist does not use the free-hand sketching method as much as blocking-in, at least in getting correct proportions for a given figure, human or otherwise. Once the proportions are established, as in the example of Donald Duck (see Figure 20), then great liberty can be taken by the artist toward the achievement of action effects. Further evidence that the early student of cartooning learned his/her skills from textbooks that contained instruction on blocking-in is provided by Loomis (1939).

According to Cornwell, cartoon production involved many laborious stages. Many artists were called upon at different stages of production and each one did his/her job in the sequence. Single cartoon cells were drawn and painted in very large numbers. From considering the time it took to produce a cartoon filmstrip, one can infer that a systematic blocking-in style must have been used. Each cell was then photographed in sequence and these, when seen on movie film, give the illusion of movement and lifelike beings.

Cornwell puts forth the idea that cartooning and film making are so commercialized and competitive that it is imperative to find shortcuts. In the light of this, according to Cornwell, Disney was concerned with "pretty and funny" pictures more than he was with aesthetics. Expense and time were of the utmost importance. In

Figure 20


IN OUTSTRETCHED POSES THE NECK STILL ATTACHES TO THE UNDER-SIDE OF THE HEAD
EXAGGERATED CHEST
LOOSENESS IN JACKET

building up a good figure, the artist could keep and use old tracings of the cartoon characters, change them slightly as needed, and save both time and money. She claims that Disney was visionary in that he attempted things for which he was highly criticized. One had to do with the type of audience he tried to reach. Disney's cartoons were funny and thought to be for children only. He was the first to make full-length productions for adults as well as children. They were box office hits.

It would appear that both methods of teaching/learning cartooning, the blocking-in method and the free-hand sketching method, were used successfully, at least in commercial terms. However, in Cornwell's article, the blocking-in method seems to dominate.

Robinson (1985) presents a review of drawings which can be found in the Albertina Collection. In this Vienna, Austria museum are displayed over 34,000 drawings and one million prints. Robinson reported on two of the great masters, Raphael and Dürer. A reproduction of a drawing of two male nudes by Raphael introduces the article and sets the stage for Robinson's study of the mastery of line and form. Raphael's drawing shows this mastery in the beauty of its proportionality and action of the subject matter, i.e., the moving, turning forms of the figures. The muscle structures of the two figures, by their absence of lines, seem to suggest a blocking-in procedure more than a free-hand sketching one. This drawing was inscribed by the artist and sent to Albrecht Durer, his contemporary, to show his ability to draw the human figure (p. 60). This was in

the year 1515. This illustrates the quality of Raphael's work and his desire to achieve fine drawings with respect to detail and mastery of drawing skill.

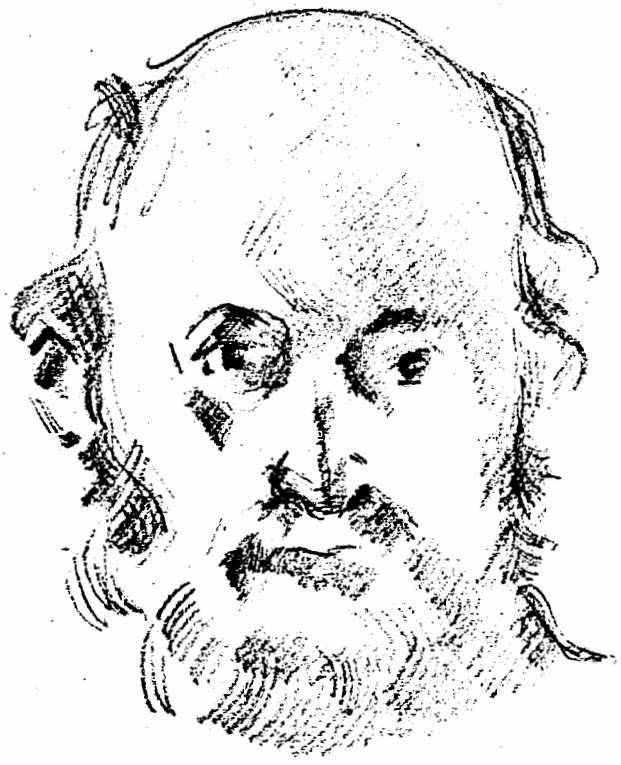
In this article, the draftsmanship abilities of the artists Raphael and Durer is mentioned. This term is used in regard to great detail and linear perspective and the methods used by the masters to achieve convincing representation of the physical world. Robinson presents a quotation of Durer which says a great deal about the theme of laborious love for quality in one's work of art:

> One man may sketch something with his pen on half a sheet of paper in one day, and it turns out to be better than another's big work at which it's author labors with the utmost diligence for a whole year. (p. 62).

Robinson describes the techniques of these great artists with words such as "broken strokes," a certain "looseness," "perspective," and "draftsmanship." All these give clues that there was a type of blocking-in method used. These terms are used in regard to the teaching of the blocking-in method of instruction. However, the term looseness is also used in the free-hand sketching method as well. Perspective refers to objects appearing to get smaller as they recede. Draftsmanship is used to describe the skills of an artist who excels in drawing and has an understanding of structure and form. A good example of structural knowledge is illustrated in Figure 21 (Goldstein, 1981, p. 36) and again in Figure 22

Figure 21

Figure 22



(Schniewind, 1985, p. 50). Robinson talks about how the first ideas of the artist are jotted down and later used in final works. He mentions study sheets and drafts, all of which infer a systematic approach to the artist's work. A study sheet or draft can be a series of drawings by the artist as preliminary work before the final piece. In examining the studies done prior to the famous artist, Michelangelo's drawings, one can find many of these rough drawings of body parts (Goldstein, 1981, p. 243). In this reproduction, a blocked-in foot can be clearly seen as part of the artist's rough draft (see Figure 23).

Another clue to the early knowledge of the blocking-in method was a 1661 reproduction of a drawing of the interior of a cathedral (see Figure 24) by Pieter Saenredam (p. 64). Saenredam's system of low perspective gives the illusion that the viewer is standing in the space.

To draw in perspective, an artist must use a horizon line, left and right vanishing points, and lines drawn from an object to these points. Thus, both animate and inanimate objects appear to recede as parts of the object being drawn. They appear to go into the distance. Long buildings, roads, railroad tracks, etc., appear to vanish at a point on the horizon line. However, in the case of a human figure that occupies less space, the perspective upon body parts is called foreshortening. Both demand linear drawing, and this is the procedure used in the blocking-in method. However, foreshortening can also be achieved by the artist who

Figure 23

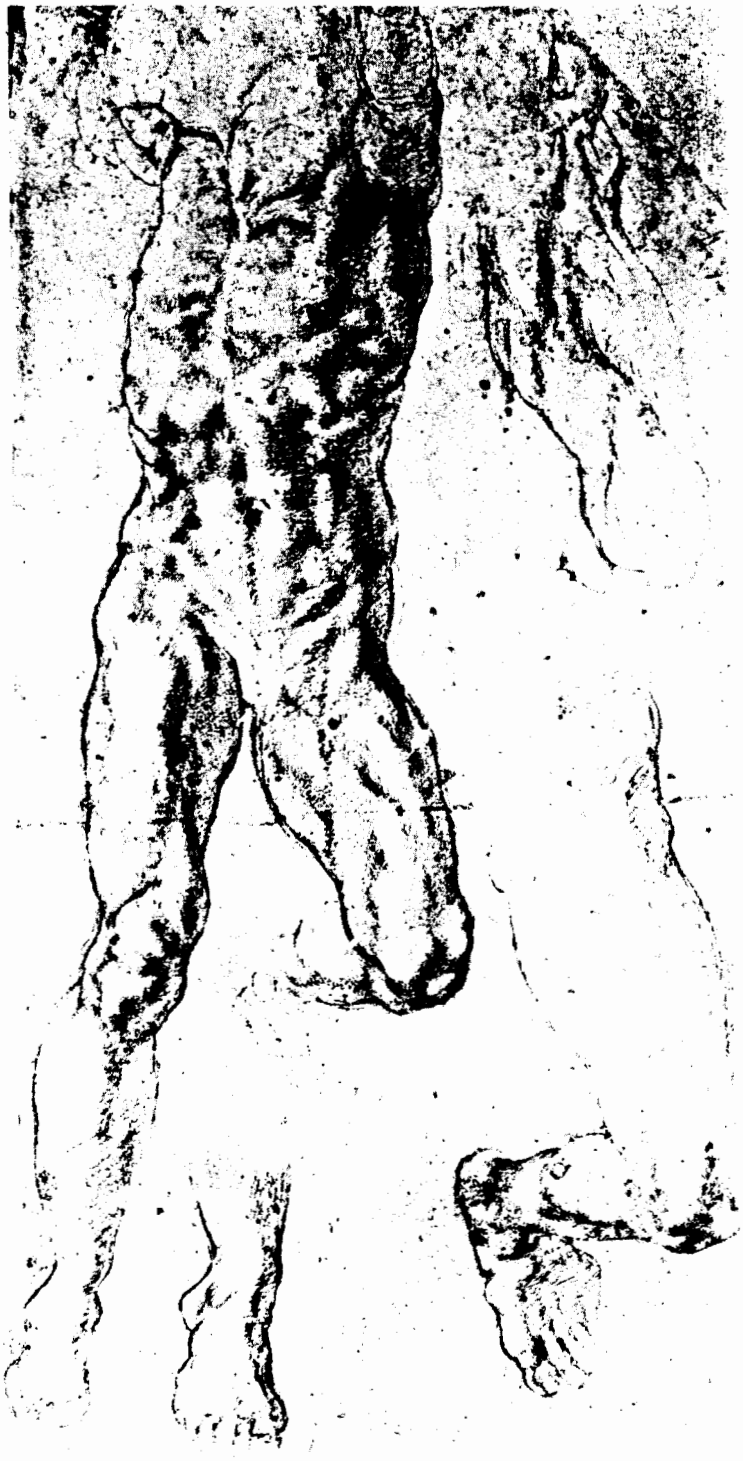
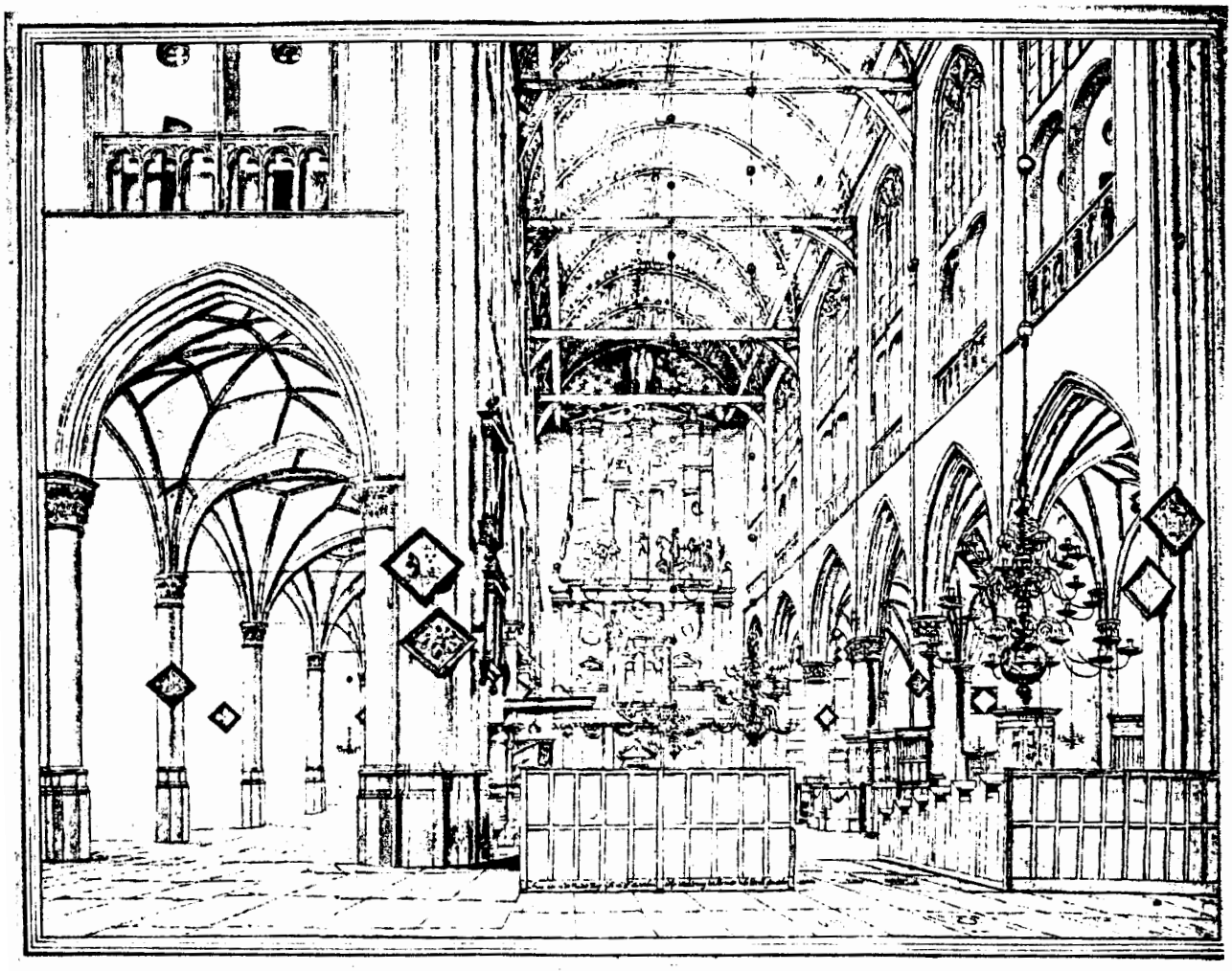


Figure 24



uses the free-hand sketching method, but does not rely on guidelines.

The vast collection of the Albertina contains what may be seen as strong evidence of early versions of the blocking-in method of drawing.

Further information about Picasso's cubism is presented by the art historians, Pierre Daix and Joan Rosselet (1981). Daix and Rosselet give a more thorough presentation in that they put Picasso's work into strict chronological order. They clearly show the evolution of the life and works of this famous artist. Daix was a friend of Picasso's and had many discussions with him from which he gained special insights. One can speculate that cubism is an outgrowth of an early blocking-in method. Indeed, even the title of this style of art, "cubism," denotes shapes. In cubism, the pure shapes stand alone, void of realism. Daix and Rosselet provide information about some of the influences on Picasso. If Picasso had, in fact, used a blocking-in method in achieving his drawings, then the precursor of cubism, the Cezanneian influence, would likely have shared in that method as well. Daix relates that Picasso had an increasing obsession with Cezanneian motifs. He wanted to understand the great mind of Cezanne.

From an examination of the book of Cezanne drawings (Schniewind, 1985) the influence of a type of blocking-in method can be seen in the work of Cezanne. An example of this can be found on page 38 of that book (see Figure 25). Here, we see a seated male figure done

Figure 25

with quick deliberate strokes of the artist's pencil. The head seems to be blocked-in as well as folds of the coat's arms. This drawing does not employ a loose sketching style as used in the free-hand sketching method.

It is stated by Daix that the era of cubism in which Picasso entered, was "namely the creation of a classically anti-classical art" (Daix, p. 93). Picasso entered this new era in the arts by daring to pursue "pictorial flatness" (Daix, p. 93).

The economy of line, form, and space is the main difference between pure Cezannian art and blocking-in. Cezanne renders the blockiness "feel" to his drawings without the guidelines of the blocking-in method. Nevertheless, blocking-in is apparent. Cubism goes a step further and uses line to connect parts of objects being drawn. The main difference in pure blocking-in and cubism is the subject of realism. The blocking-in artist constructs his/her shapes to represent real objects, whereas the cubist disregards realism altogether. They are alike in that both use a block-type form to achieve the end results. They are very similar.

The study for this paper was one in which one group was given the experimental treatment for the blocking-in method and the other the control treatment for the free-hand sketching method.

Formal Hypothesis

Employment of the blocking-in method of teaching figure drawing, will produce better proportioned drawings than employment of the free-hand sketching method.

Chapter III

Design of the Study

Sample

The students participating in this study were enrolled as majors in the commercial art class at Hawkeye Institute of Technology in Waterloo, Iowa. Hawkeye Institute is a technical college attended by students from all over the state of Iowa, an agricultural state with an approximate population of 2 million people. In choosing the population for the study, the students in two sections of regular figure drawing class were selected. These students were just beginning the program in the fall of 1984. The registrar provided the high school grade point average and the current age for each student in the entire group, but not broken down by section. This data is shown in Table 1. The morning section consisted of 12 men and 15 women. The afternoon, 11 men and 13 women. Both groups met in a two-hour block of time, Monday through Friday, for six weeks.

Materials

There was a list of topics that both groups received (see Appendix B). The same material was used for both groups to insure both received the same information, although not the same method of instruction. A live model was used each day. The male was used one day and the female the next. A total of 3 male and 5 female models participated, each on an irregular basis. An attempt was made to alternate male and female models but that could not be done on a regular basis. The males wore trunks and the females wore two-piece

Table 1

High School Grade Point Average: Distribution Of Values and Descriptive Statistics

Value	N	Histogram
1.5	0	**
1.6	2	*
1.7	1	
1.8	0	
1.9	0	*
2.0	1	****
2.1	4	*
2.2	1	*****
2.3	5	**
2.4	2	***
2.5	3	**
2.6	2	*****
2.7	5	***
2.8	3	*
2.9	1	***
3.0	3	***
3.1	3	**
3.2	2	**
3.3	2	
3.4	0	*
3.5	1	**
3.6	2	
3.7	0	
3.8	0	
3.9	0	**
4.0	2	

N	45
Mean	2.70
STDEV	.57

Age: Distribution Of Values And Descriptive Statistics (N=47)

Value	N	Histogram
16	1	*
17	17	*****************
18	12	************
19	3	***
20	2	**
21	1	*
22	1	*
23	1	*
24	4	****
25	0	
26	1	*
27	1	*
28	0	
29	0	
30	0	
31	0	
32	0	
33	0	
34	2	**
35	0	
36	1	*

swimsuits. The students in each group were provided with newsprint pads on which to draw. This is inexpensive paper and, when in a pad, it is soft enough to give good resilience when pressure is applied with a pencil. Each student was also provided with three B series pencils. These contain a soft graphite lead, having degrees of softness of 2B, 4B, and 6B, with 6B being the softest. Charcoal pencils were introduced but not used extensively. Shading stumps, which are tightly wound paper cylinders, were used for shading. In teaching the blocking-in method, the instructor used a set of wooden objects to demonstrate the various shapes used.

Procedure

The investigation began in October and lasted six weeks. As the experiment began, the students in the morning section were informed that they would be using a blocking-in method of learning to draw the human figure. The afternoon section students were told that they would use a free-hand sketching method (see Figure 26). Neither group was told that this was an experimental study.

Method

The daily human figure drawing sessions were observed during the posing sessions. This was done by the instructor, who moved throughout the classroom at these times. Comments and instruction were given during these observation periods. Both groups were taught by the same instructor using the same lesson topics but different methods of instruction.

Figure 26

Morning Section

Blocking-In Method

Afternoon Section

Free-Hand Sketching Method

For the group receiving the blocking-in method of instruction, demonstrations on the blackboard were presented. During these times, references were made, using the live model, to the various body parts. Those parts were then drawn on the blackboard, with the instructor using the shapes of the blocking-in method. The students would then do their own drawings on the newsprint pads.

For the group receiving the free-hand sketching method of instruction, the instructor told the class to look at the model and squint their eyes so as to see the model as a whole unit or mass. Then the class was told to begin to sketch what they saw. The instructor did not draw the body parts for the entire group, but did help each individual student. This procedure was used by the instructor because it was difficult to look at the model, then turn and sketch it on the blackboard. During the instruction period for both groups the duration of poses varied from fifteen seconds to thirty minutes, with the model in various attitudes including standing, sitting, prone, etc.

Description of the Test Instrument

The posttest was given to both groups at the end of the six-week period. It consisted of two posed drawings, one of a male standing and the other of a female seated in a straight back chair. The test was given on the same day to both groups and the students were given thirty minutes to complete each drawing.

The students in each group were instructed to look at and study the model, then begin their drawings. Both groups were told to

develop their drawings in such a manner as to attain proper proportion and realism. At the end of the first pose, the students took a ten minute break and then began the second drawing. The students were told not to sign their names on either drawing, but were randomly assigned numbers. The test drawings were collected at the end of each test period.

Judging of the test drawings was done by four art teachers, one each from an elementary school, a junior high school, a high school and a university. The instructions given to the judges were to sort the drawings into two piles, placing approximately half into a pile labeled "better" and the others in a pile labeled "worse" with respect to proportionality. Two of the judges evaluated the male standing pose drawings and the other two evaluated the female seated pose drawings.

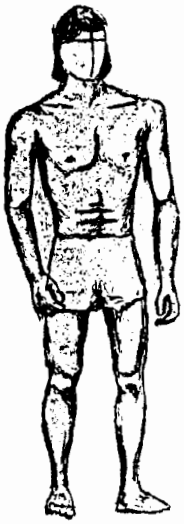
Figure 27 shows examples of the male drawings. On the top row are shown a blocking-in drawing judged as "better" and another judged as "worse." The bottom row shows free-hand sketching drawings judged "better" and "worse." Figure 28 shows the same data for the female drawings.

Figure 27

Examples of Male Drawings Done Using Both

Methods Judged "Better" and "Worse"

Blocking-In Better



Blocking-In Worse

Free-Hand Sketching Better

Free-Hand Sketching Worse

Figure 28

Examples of Female Drawings Done Using Both Methods Judged "Better and "Worse

Blocking-In Better

Blocking-In Worse

Free-Hand Sketching Better

Free-Hand Sketching Worse

Chapter IV

Analysis and Results

The object of this experiment was to determine whether the two methods of instruction, blocking-in and free-hand sketching, differed in the quality of drawings produced by the students when judged in terms of proportionality.

The results of the judgments of the drawings of the male in the standing pose are shown in Table 1. The two numbers under "Better" and "Worse" represent the number of drawings sorted by each of the two judges into the named categories. For example, as shown in row one, blocking-in, Judge 1, when given the 28 blocking-in drawings, sorted thirteen as "better" and fifteen as "worse." Judge 2 also sorted the 28 drawings into piles of thirteen "better" and fifteen "worse." It should be noted, however, that the two judges may not have agreed about any particular drawing.

The results of the judgments of the drawing of the female in the seated pose are shown in Table 2. Again, the two numbers under "Better" and Worse" represent the number of drawings sorted by each of the two judges.

Since neither table displayed a strong tendency for one method to yield better judgments than the other method, the data in the two tables were combined. Table 3 shows the combined results of the judgments of the male standing and female seated drawings. A chi-square test was performed on the data. The resulting chi-square value of 2.65, with one degree of freedom, was not even significant

Table 1

Judgments of the Quality of Proportionality of the Male Standing Pose Drawings Number of Drawings Judged Better and Worse By Each Of Two Judges (Labeled J1 and J2)

Method	Judgments			
	Better		Worse	
	J1	J2	J1	J2
Blocking-In	13	13	15	15
Free-Hand	15	13	9	11

Table 2

Judgments of the Female Seated Pose Drawings Number of Drawings Judged "Better" and "Worse" By Each Of Two Judges (Labeled J3 and J4)

Method	Judgments			
	Better		Worse	
	J3	J4	J3	J4
Blocking-In	11	11	17	17
Free-Hand	13	11	11	13

Table 3

Judgments of All Drawings Combined

Number of Drawings Classified By The Judges

(Sum of Tables 1 and 2)

Method	Judgments	
	Better	Worse
Blocking-In	48	64
Free-Hand	52	44

at the .10 level. It was therefore concluded that there was no statistically significant difference between the two methods of instruction. The findings of this study, therefore, did not support the research hypothesis as stated in Chapter I. These results are discussed in Chapter V.

Chapter V

Summary and Discussion of Findings

It was hypothesized in this study that the blocking-in method would produce better proportioned drawings than would the free-hand sketching method. The findings in the data of the experiment did not support this hypothesis. Instead, the results led to the conclusion that the two instructional methods do not differ in their effectiveness of producing better proportioned drawings. While this may be a correct inference, the reader should consider that there are other alternative explanations for the results. Some of these are described below.

A major alternative explanation of the results is that the four judges were not properly trained in judging proportionality. The judges had been told to go through the drawings and place better proportioned drawings in one pile and worse ones in a second pile. They were told to make piles of about equal size. Thus, the judges were seeking both good and poor drawings visavis proportionality. Each of the judges commented that there were actually no outstanding drawings. This appears to have frustrated the judges. How were they to label a pile "better" if they believed none were in fact good? This suggests that pre-training of judges might be necessary. Judges could be asked to do a trial run and go through two or three drawings for practice. Then the results could be evaluated by independent judges. With the training completed, judges would then evaluate the drawings for the experiment.

Another alternative explanation for the results concerns the importance that the students put upon the testing situation. At the beginning of the test session, the students were told not to put their names on their drawings, but to put an assigned number on it. When asked by a student, "How will you know whose drawings are who's," the instructor responded by saying, "Your number is placed by your name in my class record book." In the past, the students had always put their names on their drawings. That change in procedure may have planted a question in the minds of the students concerning the importance of this exercise. They could well ask themselves, "Why this change?," or "Is this test really worthwhile?" This could explain why the overall quality of drawings was poor according to all four judges. Some students were doing quite well at the end of the six-week period. Having been in the figure drawing class for two hours a day, five days a week for six weeks should have led at least some students to produce well-proportioned drawings. An alternative procedure might be to have students put their names on their drawings, treating this like any other exercise. The names could later be covered up and replaced by numbers.

The system in which the experimental subjects were assigned to the two methods of instruction should be mentioned. The students had been assigned to the morning or afternoon section according to their preference if space was available. There was no formal systematic assignment of students in terms of ability or any other characteristic. It was assumed that the assignment approached a

randomized procedure. However, there is the possibility that the groups differed in initial ability. In particular, if the more talented students chose the afternoon (in which sketching was used) and the less talented chose the morning (in which blocking-in was used), then even if the blocking-in method was superior, it might only have been possible to help make those students become equal but not superior to the sketching group.

Unfortunately, there were no initial measures of ability by which this explanation could be checked. As was pointed out in Chapter III, the measures of high school gradepoint average and age were not available for each of the groups separately, but only for the total combined group. However, it can be said that there was no important difference in gender ratio between the two groups.

Implications and Further Research

There are at least three factors which may have influenced the direction of the findings and which future researchers might consider. To control for the density of the graphite, the pencil used for sketching ought to be of only one level of softness. The fact that several types were used in the present study may have influenced the data.

Similarly, the chalkboard should be used to the same extent and in the same fashion for both groups. Finally, it should be arranged that the same models be used for both groups. If that is not possible, they should be randomly assigned to the treatment groups.

Chapter II reveals the apparent total absence of prior research on human figure drawings. If this finding is indeed accurate, it is also lamentable. The drawing of the human figure is an ancient and probably universal pursuit. Certainly its improvement is as worthy an endeavor as the search for excellence in other areas of teaching. Ways must be found to encourage the carrying out of systematic research on this topic, whether about such methods as free-hand sketching and blocking-in or about any of the other approaches creative teachers may try as they engage in the teaching of drawing.

It is hoped that this experimental study will serve to encourage other teachers of figure drawing and those who are interested in it for other reasons, to study ways of improving the available methodologies for teaching it.

References

Blake, V. (1951). The art and craft of drawing, New York: Dover Publications, Inc.

Burton, J. M. (1983). Advanced life drawing. School Arts, 83, 32-34.

Cornwell, R. (1968). Emperor of animation. Art in America, 69, 113-125.

Daix, P. & Rosselete, J. (1981). Picasso: The cubist years 1907-1916. Art Journal, 41, 91-99.

Famous Artists Course: Workbook 1 (1952). Famous Artists Schools, Inc., Westport, Connecticut.

Goldstein, N. (1981). Figure drawing: The structure, anatomy, and expressive design of human form. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Haldorson, R. (1949). Commercial Design: Division 1, Blocking-in drawing with pencil and crayon. Minneapolis, Minnesota: Art Instruction, Inc.

Hale, R. B. (no date). Drawing lessons from the great masters, New York: Watson-Guptill Publications.

Loomis, A. (1939). Fun with a pencil. New York: The World Publishing Company.

Moorman, M. (1985). Leo Steinberg and the sexuality of Christ, Art News, 85, 76-78.

Robinson, W. W. (1985). Drawing power. Art News, 85, 61-63.

Schniewind, C. O. (1985). A Sketchbook by Paul Cezanne. New York: Dover Publications, Inc.

Townley, M. R. (1983). Taking another look: Using fingers as eyes. School Arts, 83, 38-35.

Troy, N. J. (1982). Theo Van Doesberg: From music into space. Arts Magazine, 56, 92-101.

Appendix A

CONSTRUCTION VS. OUTLINING - An object that is "well constructed" has depth, as well as height and width. If we say that the construction of your drawing is bad, we will mean either that you have merely outlined your forms, forgetting about depth, or else that you have made mistakes in drawing the basic structural lines.

DRAWING THROUGH - The drinking glass is transparent and can be "drawn through to the other side;" all the structural lines can be seen. You must put down all the structural lines when you are drawing a solid, opaque object, whether you can actually see them or not.

FORESHORTENING - When an object is tipped toward you or away from you, it is said to be "foreshortened." It seems to diminish in size and change in shape as it goes back. In the case of the cylinder, notice that the length of the sides becomes shorter and the ellipses more open as the amount of foreshortening is increased.

GUIDELINES - Structural lines that make up solid objects.

LOOSENESS - A certain freedom of movement in a drawing.

MASS - Having weight and bulk, a physical measure.

MODEL - A human figure, either male or female (Can be any age).

MODIFIED CYLINDERS - The cylinder is a geometric object, perfectly regular in shape and proportions. In drawing the human figure, one must modify the cylinder.

PERSPECTIVE - To draw objects in three dimensional space on a two dimensional surface.

RELATIONSHIP OF PARTS - Separate forms in a drawing must be properly proportioned. Make sure that the individual forms have the right proportions; also make sure that when those forms are put together they have the proper "relationship" to each other.

THREE-DIMENSIONAL - A square has only two dimensions - height and width. To make objects seem three-dimensional, you must also draw in depth.

Appendix B

Lesson Topics for Both Groups, In Order of Presentation

1. Observation: see, observe, remember, observe volume and mass/bulk, viewpoint, gesture/action, proportion, size, relationship of body parts to each other.
2. Blocking-in method or free-hand sketching method, depending on the group being taught.
3. Technique: sharp pointed pencils, blunt or chisel, lines, and flat strokes.
4. Practice: using B series pencils: 2B, 4B, and 6B.
5. Practice: quick warm-ups, short poses, long poses, contour drawing.
6. Comparison of male and female figures.
7. Comparison of the human figure: various ages.
8. Movable Parts: flexibility, turn, twist, limitations.
9. Anatomy: the bone structure, muscles.
10. The ball-and-socket joints/hinge joints, their function and limitations.
11. The Human Figure In Motion: to draw convincingly, balance, foreshortening.
12. Shading: light source, planes, mass/bulk highlights, casting of shadows, tone, contrast.
13. Drapery: folds, shadows.