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ABOUT THE AUTHOR

Deborah Rockman is an artist, author, and Emeritus Faculty at Kendall College of Art and Design of Ferris State University. She served as Chair of the Drawing and Printmaking programs for a number of years. In addition to *Drawing Essentials*, she is also the author of *The Art of Teaching Art* (OUP, 2000).

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A Complete Guide to Drawing

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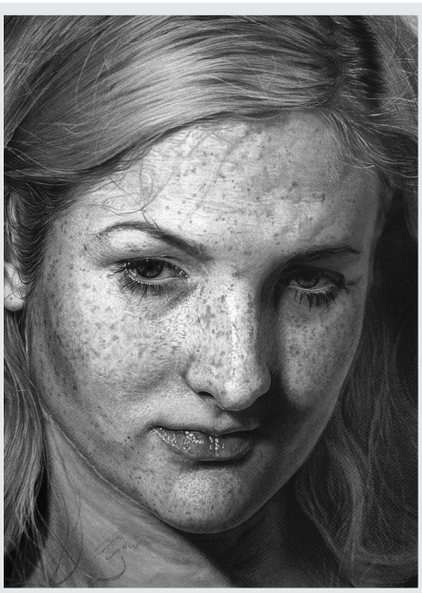

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For Rick, Craig, and Lisa

I love you always and forever

CONTENTS

PREFACE

It is profoundly important to me in both theory and practice to teach drawing effectively as a fundamental discipline for developing artists. Anyone familiar with my first book, *The Art of Teaching Art: A Guide to Teaching and Learning the Foundations of Drawing-Based Art*, will know this. The significance of the foundation experience for students of visual art cannot be overstated. The quality and character of this introductory experience has the power to broadly influence a student's long-term attitude toward his or her education in the arts. In considering all the variables involved in this foundational experience, *no* factor is more important than the instructor. She or he has the capacity to create an atmosphere of wonder, excitement, confidence, and enthusiasm for the experience of learning, or to create an atmosphere of dread, defeat, and discouragement. As the primary facilitator of the learning experience, the instructor's knowledge base, communication skills, self-confidence, preparedness, and enthusiasm for teaching are vital to a positive experience for both the students and the instructor.

Drawing Essentials: A Complete Guide to Drawing, fourth edition, is designed to support instructors' efforts in making this foundational experience and beyond a rich and satisfying one for students. As an introductory text for beginning drawing students and a handbook of vital images and information for more experienced students, *Drawing Essentials* offers a no-frills, nuts-and-bolts approach that addresses foundation-level drawing and beyond based on the classic model of highly attuned observational drawing as preparation for more advanced studies. Unlike some drawing textbooks, *Drawing Essentials* does not specifically address contemporary art movements or the history of drawing, nor is it heavily focused on extensive experimentation. While I consider these issues to be an important component of any art student's educational experience, my primary focus is on essential knowledge and experiences that provide a rich context for more advanced and experimental explorations of drawing and related disciplines, and that help to clarify the vital relationship of drawing to both contemporary and historical paradigms for the creation of art.

Drawing Essentials thoroughly addresses the three subcategories of drawing that are most important at the foundational level—basic drawing (non-subject-specific), figure drawing (including anatomy), and perspective drawing—explaining clearly and in depth the elements that are essential to depicting form and space on a two-dimensional surface. A well-developed chapter on color in drawing complements the emphasis of other chapters. This text is unique in that it clearly and thoroughly explains and illustrates key studio experiences that are not, in my estimation, satisfactorily fleshed out for students in other drawing textbooks. *Drawing Essentials* also provides examples and discusses the use of nontraditional media and processes that encourage exploration and experimentation as a complement to fundamental knowledge and experience.

Organization and Content

Drawing Essentials is organized in terms of both direct studio experiences that are necessary for a solid and thorough two-dimensional foundation education and supplemental information that facilitates and informs the drawing experience. Throughout the book, I emphasize the cultivation of observational skills, increased sensitivity, technical refinement, critical thinking, and knowledge of materials. More than 600 illustrations (including many high-quality student drawings) are provided with captions that clarify the primary technical, formal, and/or conceptual focus of each piece.

In response to feedback from those instructors who use *Drawing Essentials* in their classes and those who are interested in using it, this fourth edition includes a thorough reorganization of the book and a further breakdown of information to create more manageable chapters, making it easier to find specific information. As always, the chapters are generously illustrated with high-quality work by students, masters, and contemporary artists in various stages of their careers.

Chapter One, "Getting Started: Drawing with Line and the Process of Sighting," introduces students to drawing from direct observation using the most fundamental element of line, including techniques for creating meaningful line variation that can effectively communicate form, volume, space, and more. Working from general to specific is discussed and encouraged. Following the introduction of fundamental linear drawing, including straight-line and planar construction, the three primary sighting methods are introduced and discussed in depth to facilitate accuracy in observing and recording relative proportions, the relationship between parts and the whole, and the effective use of the drawing surface when translating sighting observations. Included is a

thorough explanation of how and why sighting works when used correctly, demystifying what may initially seem complicated or difficult.

Chapter Two, "The Principles of Composition," provides a comprehensive outline of fundamental compositional concerns including some essential definitions, important visual principles of composition, variable compositional elements to consider, a discussion of viewfinders that includes the ways in which they aid composition and instructions for making them in various sizes, some general guidelines to keep in mind when exploring composition, and the significance of viewpoint and thumbnail studies in investigating a variety of compositional possibilities.

Chapter Three, "Developing Value Structure and the Illusion of Volume," addresses working with light and shadow by providing guidelines for observing and creating tonal/value structure and the illusion of volume. Techniques for using a general-to-specific method of tonal development are discussed along with the benefits of this approach. The relationship of value to establishing various effects or moods is defined and discussed, as is the role of value in creating different kinds of texture. What to look for when identifying value structure is followed by a discussion of various methods for applying value and guidelines for controlling some variables of value structure.

Chapter Four, "The Illusion of Space and Depth on a Flat Surface," introduces the many variables that can be used to indicate space and depth on a two-dimensional surface (such as size, overlapping, value contrast), as well as a discussion of different kinds of illusionistic space that can be explored through observation or invention. Scaling techniques are introduced and elaborated upon as a tool for determining consistent size relationships in a spatial environment. Finally, a discussion of still lifes addresses what kinds of objects to include and why, options for lighting a still life, the potential meaning or symbolism of still-life objects, and guidelines regarding the potential benefits and drawbacks of using a photographic reference (whether one's own photograph or a found photograph).

Chapter Five, "Spatial Thinking and Visualization: Essential Principles of Perspective Drawing," introduces perspective drawing with an emphasis on understanding perspective at an introductory level. It demystifies this often intimidating subject and presents it in a sequential manner so that each new area of investigation builds naturally on prior information to maximize comprehension. Both technical perspective and freehand perspective are introduced with an emphasis on the significance of a "perfect" cube as the geometric basis for creating a wide variety of forms and structures. Following a discussion of the importance of proficiency in perspective and a list of relevant materials, tools, and vocabulary terms, concise instructions are given for one- and two-point cube construction and estimation of cube depth. An understanding of basic cube construction provides the building blocks (quite literally) for in-depth investigations of gridded planes in both one- and two-point perspective, multiple or sliding vanishing points and when to use them, cube multiplication and cube division, and the accurate construction of ellipses. Please note that "Advanced Perspective Techniques," the title of Chapter Three in the third edition, has been moved to the companion website set up by OUP that accompanies this fourth edition of *Drawing Essentials*.

Chapter Six, "Essential Principles for Drawing the Human Figure," applies fundamental drawing principles to the unique challenges presented by the human form, introducing information vital to studying and drawing the figure. Included are guidelines for classroom etiquette when drawing from a model, the application of sighting in relation to the human figure, a comparison of male and female proportions, key elements of gesture drawing, consideration of volume and space in relation to the figure, an in-depth discussion of portraiture, and exercises for "mapping" the figure in an observed spatial environment.

Chapter Seven, "The Human Figure and Artistic Anatomy," addresses the importance of visible anatomy in the study of the figure and provides a comprehensive outline and descriptive information of significant skeletal and muscle structures that form the basis for understanding artistic anatomy. A distinction is made between medical anatomy and artistic anatomy and landmarks in the body are identified and discussed. Twenty-six illustrations present the fully labeled skeletal structure and muscle structure from various viewpoints. A number of detailed views of the skeletal structure, based on reproductions of work by renowned anatomist Bernhard Siegfried Albinus (1697–1770), are provided for greater understanding.

Chapter Eight, "Color Theory and Application," addresses both color theory and the use of color media in drawing. The chapter begins with clear definitions of color terminology and an exploration of fundamental color theory (the seven color contrasts, color harmony

and color chords, and the spatial and volumetric effects of color). This is followed by an in-depth investigation of color drawing media, specifically colored pencils, soft pastels, and oil pastels. Each medium is discussed individually with information regarding the characteristics of the medium, student-grade and artist-grade materials, tools and accessories for working with the medium, advantages and disadvantages inherent in working with each medium, suitable papers and other substrates, and techniques and processes specific to each medium.

Chapter Nine, "Developing Ideas, Resolving Problems, and Evaluating Results," begins with a discussion of the process of generating ideas, followed by a new section on collage as a tool for the exploration of ideas, and continues with a discussion of evaluating one's own work as well as evaluating the work of others. Suggestions are made for identifying technical and formal problems that repeatedly surface in foundation-level work, with guidance provided for identifying and diagnosing what ails a drawing and what remedies will facilitate progress and improvement. Both group and individual critiques are considered, citing the unique aspects and advantages of each. Key questions for critiquing are provided to help guide the process of identifying strengths and weaknesses in one's own work and the work of others. These questions are organized into categories including composition, drawing, figure drawing, perspective, and color. A series of sketches early in the chapter, drawn by Edward Hopper, show the development of an idea from its inception to its conclusion. The new section on collage in Chapter Nine is generously illustrated with examples by students at all levels and a few of my own collages as well.

Chapter Ten, "Drawing Materials and Processes," provides an extensive discussion of drawing materials and elaborates on both traditional and nontraditional drawing media, drawing papers, and other substrates. Included are instructions for alternative processes that can be combined with drawing, such as photocopy or laser print transfers and Lazertran transfer processes that expand the experience of drawing.

Appendix I, "Digital Art and Drawing," features information and resources for exploring digital drawing, including an open link to Kendall College of Art and Design's Digital Art and Design program website. A discussion of digital drawing's relationship to the drawing program at KCAD is included, and a selection of digital drawings by KCAD students is included on the OUP open-access companion website that accompanies this book. The information available via the website links is an invaluable resource to both students and instructors who would like to learn more about digital drawing.

Appendix II, "Contemporary Art: A Gallery of Drawings," features the work of eighteen contemporary artists whose studio practice explores drawing and whose work both reinforces and expands on the traditional definitions of drawing. Some work focuses on representation and observationally based drawing while other work explores expressive and/or interpretive approaches to the practice of drawing while utilizing media that is not typically associated with drawing. A brief discussion of the conceptual emphasis of each artist's work via an artist statement (when available) provides a framework for understanding his or her intentions.

As noted earlier, I continue to include many illustrations created by students at all levels who have studied at KCAD, as opposed to relying primarily on illustrations by historical masters and contemporary artists. Students of drawing have many resources for viewing the work of established artists, but for the beginning student, a textbook full of masterworks can be intimidating and even discouraging. To see what other students can accomplish using this book as a course of study establishes more accessible goals based on the work of peers. This fourth edition also provides powerful examples of what more advanced students can accomplish with a strong foundational drawing background. I continue to include throughout the book carefully selected drawings by historical masters and contemporary artists whose work highlights the accomplishments of the masters and the significance of drawing in contemporary studio practice.

This edition, like all earlier editions, continues to reflect my belief that drawing is the backbone for the visual arts. Whether it is used as an end unto itself or an integral component for other forms of expression, the ability to draw well is an invaluable skill and drawing is an exquisitely expressive medium.

New to This Edition

This fourth edition reflects a reorganization of information resulting in an increased number of chapters with a more specific focus in each chapter. I've updated the book throughout with 142 new illustrations in Chapters One through Ten that include new

student works, new master works, new works by contemporary artists; the inclusion of collage as an area of exploration; and a requested section on digital drawing added to the online resource site available to all users of this text.

As noted earlier, **Chapter One, "Getting Started: Drawing with Line and the Process of Sighting,"** is much briefer than in the third edition and specific to the most fundamental introductory drawing experiences, focusing on drawing with line, the broad language of line work, and the principles of sighting in relation to observational drawing. Chapter One includes 65 total illustrations with 3 new illustrations.

Chapter Two, "The Principles of Composition" (formerly a component of Chapter One), is now exclusively focused on the numerous considerations related to understanding the significance of composition and the many variables associated with it. In response to user feedback, the text and accompanying illustrations that address The Golden Section and The Fibonacci Series as they relate to composition can now be found on the companion website, which is available to all users of the fourth edition. Chapter Two includes 41 total illustrations with 6 new illustrations.

Chapter Three, "Developing Value Structure and the Illusion of Volume" (formerly a component of Chapter One), focuses on guidelines for observing and developing value/tonal structure and creating the illusion of three-dimensional form on a flat drawing surface, including the benefits of working from general to specific. Chapter Three includes 33 total illustrations with 5 new illustrations.

Chapter Four, "The Illusion of Space and Depth on a Flat Surface" (formerly a component of Chapter One), discusses the many factors to consider when seeking to create the illusion of space and depth on a drawing surface while also introducing the technique of scaling to enrich spatial illusions. Guidelines for setting up an effective, instructional, and interesting still life are included. Chapter Four includes 38 total illustrations with 7 new illustrations.

Chapter Five, "Spatial Thinking and Visualization: Essential Principles of Perspective Drawing" (formerly Chapter Two), thoroughly explores the essential principles of perspective drawing with clear explanations and illustrations. Chapter Five includes 47 total illustrations with 7 new illustrations. "The Terminology of Perspective," formerly a component of this chapter, is now located in the Glossary with definitions of all relevant terms. The terms remain listed in Chapter Five, but their definitions are specific to the Glossary. Additionally, the former Chapter Three of the third edition was an advanced chapter on perspective for those students interested in taking things further. "Advanced Perspective Techniques" and accompanying illustrations can now be found on the companion website, which is available to all users of the fourth edition.

Chapter Six, "Essential Principles for Drawing the Human Figure" (formerly Chapter Four), focuses on all aspects of understanding and drawing the human figure. This chapter formerly included artistic anatomy as well, but "The Human Figure and Artistic Anatomy" has now become Chapter Seven. Chapter Six includes 85 total illustrations with 24 new illustrations.

Chapter Seven, "The Human Figure and Artistic Anatomy" (formerly a component of Chapter Four), focuses exclusively on artistic anatomy of the human figure, specifically skeletal and muscular anatomy. Recognizing similarities and differences in the structure and function of various parts of the skeleton and the musculature takes the experience of studying artistic anatomy beyond simple memorization and helps to create curiosity around the presence and function of anatomy in our own bodies. Chapter Seven includes 48 total illustrations with 22 new illustrations.

Chapter Eight, "Color Theory and Application" (formerly Chapter Five), thoroughly addresses subtractive color theory and the use of color, exploring in detail a range of color drawing media and techniques for working with them on a variety of different surfaces. Chapter Eight includes 58 total illustrations with 7 new illustrations.

Chapter Nine, "Developing Ideas, Resolving Problems, and Evaluating Results" (formerly Chapter Six), focuses on techniques for ideation and idea development, recognizing and resolving problems in one's work, and guidelines for evaluating results in both one's own work and the work of others. A brand-new section on collage is included as a broad-based tool for the exploration of ideas and materials and as a process that can be powerfully combined with drawing. There are no visuals to accompany the sections on "Diagnosing Problems" or "Key Questions for Critiquing Work" in this chapter, as it would require me to include student work as examples of problems with drawings. While some readers have asked that I reproduce student work that displays common problems and while this could certainly be helpful, I am unwilling to do this as I would

never want a student to see their work reproduced in the context of criticism of their drawing, however instructive the criticism may be. Chapter Nine includes 34 new illustrations.

Chapter Ten, "Drawing Materials and Processes" (formerly Chapter Seven), explores both traditional and nontraditional media, materials, and processes for drawing, including various transfer techniques and other experimental processes that can stand alone or be combined with drawing. Chapter Ten includes 63 total illustrations with 22 new illustrations.

Appendix I, "Digital Art and Drawing," new to this edition, is included in response to some reviewers' requests for a section on digital drawing. This brief appendix provides digital links to vital resources for learning about and viewing digital drawing via Kendall's Digital Art and Design program's website (www.kcaddlc.org), generously shared by the faculty of this program. Check it out to find lots of helpful information and tutorials of all kinds! Appendix I includes 32 new images created in drawing classes by students from the Digital Art and Design program at KCAD.

Appendix II, "Contemporary Art: A Gallery of Drawings," features eighteen artists and examples of their work. This appendix has been thoroughly refreshed to include the work of highly regarded and well-known contemporary artists engaged with drawing, including William Kentridge, Whitfield Lovell, Julie Mehretu, and Michaël Borremans. I have also chosen to include work by Egon Schiele. Although he is not considered a contemporary artist, his work is truly unique and timeless. Other invited artists include Dragana Crnjak, David Kohan, Beili Liu, Seth Marosok, Emily Mayo, Huaming Wang, and Shelby Shadwell. New work is featured by some of the artists from the third edition, specifically Aneka Ingold, Armin Mersmann, Julia Randall, and Robert Schultz. Appendix II includes 102 works, including 34 new works in full color.

In choosing the artists featured in "Contemporary Art: A Gallery of Drawings," I am interested in providing examples of a variety of traditional, nontraditional, and experimental media, techniques, and substrates, a range of subject matter, and various strategies employed in the expression of ideas. This variety includes drawings made from direct observation, drawings that rely on photographic sources, drawings that explore expressive interpretation, drawings that engage with imaginative invention, drawings that are dependent on color media, and drawings that utilize color as a secondary or supportive component, as well as achromatic drawings, mixed media drawings, and more. There is so much work to choose from, and it is a daunting task to narrow my options to a manageable number of artists and their work. I hope you enjoy the work featured in "A Gallery of Drawings."

A good amount of the student work included throughout *Drawing Essentials* is created by students in foundation-level courses (Drawing I and II and Figure Drawing I and II). In acknowledging the positive impact of strong foundational skills on the work of more mature students, I also continue to include the work of advanced undergraduate students in our BFA programs as well as graduate students in our MFA programs. Individual drawings by contemporary artists, some well known and others lesser known, can also be found throughout *Drawing Essentials*, along with classic drawings from the great masters that reflect a small portion of the history of drawing over a number of centuries. I think it is beneficial for both students and instructors to experience a variety of work from diverse sources in providing visual examples as companions to text. Throughout the entire text, there are many new works included. Some of these replace works from the third edition, while other new works expand upon the existing illustrations.

I continue to include (when possible) the student's name as well as the name of the instructor when using a student drawing as an illustration. In earlier editions of *Drawing Essentials* as well as *The Art of Teaching Art*, the majority of the student work I used was drawn by students in my classes. As the structure of programs at Kendall transformed over the years and enrollment continued to expand, additional faculty members were hired, and multiple sections of courses were offered, providing me with a greater abundance of strong student work to use in subsequent editions. I am grateful for the access I have to all of the student work created under the instruction of my colleagues. In those instances in which no instructor is noted, either the instructor is unknown or I was the instructor.

This fourth edition of *Drawing Essentials* is the culmination of thirty-seven years of college- and university-level teaching experience as well as my creation of the BFA in Drawing at KCAD. It represents my passion for all that drawing is, my love for teaching and learning, and my desire to assist both students and instructors in their pursuit of excellence. Without question, the student of drawing embarks on a life-changing journey of great challenge, reward, and personal responsibility. I hope this book enriches your travels all along the way!

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DRAWING ESSENTIALS

INTRODUCTION

> "For the artist, drawing is discovery. And that is not just a slick phrase; it is quite literally true."
>
> —John Berger

It is interesting and informative to consider the many ways that drawing has been defined historically, how drawing is defined today, and how frequently outmoded definitions still come into play. There is often still an insistence on the use of line in drawing, but this is an incredibly narrow and restrictive way of describing it. One thing, however, is certain—the study of drawing continues to serve as the most fundamental form of training for work in all of the visual arts.

The earliest known examples of drawing date from 30,000 to 10,000 BCE and were discovered on the walls of caves in France and Spain. It is believed that these drawings served a variety of purposes, including communication with other humans and as a way of ensuring a successful hunt. In other very early examples, drawings were scratched or carved on the surfaces of primitive tools. Beginning around 3000 BCE, the temples and tombs of the ancient Egyptians were covered with scenes of daily life using a flat, linear style of drawing and texts were written and illustrated with pen and ink on an early form of paper called papyrus. Drawing has been around for a very long time, serving many different functions throughout the history of humankind.

Today drawing is defined very broadly and fluidly, embracing traditional practices of drawing as well as more experimental and pluralistic practices. Along with other disciplines in the visual arts, drawing as a contemporary practice continues to respond to the decreased emphasis on specific and narrow discipline-based boundaries (that is, practices specific to drawing, painting, sculpture, photography, and more) as evidenced in the work of many contemporary artists and in the structure of many BFA and MFA programs. Because of this, drawing continues to stand in both tradition and innovation, depending on the artist's desire. Not only do many artists work in a variety of different art media, but many artists today merge different artistic practices together. And drawing, in one form or another, nearly always plays a role.

Acknowledging and embracing this duality of tradition (based on historical notions of drawing) and innovation (based on contemporary notions of drawing) is, in my experience, one of the hallmarks of a successful drawing program and forms the basis for the drawing program at Kendall College of Art and Design. Drawing is offered as a concentration in both the BFA and MFA programs, and the drawing program provides support courses to fine arts and applied arts as well as art history and art education programs throughout the college. Initial course work in the undergraduate drawing program provides students with strong fundamental skills and experiences rooted in tradition and careful observation, while intermediate and advanced course work progresses toward a broad working definition of drawing that supports students whose technical emphasis is more traditional as well as students who wish to expand on or work outside of a traditional definition of drawing.

In thinking about the expanded and fluid definition of drawing in contemporary art, it is often difficult to clarify what is or is not a drawing in artworks that do not fit cleanly within narrow definitions or clearly defined discipline-based boundaries. In fact, it is often easier to determine what is *not* a drawing. Although the definition of drawing as a material practice is fluid and embraces both traditional as well as revised contemporary definitions, there remain obvious instances where works are *not* drawings. A stretched canvas completely covered in oil paint is clearly not a drawing.

But still we grapple, perhaps unnecessarily, with definition. Drawing is sometimes defined as any work *on paper* that is not specifically photography or printmaking. But consider the work of Whitfield Lovell, who draws with charcoal on reconstructed wooden plank walls from slave-era dwellings, or Sol Lewitt's wall drawings executed by others based on his intentionally vague instructions, or Dragana Crnjak's abstract drawings done directly on walls that convey the illusion of dimension. How do we categorize the work of Amelie Chabannes, who transfers her complex linear drawings of "extreme" artist couples to the surface of a wall and then destroys, through gouging and digging with sharp tools, the portion of the wall where the two figures meet or overlap; or the work of Mary

Borgman, Wangechi Mutu, and others who draw on synthetic Mylar with various materials; or Juan Perdiguero's drawings on black and white or color photographic emulsion that has been light sensitized and chemically treated?

Drawing is sometimes defined in terms of *materials* or *media* so that drawing material on any surface, paper or not, is defined as a drawing. But today there are many different media or materials that do not fit easily into familiar definitions of drawing material. There is no question that charcoal, graphite, conté, and ink are drawing materials, although they often show up as elements in work from other art disciplines. What about ink washes? On paper, they are considered drawings. Does this mean that watercolor washes executed on paper are also a drawing medium? If not, why not? Is it because of the aspect of color that is integral to watercolor? Consider Matthew Boonstra's large figurative works on paper executed using used motor oil and a torch, or Cai Guo-Qiang's drawings made with gunpowder and fireworks. Certainly these materials are not traditional drawing media.

Drawing is sometimes defined as *achromatic* or *monochromatic*, lacking any significant use of color. This particular definition discounts the primary role that color can play in drawing and does not take into account colored pencil, soft pastel, oil pastel, and other color media that are often used in the context of drawing. Consider Julie Mehretu's oversized works on paper, some of which explode with color, Elizabeth Peyton's colored pencil and watercolor drawings, the mixed-media color drawings of Jockum Nordstrom and Shahzia Sikander, or Amy Cutler's gouache on paper drawings. There are many examples of artists working in drawing who incorporate color as a significant and primary element.

Drawing has historically been limited by being thought of as *intimate* or *small in scale* and *preparatory* for sculptures or paintings, although we know that this is no longer a valid characterization. Drawings have exploded in scale, in part because paper manufacturers are producing larger sheets and oversized rolls of high-quality paper that allow for extremely large-scale works, and in part because drawings have been liberated from the traditional paper substrate onto all kinds of different surfaces. Some examples of drawings that move beyond a frame and emerge from beneath protective glass include Antonis Donef's wall-size drawings created with ink on collaged book pages, the large-scale drawings of Los Carpinteros (a Cuban collaborative group), the large mixed-media drawings of Njideka Akunyili, and Robert Longo's ongoing series of wall-size charcoal and ink drawings on paper. In some cases, very large paper pieces hang freely on the wall, while in other instances the paper is mounted on wood or a stretched canvas backing for additional support.

Finally, how do we characterize the work of South African artist William Kentridge? His beautiful and evocative charcoal drawings (with occasional passages of red or blue soft pastel) are executed on paper and recorded on film/video as they shift and change through additive and subtractive processes, resulting in both finished and framed drawings as well as hand-drawn animated films. The drawings become films; the films are a record of drawings.

Many contemporary art organizations, exhibitions, and publications—such as the Drawing Center in New York City and the Kentler International Drawing Space in Brooklyn; the exhibitions *Drawing Now: Eight Propositions* (Museum of Modern Art, 2002), *Drawing as Process in Contemporary Art* (Smart Museum of Art, 2007), and *On Line: Drawing Through the Twentieth Century* (Museum of Modern Art, 2011); and the books *Vitamin D: New Perspectives in Drawing* (Phaidon Press, 2005), and *Vitamin D2: New Perspectives in Drawing* (Phaidon Press, 2013)—increasingly interpret drawing as broadly as possible, encompassing both draftsmanship and experimental art to emphasize the complexity, variety, innovation, and relevance of the practice of drawing in contemporary art. Some of the materials and supports that comprise this expanded definition include graphite, charcoal, ink, watercolor, gouache, pencil, crayon, conte, acrylic, felt-tip pen, colored pencil, marker, gunpowder, smoke and soot, ballpoint pen, oil, latex paint, carbon paper, chalk, soft pastel, correction fluid, cut paper, thread, wax, gesso, silverpoint, carbon, used motor oil, hair, paper of all kinds (including gessoed paper, tracing paper, vellum, Mylar, newspaper pages, craft paper, found paper), photographs, photocopies, raw wood, painted or prepared wood, acetate, blackboard, cardboard, walls, canvas, and more.

In 2005, the Museum of Modern Art in New York announced the acquisition of the Judith Rothschild Foundation Contemporary Drawings Collection, comprising nearly 2,600 drawings by more than 640 major and emerging artists, toward the achievement of its goal to assemble "the widest possible cross section of contemporary drawing made primarily within the past twenty years. These new works demonstrate the richness and complexity of the medium of drawing and its central position in the artistic process, and catapults the Museum's collection into an unequaled position for contemporary drawing." Selections from the collection were featured at MOMA in a major 2009–2010 exhibition titled *Compass in Hand*.

It is clear that contemporary drawing is alive and well and receiving significant critical attention as a force to be reckoned with in contemporary art, particularly in the hands of the upcoming generation of younger artists. Recent books and exhibitions dedicated to the drawing practice of established and emerging contemporary artists are highlighting the significance of drawing in the twenty-first century, including the work of Anna Barriball, Michael Borrëmans, Vija Celmins, Amy Cutler, Marcel Dzama, Anthony Goicolea, Sophie Jodoin, William Kentridge, Toba Khedoori, Ricardo Lanzarini, Robert Longo, Julie Mehretu, Ethan Murrow, Odd Nerdrum, Paul Noble, Chloe Piene, Diogo Pimentao, Cai Guo-Qiang, Jenny Saville, Kara Walker, and many, many more.

Within my own practice as an artist and a professor of art, I believe in the significance of introductory experiences that acknowledge and embrace the technical and formal traditions of drawing, ultimately providing the context for a broader scope of contemporary drawing practices. Students benefit from exploring both objective observation and subjective interpretation, with emphasis on the interdependence of process and product. At more advanced levels there is a significantly broadened exploration of drawing that includes alternative and mixed-media drawing processes as potential elements in the advanced investigation of drawing as a vehicle for personal expression. Drawing thrives as an independent discipline, as an element of mixed-media investigation, and as a vital resource for the investigation of other disciplines.

It is my hope that the fourth edition of *Drawing Essentials* will provide a resource for any student who is passionate about learning to draw. I am confident that the instruction and guidance offered here provide a solid foundation for further investigation of drawing and related disciplines at both a personal and advanced level. Whether you are teaching others to draw or learning to draw for yourself, I hope you find this book helpful.

—d. a. r.

So You're Taking a Drawing Class!

Welcome to the world of drawing. You may be a first-semester student in college, or you may be a seasoned student with some college experience under your belt. You may be studying art and/or design, or something entirely unrelated. You may be required to take a drawing course, or you may have chosen it as an elective. You may have a lot of experience with drawing, or you may have little to no experience with drawing beyond what you might have done as a child.

Perhaps you feel confident and excited, or really nervous and insecure, or somewhere in between. But no matter how you've arrived at this time and place, here you are in a drawing classroom with a drawing teacher and a group of other students. You each carry your own thoughts and ideas about why you're here, what you might learn, and the relevance of the experience for you personally. Whether you look forward to it or dread it, it is happening. You are enrolled in a drawing class!

On the first day of a drawing class, especially an introductory level class, I find it very important as a teacher to have a conversation with the students in my classroom. I ask my students why they are here, and I get a wide range of answers. Some tell me that they have to take the class because it's required. Others tell me they're not sure why they have to take the required class because they think they already know how to draw. And some students express how excited they are to learn more about drawing. There are lots of different students and lots of different reasons why they are in my class. I talk with them about the fact that every

single student in the room is unique, and that some come to this experience with enthusiasm, some with dread, some with uncertainty, some with confidence, and everyone is welcome!

We talk about the wide range of abilities and experience that each student brings, and we discover together who in the class feels confident, who doesn't feel confident, and some of the reasons they feel the way they do. We discuss the idea of making progress in the class, and that this will look different for each student because each person begins the class with what they know and/or what they don't know, moving forward through the semester from this beginning point. As a group of unique individuals, we recognize and acknowledge that progress occurs differently for different people, and that some will make rapid progress while others will progress more slowly. I stress that each student brings his or her own unique background and skill set to the classroom and will have their own unique experience.

Finally, we talk about what a course in drawing will teach. Students will learn about all the different materials one can use to draw, as well as different papers and surfaces on which to draw. They will learn different techniques for drawing and different ways of organizing visual information in a drawing. But I believe that the most significant experience they will have in a drawing class is discovering a new way of seeing that can transform the "ordinary" into something "extraordinary." Let me explain what I mean by this.

Learning how to draw is learning how to see in a way that our brains are typically unaccustomed to. This is because our brains are used to minimizing our perception of what is "unimportant," according to the situation or activity we are engaged in. Think, for example, of what might happen when driving on a busy highway if we use our eyes and our brain in the way we will learn to use them when drawing. If everything we see with our eyes (and the resulting signals sent to our brain) is considered with the same intensity and significance that is required when drawing, driving on a busy highway would be an extremely dangerous activity. We would be distracted by all kinds of things that are not relevant to the experience of driving safely. We must be able to prioritize what we see in relation to the act of driving while minimizing the significance of other things we see that are not relevant. And in our world today, we are almost constantly exposed to visual stimuli that is much more complex and varied than what early humans experienced, while the interaction between our eyes and our brain remains much the same today as it did for our early ancestors.

Fortunately, the experience of drawing from observation provides us with an opportunity to examine what we are seeing in a much more focused way, without presenting a threat to our safety . . . and I wholeheartedly discourage you from drawing while driving! Drawing is a skill that can be taught, learned, and developed over time with practice. I hope you will join me in exploring drawing and all that it has to offer. From wherever you are when you begin this journey, there is no place to go but forward!

Where to Begin

My history as a professor of drawing comes mostly from my thirty-five years of teaching at Kendall College of Art and Design in Grand Rapids, Michigan. The thousands of students I have worked with were mostly seeking degrees in art and/or design, suggesting some prior experiences that ignited their desire to pursue a career as a creative professional. It is my experience with these students that shapes the content of my books. I recognize, however, that not all students who study drawing or take a single drawing class are pursuing a career in art or design. In response to this, I offer the following information to inform and assist those of you with no prior drawing experience who are walking into an unfamiliar environment, either by choice or not, to learn about drawing.

Some of you who are enrolled in a beginning drawing class at the college level will come with a history of drawing experience based on your own investigation of drawing or your high school art experiences. Perhaps you even had private lessons or someone you were close to is an artist and taught you what they know about drawing. Others of you will begin the class with no previous experience beyond what you may have done as a child or an adolescent. For those of you who find yourself in a drawing class with no prior experience, the information that follows can

help you get started while gaining an understanding of the many benefits that come with learning to draw.

What exactly needs to happen to begin a drawing? How do you get started? These are good questions that have lots of different answers. But in getting started without much or any experience, let's assume that you will be working in a drawing classroom that is equipped with tables or drawing surfaces on which to work that can be adjusted in height, chairs or stools on which to sit if you choose not to stand while drawing, and a few other essential tools to begin working. There is good lighting so you can see clearly what you are going to draw. There may be a few separate arrangements of things to draw that are set up in the room on various tabletops or other surfaces so that smaller groups of students can get closer to the subject matter to see it more clearly. Every drawing classroom is different, but each should have the basic necessities necessary to draw.

You may be asked at first to draw something placed in front of you without any particular guidance from the instructor. This is one way for your instructor to get an idea of what, if any, drawing skills each student brings to the classroom, but not all instructors begin a drawing class this way. In the event that you are asked to draw something with no guidance, you work with the skills you have at that time, and this will vary considerably from student to student. Some of you will have little or no understanding of how to begin a drawing, while others may have more drawing experience. Regardless of what your past experience may be, you are being asked to do your best at that moment to represent what you see in order to provide information for your teacher about the various skill levels in this particular group of students. This is not a "test" that you pass or fail; it is a way for your instructor to gather information. Approach the drawing experience with the goal of putting forth your best effort, avoiding the temptation to compare your work with the work of others.

A somewhat different scenario for your first classroom drawing experience may include some introductory information from your instructor about ways of looking at what you are drawing as preparation for drawing it. This approach encourages you to first spend some time just looking at and seeing what you are drawing, focusing initially on the overall basic shapes of individual objects (round, square-like or rectangular, elongated, straight edges, curved edges, more tall than wide, more wide than tall, irregular, a combination of shapes and edges, . . .), the size relationship of one object to another (bigger or smaller or similar in size, wider or taller, closer to you or farther away, . . .), the amount or size of spaces between objects (lots of empty space, a little empty space, some large empty spaces and some small empty spaces, . . .), and whether one object partially blocks the view of another object (overlapping, or one object in front of or behind another). This initial simplification of the things you are observing helps you to avoid getting caught up in details before first seeing the general characteristics of an object or a thing, a very common mistake made by beginning drawing students. This process of first observing and recording the essential shape of things without getting distracted by details is referred to as working from "general to specific."

Still you may ask, "But how do I actually begin a drawing?" Ideally your instructor will give you some guidance. But if not, think about what you need to get started. It is likely that you were given a list of things to purchase for your drawing class on the first day that the class met, and you have brought at least some of these materials with you to class. To begin, you will want to select the tools you are going to work with, and these tools will vary based on what you are being asked to draw and what your focus is for any given drawing.

Let's assume for a moment that you are being asked to draw using line only (an excellent place to begin), and that line will be used to show edges that you observe on the items you are drawing. Keep in mind the idea that edges are found not only on the outermost parts of an object where the object ends and empty space begins, but also within the outermost shape of an object, depending on what it is and how complex it is. An unbroken egg or a small rubber ball, for example, could be drawn with a single line that describes the outermost (and only) edge. But consider an everyday object like a shoe. Depending on the type of shoe it is and the view you have of it, it will likely have edges that are located in places other than along the outermost shape of the shoe, and this outermost shape

can change depending on where you are positioned in relation to the shoe. These additional edges may include the tongue of the shoe, the opening in which you insert your foot, the two sides of the shoe joined by laces, and other features of various shoes.

Describing objects using line is a fundamental approach to a beginning drawing experience that requires first a sheet of paper on which to draw. You will need a tool to draw with that makes lines, and this can be any number of different drawing pencils that are graphite-based or charcoal-based, both of which are erasable. An eraser will be useful to make changes or corrections as you draw, and there are different kinds of erasers that you can use, depending on what your instructor has asked you to purchase. It is also possible that your instructor will be very specific about what he or she wants you to work with for that first drawing, telling you what kind of paper to use, what drawing tool(s) to use, and any other specifics to get you started.

When you begin your drawing by first looking at the item(s) to be drawn, I encourage you to draw what you see with light, delicate lines, which are much easier to erase and make adjustments to if you want to make corrections or changes. Later, when you are more confident about the shapes you have drawn, you can make your lines more visible by using a softer pencil or by pressing a bit harder. Choose a single object to draw first, and think about where you want to place it on the paper in relation to other objects that you see. If you are drawing a few different objects and the one you choose to begin with is near the middle of other objects, think about drawing it near the middle of the paper, leaving room to draw the other surrounding objects. If the object you choose to draw first is near the right or left side of the collection of objects you are looking at, place it nearer the right or left side of your paper.

Depending on how large or small you draw the first object, think about how you are using the paper. If you draw the first object very small, and other objects are sized in relation to the first object, you may end up with a small drawing of objects on a large piece of paper. Don't be afraid to use the paper fully. On the other hand, if you draw your first object really large, you may not have room on your paper to include the other objects in your drawing. There are different techniques and tools to help you use the space of your drawing paper effectively (by using a viewfinder) and to help you see the spatial relationships of objects (by using a sighting stick), but you likely have not received this instruction yet so early in the semester.

Looking at a blank piece of drawing paper after being asked to begin a drawing of things you see in front of you can feel really uncomfortable if you have little or no drawing experience. But you are in the class to learn how to see and how to draw what you see, and learning something new at any age requires that we are willing to make mistakes and learn from those mistakes. Thankfully there are erasers to help you easily change, remove, or adjust information on your drawing. As you learn to look and to really see what is in front of you, you will begin to recognize that your first impression of those edges you drew may have some obvious errors that you now want to redraw with greater accuracy. Those delicate lines you first drew are easily erased and replaced with lines that reflect more accurately what you see.

You may decide that you need to make something larger or smaller in your drawing so that it relates more accurately to the objects around it that you have drawn. You may end up focusing on just one object in your drawing, drawing and re-drawing it until you think it reflects what you are looking at. However you end up building your drawing, it is evidence of having the courage to draw something with or without prior experience. You have to start somewhere, and the steps I have described provide a basic, direct, and effective way to begin a drawing.

Even at a college of art and design, there are many students who must take required courses in drawing who do not understand why they need a drawing course to pursue their passion. I have seen this in students from many different areas of study, including photography, graphic design, industrial design, art history, and more. In response to the frustration that some of them feel, I remind them of all of the many things that drawing can teach them.

Learning to draw, if you have no prior experience, forces you to face your fears directly and takes you outside of your comfort zone because drawing *anything* for the first time can be really scary. And the

experience of showing your drawing to a group of others while receiving constructive criticism is even scarier, but this will eventually happen in a drawing course. Drawing requires intense concentration and, for beginners, learning to see and observe the world around you in a way that you are unaccustomed to. But it is your responsibility to keep pushing forward and give yourself credit for every little improvement in recording what you see. Learning to draw will expose you to an entirely new and interesting way of seeing the world around you.

Drawing teaches you to view the world through a different kind of lens, one that prioritizes careful examination and observation of subtleties. This is very different from the world we live in today where we are constantly bombarded by sensory input of all different kinds. Drawing from observation requires you to tune out distractions and focus intently on what you are seeing. But, as noted, not everyone recognizes the value of learning how to draw.

For example, drawing students majoring in photography will sometimes ask, "Why do I need to know how to draw? I am working with a camera that takes the picture for me!" But in order to take a quality photograph, one needs to know about composition, light, visual balance, space, cropping, scale or size, focus, detail, and many more things that are integral to a good drawing as well as a good photograph. Designers of all kinds, whether considering schematic drawings of an idea or actual end products (both 2D and 3D), must consider the visual strength of their work and how the visual components will (or will not) appeal to the user of the designed product. If you are studying art history, how can you possibly understand the nuances in any work of art without also understanding, at the very least, the visual principles that guide the making of art? Learning about drawing and engaging in the process of drawing is a gateway to understanding the fundamentals of all art and design. So, what are you waiting for? Jump in with both feet and let's get started!

Getting Started

Drawing with Line and the Process of Sighting

1

Line Variation and Sensitivity

Line as used by artists to indicate the boundaries and edges of forms is the oldest known method for depicting both animate and inanimate objects. Paleolithic cave paintings from prehistoric times provide us with evidence of early humans' use of line in their description of the various animals they hunted for food, clothing, and tools. Throughout the long history of drawing, line is the most direct and immediate way of depicting a form or expressing an idea, and it continues to play a vital role in contemporary art. Line can stand alone or play a supporting role to a wide range of media, processes, and disciplines.

WORKING FROM GENERAL TO SPECIFIC

When you begin to construct a drawing using line, you don't need to initially concern yourself with line variation. Line variation becomes more significant after you have blocked in objects with concern for their general placement and proportion, their relationship to other objects, and their relationship to the entire drawing surface. During this early stage in the development of a drawing, your line work should prioritize the larger, simpler aspects of the forms you are drawing and should be gestural in nature. Reserve your attention to details until after the primary structural components are established through line. Even in this early stage of the drawing when you are blocking in generalized information, there will be some natural variation in the line work as you move your drawing tool around the paper searching for the general shapes and masses that describe what you are observing. When you are adequately prepared to incorporate details and more specific information, you can begin to develop line variation and sensitivity that addresses all aspects of form, both the general and the specific aspects.

THE MEDIUM AND SURFACE

When thinking about line quality and line sensitivity, two of the first factors that you should take into consideration are *medium* and *surface*. What medium are you using and to what surface are you applying it? Different media respond in a variety of ways depending upon the surface employed and the technique used in applying the media. For example, a dry drawing material such as charcoal or graphite will generally yield a texture that reflects the surface of the paper. If the paper is smooth, the texture of the line will be relatively smooth. If the paper is rough or textured, such as charcoal paper, the line work will tend to reveal the texture of the paper. A charcoal line drawn with significant pressure on a textured surface may ultimately sink into the textured surface, diminishing evidence of the paper's texture.

WHAT IS MEANT BY "SENSITIVE" LINE?

Sensitive: Having the power of sensation; ready and delicate in response to outside influences; able to register minute changes or differences; degree of responsiveness to stimuli; having power of feeling; of such a nature as to be easily affected.

Sensitive line is sensitive in its description of and response to both inner and outer contours or edges of an object. Sensitive line is able to register minute changes or differences found along contours or edges. Sensitive line is responsive to both subtle and not-so-subtle activity found along contours or edges.

Sensitive line has the power to convey a strong sense of volume, mass, form, weight, dimensionality, and space and can also convey a strong sense of feeling.

Sensitive line, in addition to its responsiveness to the information being described or interpreted, is also sensitive in its own right, independent of subject matter. Whether it addresses a particular form or exists independently, it can display various qualities including textured or smooth, dark or light, continuous or broken, curvilinear or rectilinear, heavy or delicate, thick or thin, and so on. But ultimately sensitive contour line can be described as having three main qualities—weight, value, and texture. Sensitive line is capable of describing a form with simultaneous regard for shadow and light, for position in space (foreground, middle ground, and background), and for perceived physical weight and the effect of gravity on a form (Figure 1-1). The shifting quality of weight, value, and texture in line work invites various interpretations regarding light source, spatial position, and weight or grounding of objects. The quality of line is determined by the artist's response to the medium being used, the surface on which the medium is being applied, and the subject matter with which the artist is concerned.

ACHIEVING LINE VARIATION AND LINE SENSITIVITY

There are no specific "formulas" for achieving line quality and sensitivity. The kind of line employed by the artist is a decision based on the artist's personal response to the form being drawn, and that response is undoubtedly influenced by a multitude of factors. Lines vary tremendously in character, and each type of line has its own expressive potential.

Following are some examples of various ways to approach the development of sensitive, descriptive line as

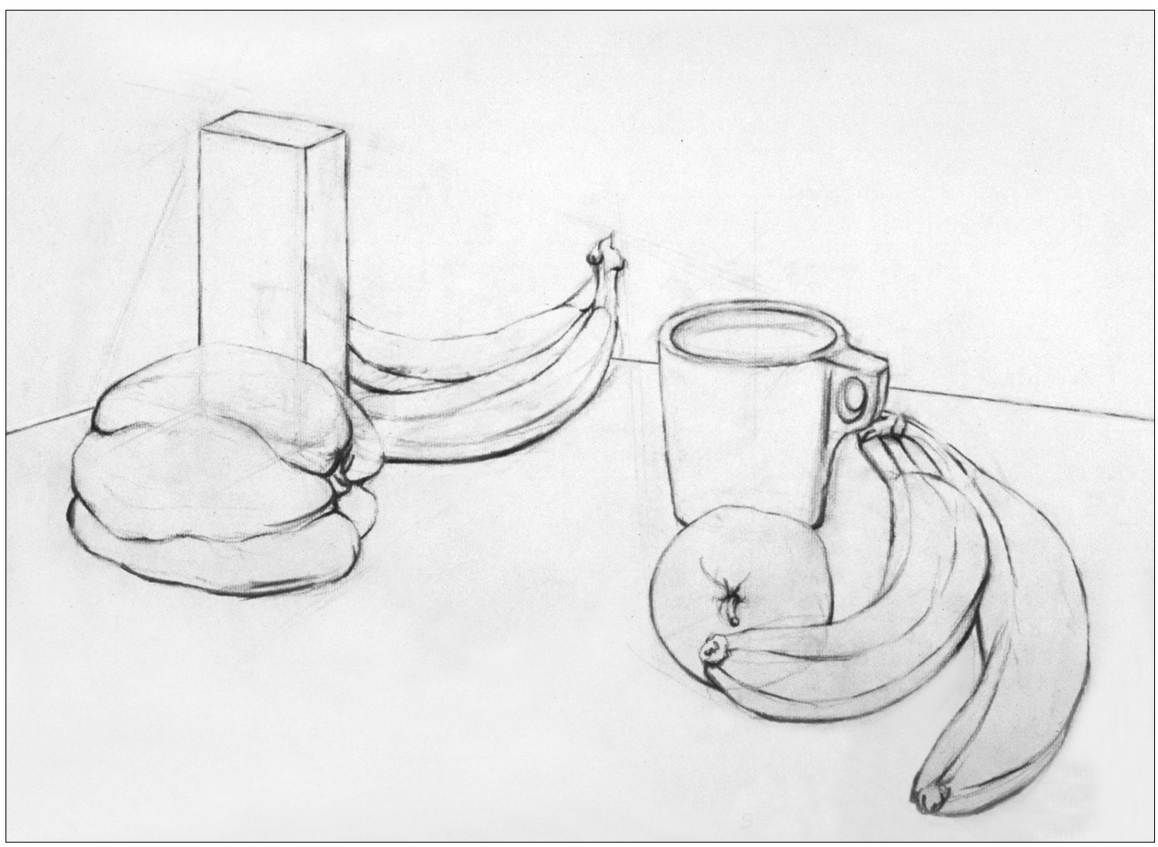


Figure 1-1. Student work. This simple but beautiful still-life drawing utilizes linear changes in weight (thick to thin), value (light to dark), and texture (soft to sharp) to convey light source, spatial position, and weight or gravity of forms.

Figure 1-2. Student work. Jane Black. This linear drawing describes the direction of the light source by utilizing lighter lines along edges that are illuminated and darker lines along edges in shadow.

it concerns itself with edges or contours. The examples focus on the development of tonal or dimensional line, which through its changes suggests form, volume and/or space, and weight or grounding of an object.

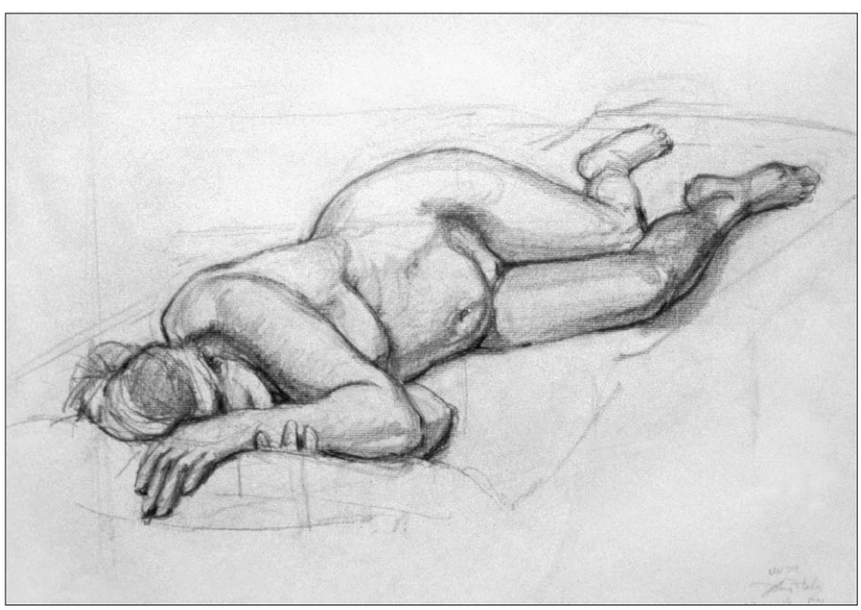
Light and Dark or Light Source

This can include concern for both the effects of an actual light source or an imagined light source. Edges bathed in shadow may be depicted with a darker, heavier line, and edges washed in light may be depicted with a lighter, more delicate line (Figure 1-2). It is important not to uniformly darken all edges in shadow and uniformly lighten all edges in light, as there are other factors to consider. An edge bathed in shadow may also have numerous dips and swells or other activity that also impacts the quality of line. What is important here is the relative difference in line quality. Complex contours bathed in shadow will have variation in the line work, but the variation will occur within the darker range of the value scale. The same can be said concerning a complex contour bathed in light. There will be variation in the line work that acknowledges other factors besides light source, but the variation will occur within the lighter range of the value scale (Figure 1-3).

Weight and Tension

This method concerns itself not only with the actual weight of objects as masses in space, but also with surface tension resulting from internal or structural activity. In relation to the human form, for example,

Figure 1-3. Student work. John Hale. The sensitivity of line variation in this figure study conveys weight, volume, space, and an overhead light source.



the effects of the skeletal structure and musculature on the surface of the body are considered. Where weight is supported, a darker or heavier line can be used. The point or edge where one surface rests on or presses against another surface can be emphasized through a darker or heavier line. When the underlying structure of the figure (bone or muscle) pushes or strains against the containment of the skin, a lighter or more delicate line can be used to suggest the "stretching" and "thinning" of the skin, whereas a more flaccid area may be suggested by the use of a heavier or darker line (Figures 1-4 and 1-5).

"Speed" of Contours and Edges

The quickness or slowness with which an edge or contour seems to move in space is considered and influences the kind of line used to describe that movement. If one thinks of the contours as a path or roadway being traveled, contours that require more careful negotiation because of complexity (*slower* contours) would be suggested by an appropriately darker or heavier line; contours that do not require such careful negotiation (*faster* contours) would be suggested by an appropriately lighter or more delicate line (Figures 1-6 and 1-7).

High and Low Points, or Dips and Swells, in Contours

This process, very simply, suggests that as contours dip into or toward the major mass of a form (depressions), they theoretically move away from light and into shadow and can be suggested through use of a darker or heavier line. Conversely, as contours swell away from the major mass of a form (projections), they theoretically move away from shadow and into light and can be suggested through use of a lighter or more delicate line. You can also think of a depression into the form as a more flaccid edge, suggesting darker line work, and a projection out of the form as a more taut or stretched edge, suggesting lighter line work (Figures 1-8 and 1-9).

Strength or Force of an Edge

When using line to define and describe edges, it is vital to recognize that not all edges are equal in strength or force. Most exterior edges, like the outermost edge of a bulb of garlic or the outermost edges of a shoe or of the human figure, are firm and definite. They are the result of a form meeting negative space. But other edges, typically found in the interior of a form, can range from firm to fairly gentle to extremely delicate, and the line work used to describe these edges must

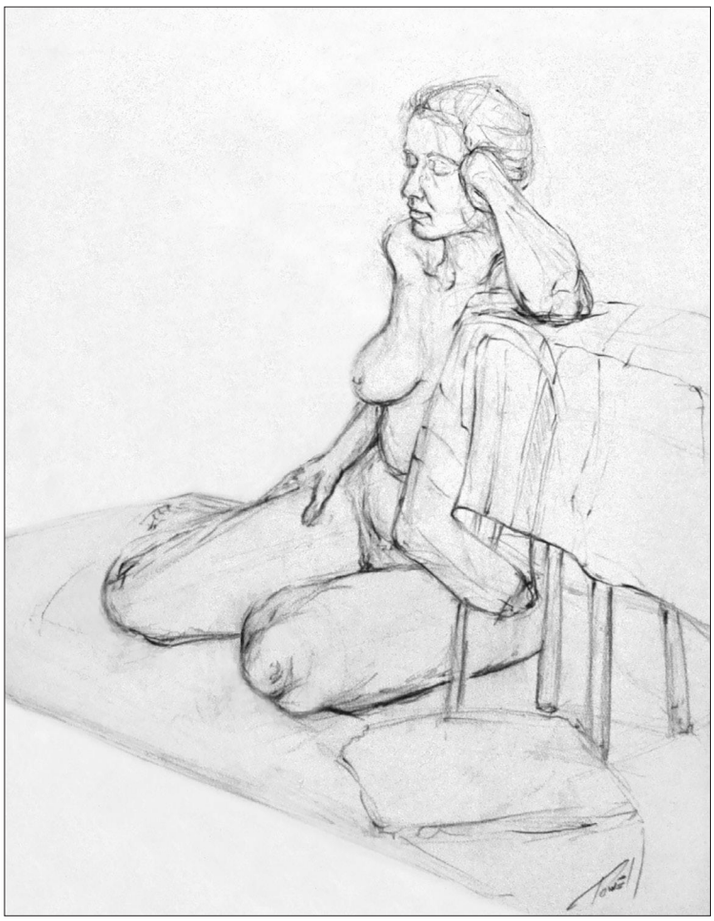


Figure 1-4. Student work. Cliff Towell. Weighted line along the model's left leg and left elbow reinforces where the model's weight is supported. Line work is lighter and more delicate at the bent knees to suggest the stretching and thinning of the skin as bone and muscle strain against the surface of the body.

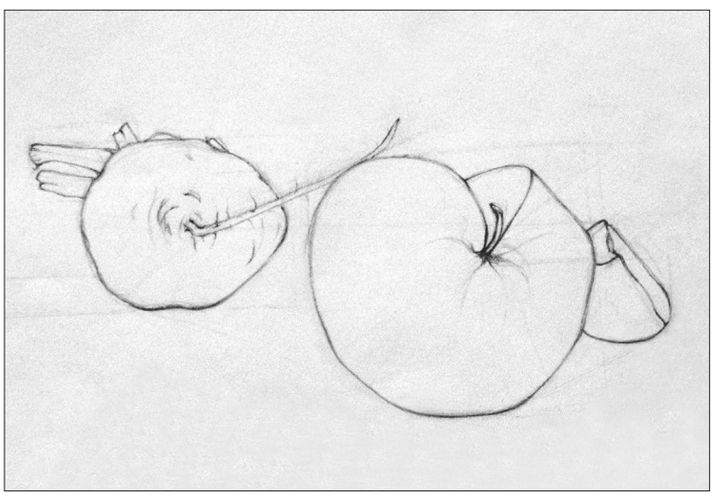


Figure 1-5. Student work. Jennie Barnes. The line along the contour where the apple and beet rest on the ground plane is darkened to indicate contact with another surface. The point of contact of the stem with the apple is also emphasized through darker line.

Figure 1-6. Student work. Clarkson Thorp. Slower contours, where directional changes occur or where different edges meet or overlap, are described with a darker line that reinforces the volume of the various forms.

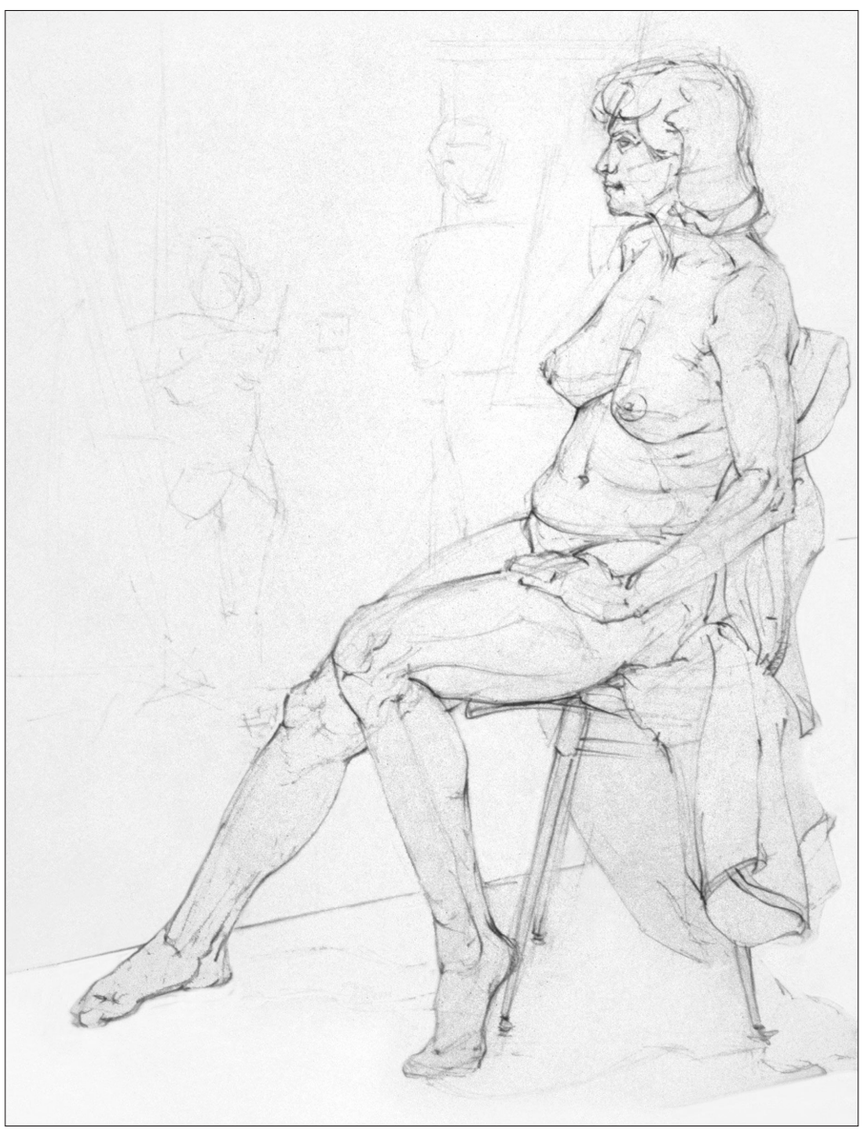


Figure 1-7. Student work. Jody Williams. Slower and faster contours of the figure are indicated by darker and lighter lines, respectively.

Figure 1-8. Student work. Rene Adrian Rogers. In this combined contour and cross-contour study of the figure, surfaces or edges that dip toward the major mass of the body are darkened according to the strength of the dip, and surfaces or edges that swell away from the major mass of the body are lightened accordingly.

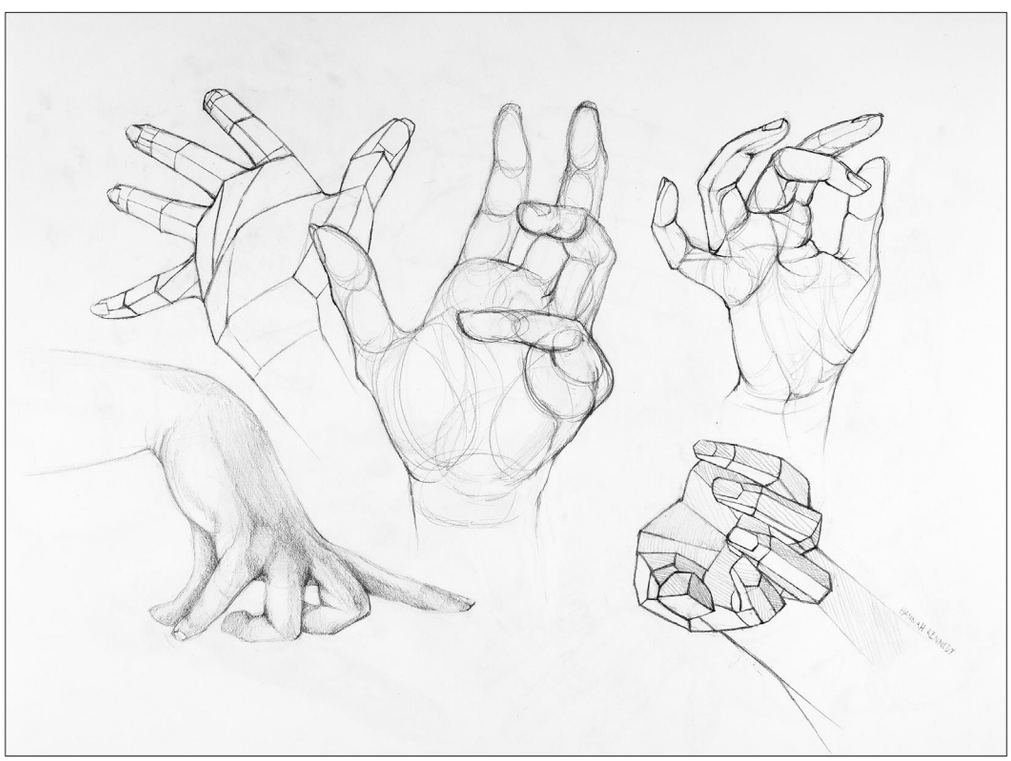


Figure 1-9. Student work. Hannah Kennedy (Instructor: Stephen Halko). The delicate lightening and darkening of line work in this page of hand studies describes the richness and subtlety of contour and surface variations in the hands. Along with concern for correct proportional relationships, the studies explore a range of processes to describe the structure of the hands in different positions, including planar construction, oval construction, linear construction, and delicate tonal range.

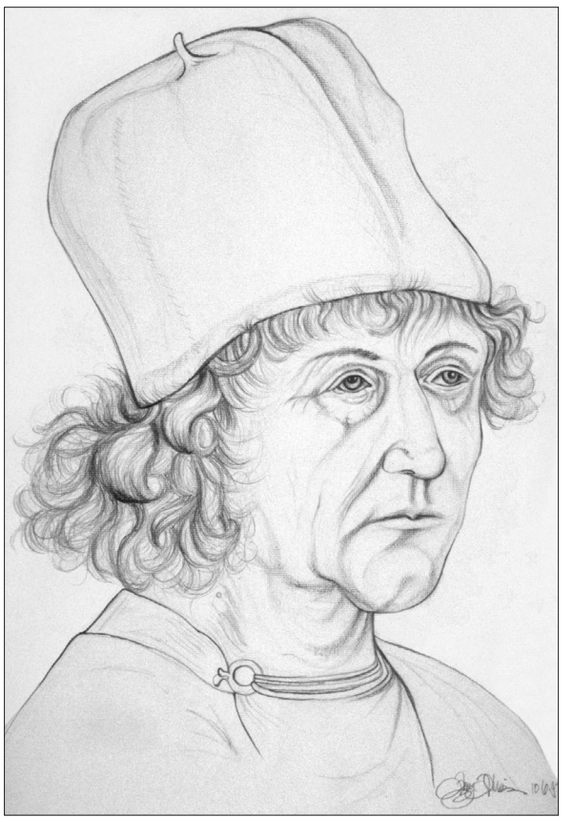
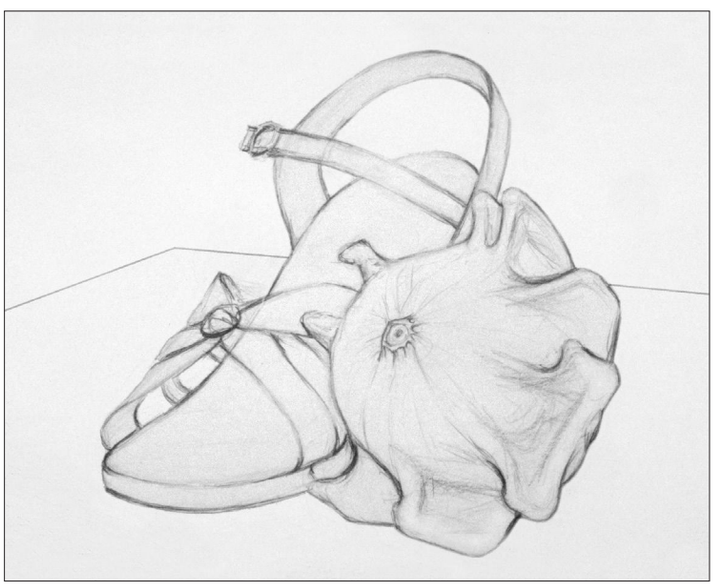


Figure 1-10. Student work (after Albrecht Dürer). Amy Allison. The rich variety of edges and contours found in the face are explored by working with a number of factors—hard, medium, and soft drawing material; increased and decreased pressure on the drawing tool; and shifts from the tip of the drawing tool to the side of the drawing tool.



reflect this difference. Think of the delicate edges found on the interior of a garlic bulb as the surface curves and undulates. Think of the delicate creases on a boot formed by the constant bending of the boot when walking. Think of the delicate edges found on the interior surface of the human body based on the ripple of muscles or tendon, the delicate projection of a bony landmark such as the clavicle (collar bone), the hollows in the neck or the buttocks. When describing a more delicate or tentative edge, it is important to vary not only the tone of the line, but the thickness and clarity as well. Changing your grip on the drawing tool and favoring the side over the point of the tool provides a way of gently building up a softer, lighter, and less focused line, which is very capable of describing more delicate interior edges. The appropriate combination of strong, crisp lines and soft, unfocused lines greatly enhances the sense of dimension and volume (Figures 1-10 and 1-11).

Spatial Sequence

This applies not only to the spatial relationships between various objects but also to the spatial relationships found within a single object that is volumetric or three-dimensional and takes up space. On a light drawing surface, darker lines advance or come forward and lighter lines recede or move back in space. This relationship is reversed on a dark drawing surface. Using a full range of value, weight, and texture in your line work, you can suggest full volume; a clear separation between foreground, middle ground, and background; and the grounding of forms upon the surface where they rest (Figures 1-12 and 1-13). A wide, bold, heavy, or thick line (weight) that is dark (value) and sharp, crisp, and in focus (texture) will advance or come forward in space. Conversely, a thin, delicate, wispy, fragile line (weight) that is light (value) and fuzzy, soft, and out of focus (texture) will recede or move back in space. While these describe the extremes of the spatial qualities of line, there can be numerous intermediate degrees of space that are described by line work that utilizes more moderate degrees and combinations of weight, value, and texture.

Figure 1-11. Student work. Kirk Bierens. Both firm and delicate edges are described with great sensitivity in this simple still-life arrangement of a human-made and a natural form. The side of the drawing pencil is effectively used in describing the especially delicate contours found in the interior of the gourd.

Figure 1-12. Student work. Chris Schroeder. Because the hands of the model and the book recede in space, the line work used to describe them is lighter in tonal range to more closely identify these receding forms with the light value of the background.

Degrees of Importance

This method implies the development of focal points in a composition through greater development of line. Areas of greater or lesser importance are described to a greater or lesser degree through line, creating dominant passages or focal points in a composition (Figure 1-14). The decision to lend greater or lesser importance to a particular area is a subjective one based on your personal response.

Combining Different Methods

Although discussed individually, the preceding methods for achieving line sensitivity and variation need not be considered separately in their application. Various methods can and should be combined and made to work together based on the needs and desires of the artist (Figures 1-15 and 1-16).

Figure 1-13. Student work. Hwa Jeen Na (Instructor: Sarah Weber). Is that a creature of some sort crawling across the table, created by the imaginative merging of kitchenware and masking tape? Note the relationship between the full range of tonal variation in the foreground line work and the reduced tonal range of line work describing information that is further back in space.

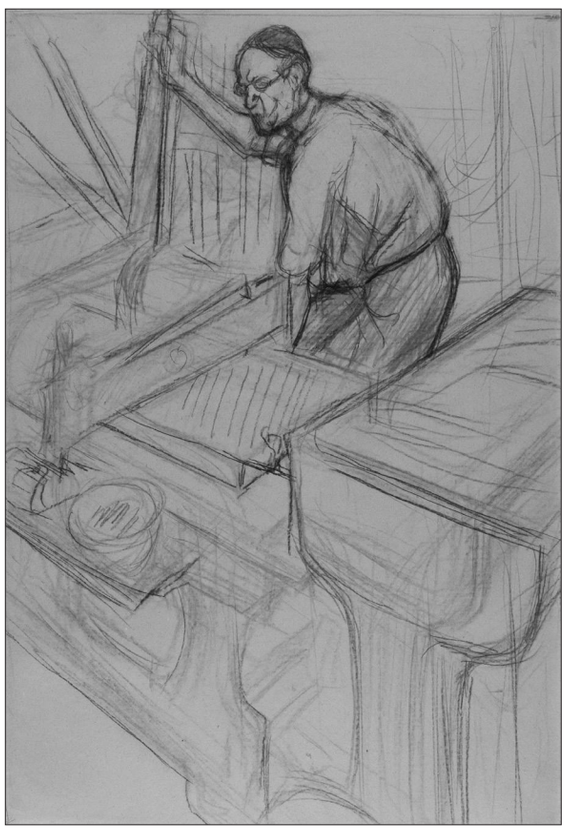


Figure 1-14. Henri de Toulouse-Lautrec, French, 1864–1901, *Study*, c. 1893. Charcoal, with colored crayons, on tan wove paper. Height: 509 mm; width: 348 mm. Mr. and Mrs. Carter H. Harrison Collection, 1933.880. Reproduction, The Art Institute of Chicago. Through the use of heavier and more emphatic line work to describe the figure in this drawing of a lithographer, Lautrec focuses our attention on the man and his activity.

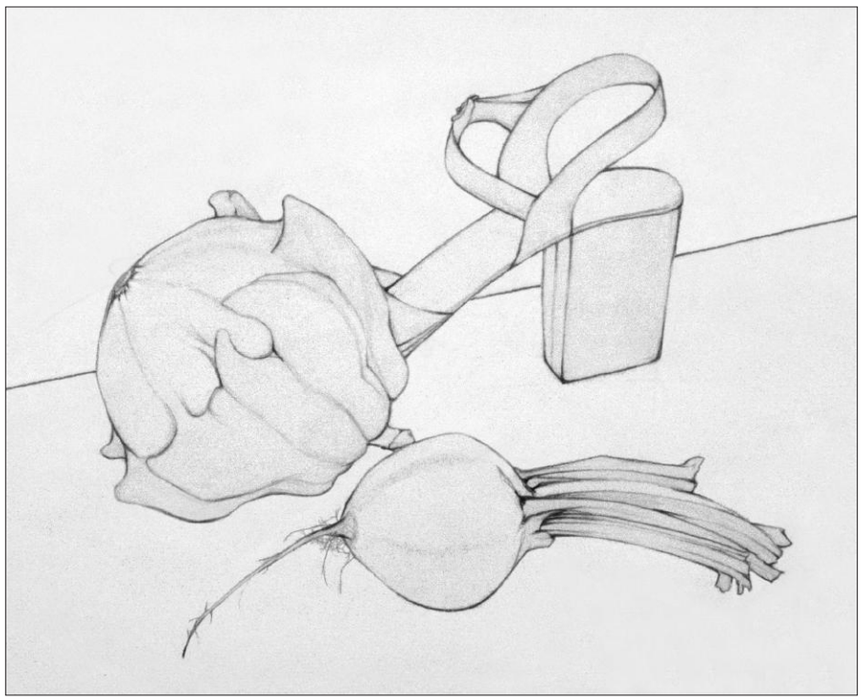


Figure 1-15. Student work. Emily LaBue. The line variation in this still-life study shows concern for a variety of factors, including light source, speed of contours, both firm and delicate contours, weight distribution, points of articulation, and so on.

There will be instances when consideration for one method, such as the effects of light source, will conflict with consideration for another method, such as the speed of contours or weight and tension. In situations where one consideration would suggest the use of lighter line (e.g., the bony projection of the elbow in a bent arm would suggest a lighter line if you consider the stretching of the skin and the tension of the bone against the skin) and another consideration would suggest the use of darker line (this same bony projection would suggest a darker line if you consider the speed or complexity of this slower contour), you must decide which consideration seems most important, and apply line variation accordingly.

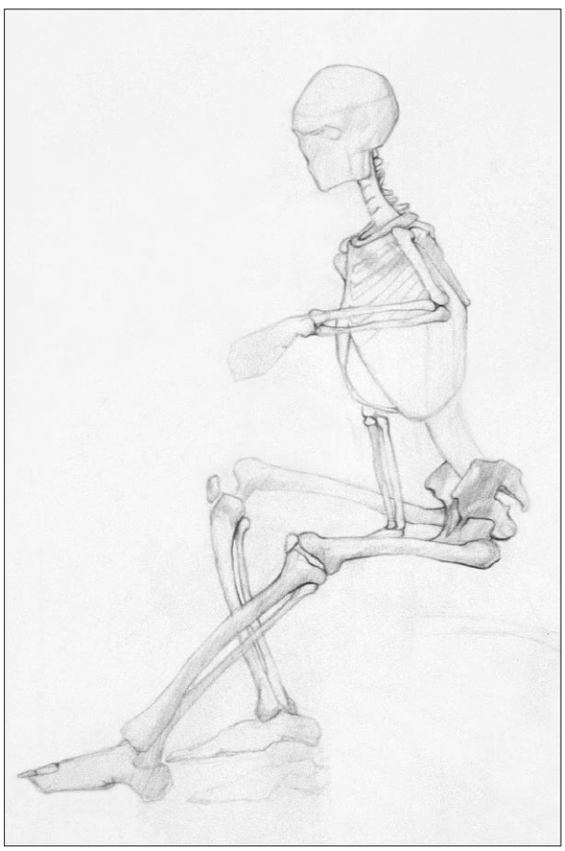


Figure 1-16. Student work. Michelle Velez. Although this study of the skeleton is in progress, the development of the line work emphasizes light source, points of articulation, weight distribution, speed of contours, and so on.

DIFFERENT KINDS AND FUNCTIONS OF LINE

Gesture Line

Gesture line is a very rapid, generalized line that is searching in nature and establishes basic size, placement, and attitude of your subject matter. Gesture line does not focus on contours or edges, but rather duplicates the movement of the eyes as you quickly scan a figure or an object. It is not concerned with detail. Although it is most often used in relation to the figure and its inherent energy and potential for movement, it is also valuable to apply gesture-drawing principles to any subject matter (Figure 1-17). In addition to its preparatory value, gesture drawing helps you to gain

Figure 1-17. Student work. This dynamic gesture drawing of a tricycle captures the essential character of this familiar object.

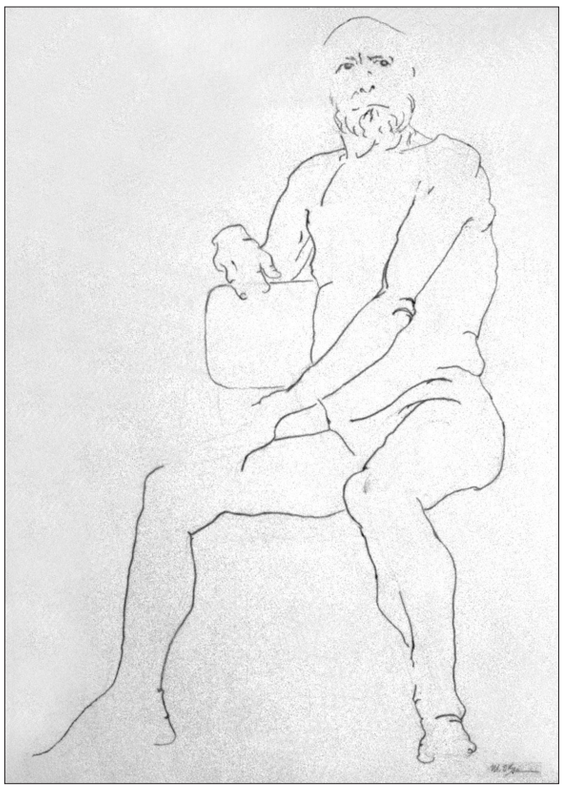


Figure 1-18. Student work. Mike O'Brien. This simple and concise contour line drawing of the figure is consistent in line weight, carefully describing all the various directional changes observed in the contours.

experience in making rapid observations of overall figure or object placement and proportion. For a more detailed discussion of gesture drawing, see Chapter Six.

Contour Line

Contour line is a single line, deliberately and slowly executed. It defines edges—edges of planes and both interior and exterior edges. There is typically no erasure work or correction in pure contour line (Figure 1-18). Blind contour indicates that you look only at the subject being drawn, and not at the paper.

Modified Contour Line

Modified contour line allows you to draw a bit more quickly, with only occasional glances at the drawing surface to monitor proportions, still focusing primarily on the subject being drawn. The work of Henri Matisse and Pablo Picasso provides some good examples of simple contour line.

Cross-Contour Line

Cross-contour lines describe an object's surface *between* edges. Rather than following the edges of planes, cross-contour lines move from side to side *across* planes, describing dips and swells and surface changes and enhancing the sense of volume and dimensionality (Figure 1-19). Henry Moore's drawings are a good example of cross-contour line.

Figure 1-19. Student work. Jennifer Malleaux-Schut. This figure study serves as an example of cross-contour line as surface analysis, exploring the planes and surfaces found on the interior of the figure.

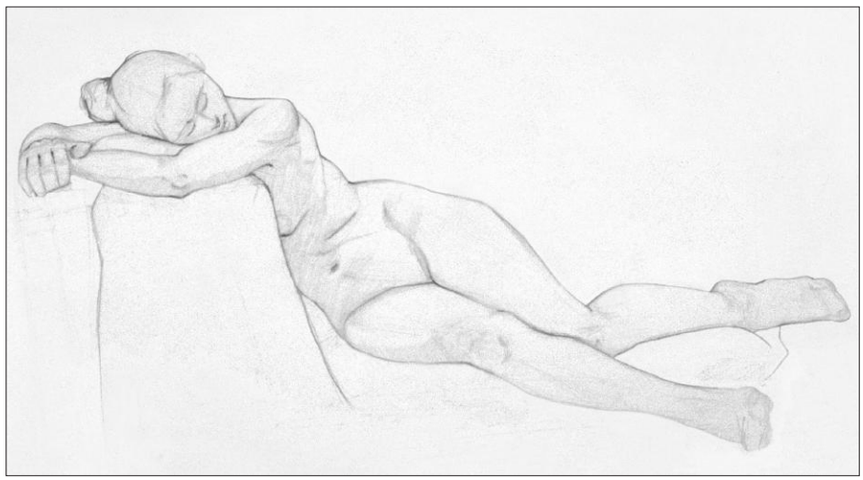
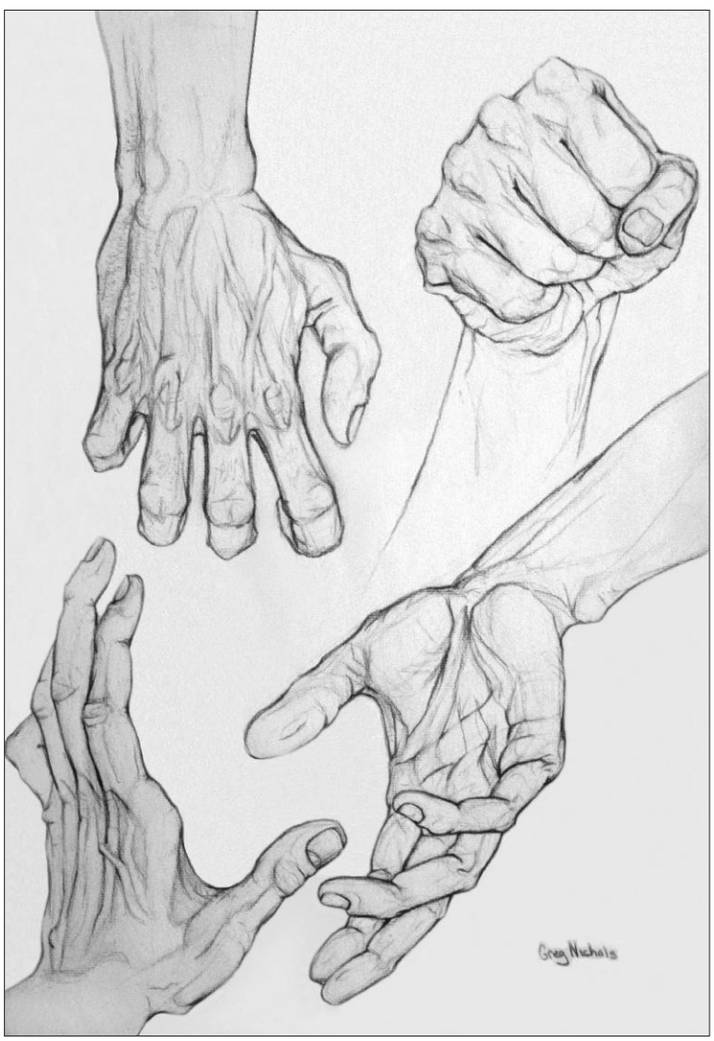


Figure 1-20. Student work. Janelle Songer. This study is an example of the delicate and precise character of classical line.

Classical Line

Rooted in classical art, classical line is disciplined, restrained, and precise. It is typically crisp and delicate in character, lacking significant variation in value or weight. It usually focuses on exterior contours with minimal description of interior information and yet is capable of evoking a strong sense of volume and dimension (Figure 1-20). The drawings of Jean-Auguste Dominique Ingres provide an excellent example of classical line.



Anatomical Line

Anatomical line strongly denotes the presence of the internal or underlying structure of an object. Most often used in reference to the human figure, it suggests the presence of structural or anatomical factors, such as skeletal structure or muscle structure, that directly or indirectly influence the appearance of the surface of the figure (Figure 1-21). The figure drawings of Alex McKibbin and Egon Schiele provide good examples of anatomical line.

Organizational Line

Organizational lines act as the underpinnings of a drawing and are most often absorbed into the finished work without being especially evident in the end re-

Figure 1-21. Student work. Greg Nichols. This linear composition of hand studies is especially attentive to anatomical factors, such as the heads of the metacarpal bones and the phalanges (knuckles), the styloid process of the radius (wrist bone), the tendonous extensions of muscle on the back of the hand, and the thenar and hypothenar muscles visible on the palm side of the hand.

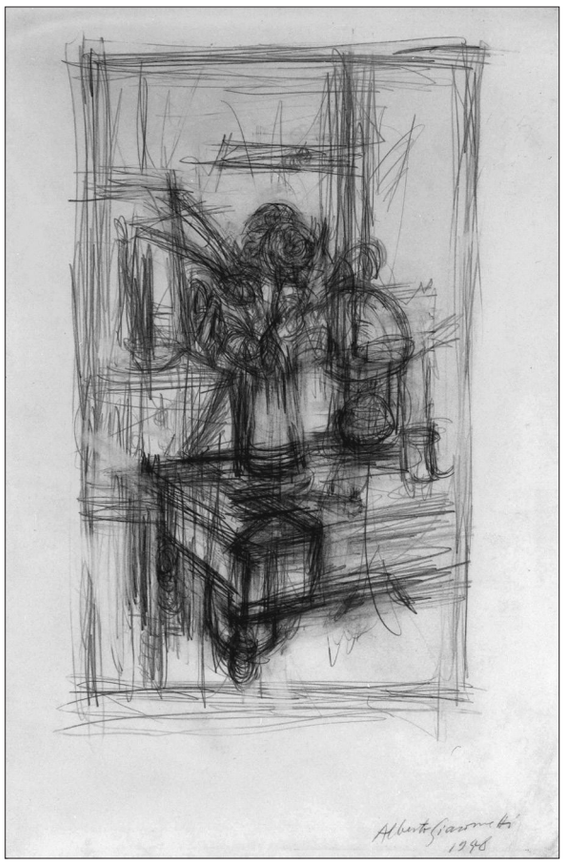


Figure 1-22. Alberto Giacometti, Swiss, 1901–1966, *Still Life*, 1948. Pencil, 19¼ inches × 12½ inches. Collection of the Modern Art Museum of Fort Worth, gift of B. Gerald Cantor, Beverly Hills, California. © 2010 Succession Giacometti/Artists Rights Society (ARS), New York/ADAGP, Paris. Giacometti's drawings, both figurative and non-figurative, consistently utilize organizational line as an integral and visible element.

sult. Organizational lines can include axis lines indicating the major and minor directional thrusts of a form and lines indicating spatial relationships between foreground, middle ground, and background forms. Organizational lines are a construct, not actually existing to be directly observed. Alberto Giacometti's work, however, relies strongly on the enduring presence of organizational line as an integral part of his figurative and nonfigurative drawings (Figure 1-22).

Structural Line

Structural line reveals the structure of an object by describing the various planes that make up the object. Line can describe the edges of planes (contour line), with structural line added to indicate the main directional thrusts of these planes, enhancing the sense of volume and dimensionality. When clustered together, structural lines can also describe value or tonal structure (Figure 1-23). The drawings of Robert Smithson

Figure 1-23. Margaret Lazzari, American, *Scream*, 2004. Conte on paper, 30 × 44 inches. Courtesy of the artist. The use of structural line in this drawing functions in two significant ways, reinforcing the directional thrust of a variety of planes in the figures while also creating tonal structure.

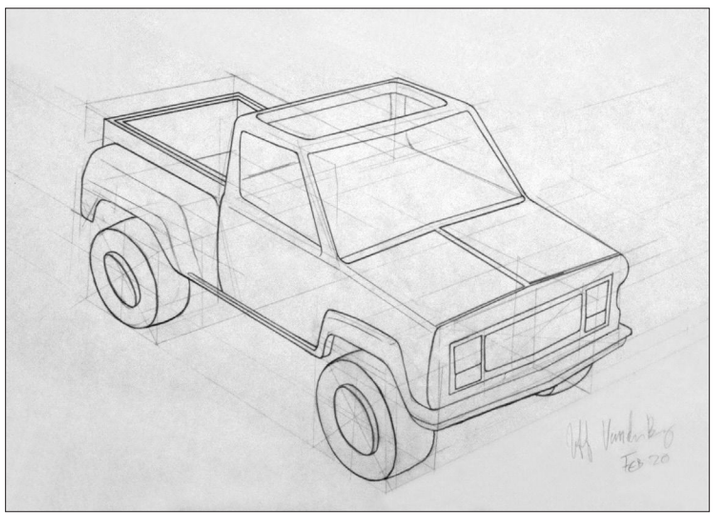


Figure 1-24. Student work. Jeff VandenBerg. Mechanical line is employed in this transparent construction study of a truck seen in two-point perspective.

and Christo provide some good examples of structural line.

Mechanical Line

Mechanical line is objective as opposed to subjective and remains constant in character, without significant changes in width or value or texture. Its most obvious application would be found in the field of architecture and architectural blueprints or in technical drawings (Figure 1-24). The drawings of Stuart Davis and Sol Lewitt provide examples of mechanical line.

Angular Line

Angular line can be used to develop a precise definition of contours that are not typically considered to be angular in nature. It employs the use of a series of straight lines to interpret a curved edge or contour, without the straight lines being particularly dominant in the end result (Figure 1-25). The visual result provides a sense of full and descriptive contours. Some drawings by Oskar Kokoschka, Henri de Toulouse-Lautrec (Figure 1-26), and Pablo Picasso provide examples of the use of angular line, and an examination of any number of historical and contemporary drawings will reveal additional examples.

Decorative Line

Decorative lines are typically more curvilinear than rectilinear and are generally rooted in interpretation rather than objective observation. They convey a sense of spontaneity, ease, and relaxation, moving gracefully and fluidly across the page (Figure 1-27). The drawings of Henri Matisse and Pierre Bonnard provide some good examples of decorative line.

Calligraphic Line

Calligraphic line resembles handwriting and makes use of fluid, continuous movement. Eastern artists developed the art of calligraphy, in which the tool, media, surface, and technique are all considered equally important, with ink, brush, and paper

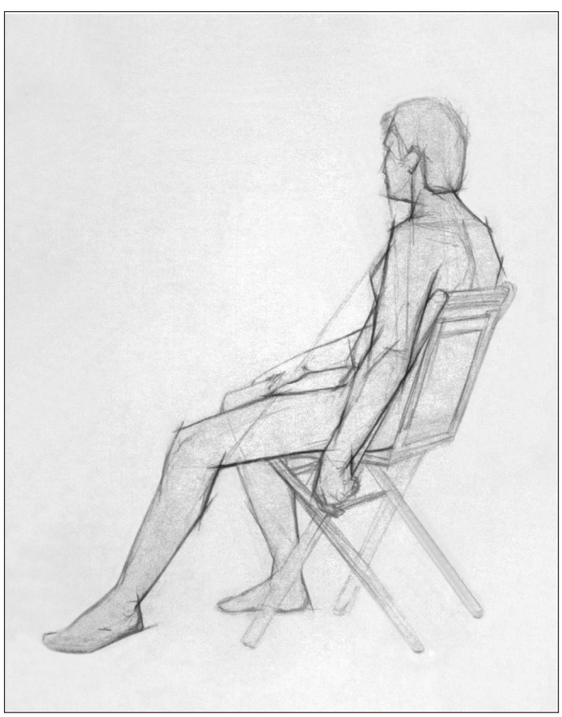


Figure 1-25. Student work. Jacquelin Dyer DeNio. The use of angular line (also known as straight-line construction) in this study of a seated figure is especially helpful in defining subtle directional changes in both interior and exterior contours.

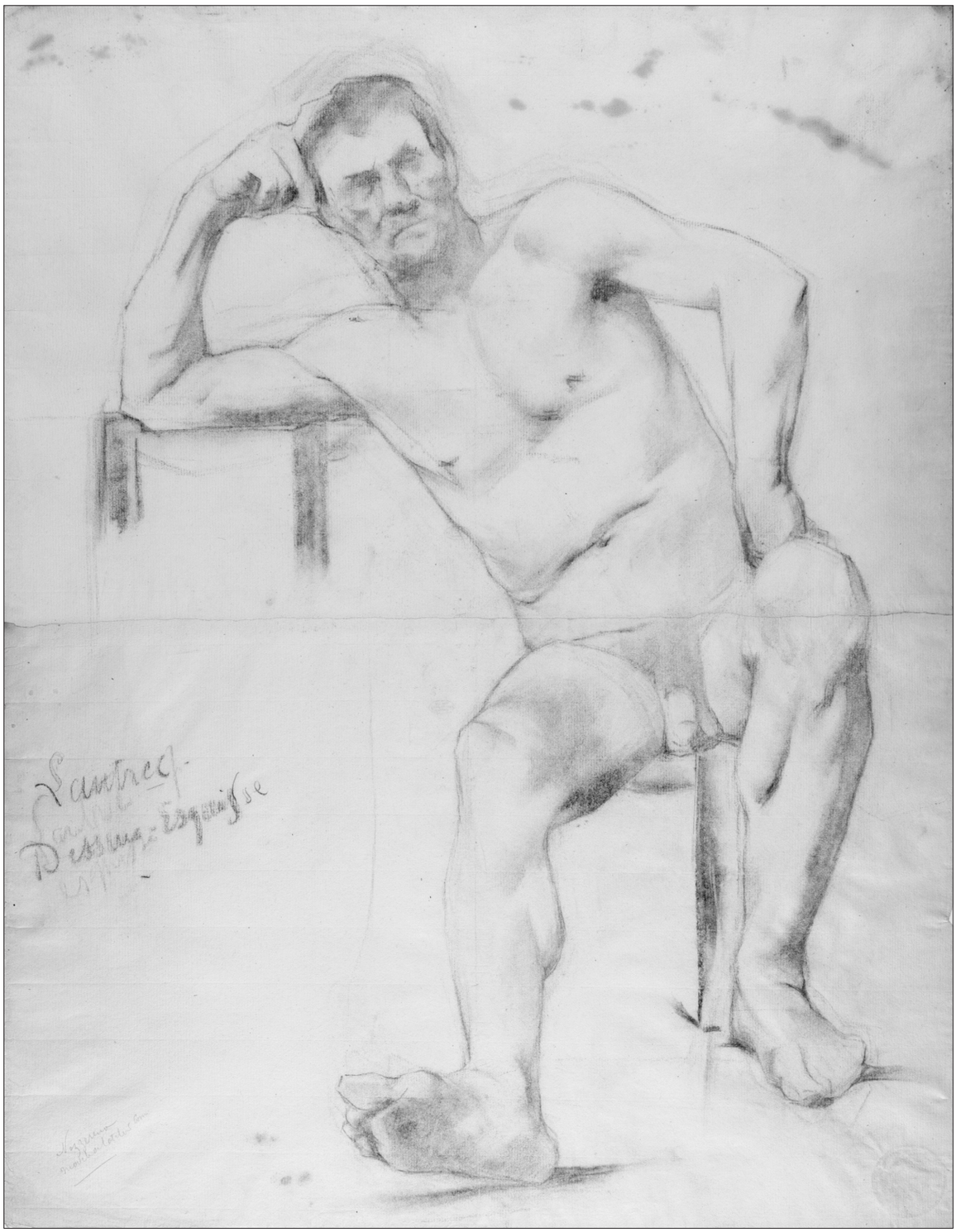


Figure 1-26. Henri de Toulouse-Lautrec, French, 1864–1901, *The Model Nizzavona*, c. 1882–83. Charcoal, with stumping, on cream laid paper. Height: 610 mm; width: 471 mm. Mr. and Mrs. Carter H. Harrison Collection, 1933.881. Reproduction, The Art Institute of Chicago. Lautrec's drawing of a seated male figure shows a number of passages that utilize angular line to describe the movement of contours. Note especially the model's right foot, left knee, and right arm and hand.

Figure 1-27. Student work. Molly Borkowski. This exquisite marker drawing (original in color), invented from a variety of sources, is characteristic of the fluid and graceful movement of decorative line.

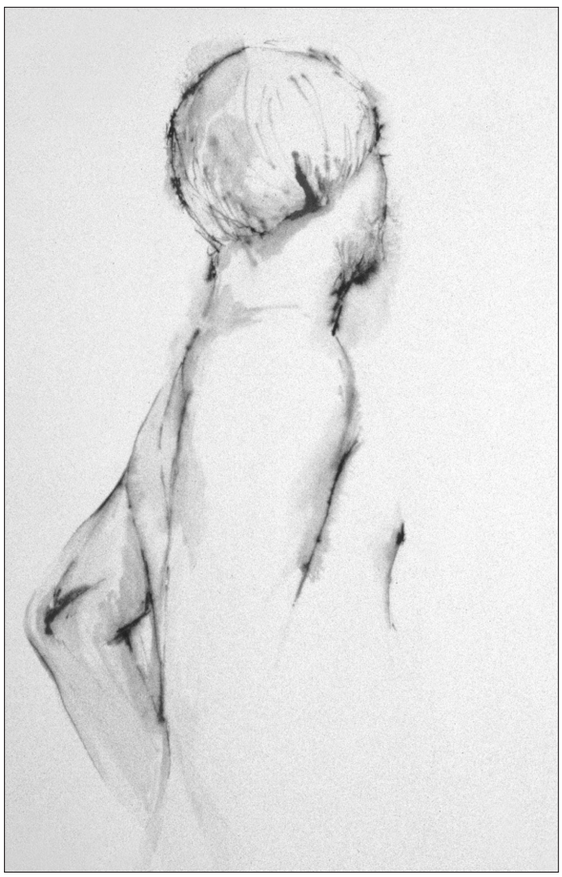


Figure 1-28. Student work. Broken or implied line is utilized in those areas where the contour is not engaged in significant directional changes or overlapping. In this drawing, implied line is found in the model's upper chest, lower arm, and stomach area.

serving traditional calligraphy. The calligraphic line explores extremes of thick to thin, heavy to delicate, long to short. The work of Japanese artist Hokusai is a beautiful example of calligraphic line in drawing.

Broken or Implied Line

Relying on the principle of closure (a perceptual phenomenon in which the viewer participates by visually filling in the "missing information"), broken or implied line is the mere suggestion of an edge or contour as opposed to the explicit definition of an edge or contour (Figure 1-28). The use of broken or implied line creates an "open" shape (as opposed to a "closed" shape), allowing a free exchange between positive and negative space. The drawings of Rico Lebrun and Egon Schiele provide some good examples of broken or implied line.

Altered Line

Characterized by a reworking of line, altered lines are smeared, rubbed, blurred, softened, or erased to create an imprecise line. Subjective in nature, altered lines are capable of conveying motion or movement or a sense of ambiguous form or space because of their imprecision (Figure 1-29). The drawings of Larry Rivers and Michael Mazur provide good examples of altered line.

Agitated or Angry Line

Characterized by irregular or choppy strokes, agitated or angry line conveys the same—a sense of agitation, anger, tension, or a similarly negative emotion (Figure 1-30). Rooted in subjective interpretation rather than objective observation, and considered the "opposite" of decorative line, agitated or angry line should be reserved for a fitting subject. The drawings of George Grosz and Ben Shahn provide good examples of agitated or angry line.

Process or Searching Line

Process lines or searching lines refer to the presence of the initial marks made by the artist in seeking out

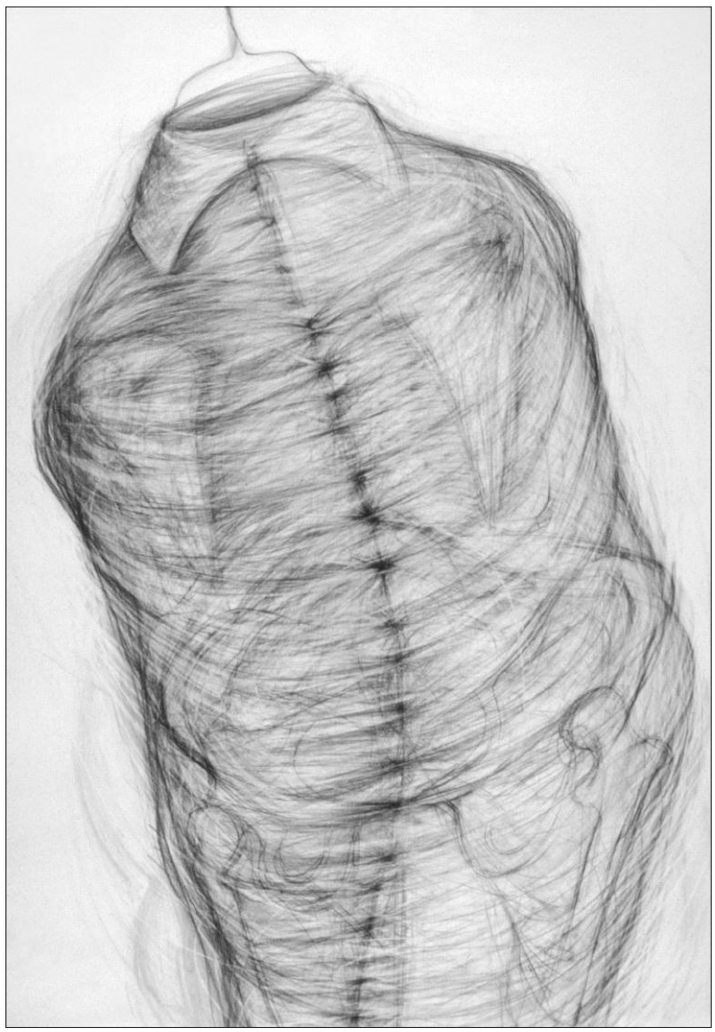


Figure 1-29. Student work. Jason Roda. Erasers are used to shift, smear, blur, and soften nearly all the line work in this drawing of anthropomorphized clothing.

Figure 1-30. Student work. Douglas Borton. This drawing of a screaming man utilizes a dense network of agitated line work that becomes the ground or base tone for the more defined face.

correct or "true" edges and contours (Figure 1-31). They are often considered to be mistakes by beginning drawers and are erased, leaving only a single line to describe an edge or contour. If delicate process or adjustment lines are selectively allowed to remain visible to the viewer, they can add much vitality and life to a drawing and convey a strong sense of the process and search involved in drawing. Numerous examples can be found in both historical and contemporary drawings (Figure 1-32).

Tonal or Dimensional Line

Although addressed here as an individual kind of line, tonal or dimensional line is frequently an integral part of other functions of line previously discussed and is particularly important in conveying a sense of dimension, space, and grounding through line. Variation of

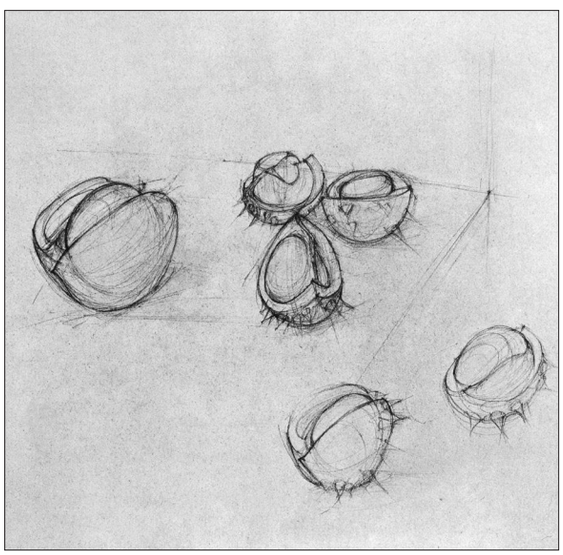


Figure 1-31. Student work (School of Design, Basel, Switzerland). Multiple process lines in this study of chestnuts provide delicate evidence of the search for proportions, contours, placement, and structure.

Figure 1-32. Alberto Giacometti, Swiss, 1901–1966, *Corner of the Studio with Cat II,* 1951 (litho). Collection Fondation Alberto and Annette Giacometti/© The Estate of Alberto Giacometti (Fondation Giacometti, Paris and ADAGP, Paris), licensed in the UK by ACS and DACS, London 2015, Bridgeman Images. Giacometti's approach to drawing provides superb examples of process lines and searching lines as he dives into the structural sequence of both inanimate and animate forms occupying the corner of his studio. It is easy to imagine that if you grabbed the end of one line and tugged on it, the entire drawing would unravel before your eyes!

the line, specifically in the weight of the line (thick and thin), the value or tone of the line (light and dark), and the texture of the line (crisp and soft), is required. This variation can address a wide range of concerns (as discussed earlier) based on the artist's response to the information at hand. Tonal line as it explores contours and edges can respond to the effects of illumination or light source, to the strength or force of an edge, to the "peaks and valleys" of form, to weight and/or tension, to the "speed" of contours and edges, to the spatial sequence of forms, or to a combination of these factors (Figures 1-33 and 1-34).

Figure 1-33. Student work (after Hans Burgkmair the Elder). Kerre Nykamp. This beautiful study of a master's portrait drawing utilizes a broad range of tonal changes in the line work that support the illusion of dimensionality even in the absence of shading.

Figure 1-34. Student work. Kirk Bierens. This still-life study relies on variations in the value and sharpness of line to describe many different kinds of contours, textures, and edges.

STRAIGHT-LINE CONSTRUCTION

When drawing from observation, you are going to encounter all kinds of edges and contours that need to be carefully recorded. When dealing with curved contours, either simple or complex, it is important to determine how the sequence of convex and concave curves moves, and the positioning or location of these curves. What is the length of a specific curve in relation to the entire contour? Where are the outermost and innermost contours of a curve positioned? Where do directional changes take place in terms of an outward-moving curve beginning to move inward, or an upward-moving curve beginning to move downward? An inaccurate depiction of the contours can result in an awkward or unconvincing form, while an accurate depiction provides a solid and sensitive visual description of the form.

In some instances, there may appear to be a random quality in the way a series of curves moves. Consider the way that ivy or grapevines grow, twisting and turning with no apparent pattern, or the seeming randomness of roots, or the unpredictable contours and edges observed on curling or decaying leaves (Figure 1-35). Nature is full of these examples, and you can explore these forms using straight-line construction. Because of the tremendous variation in nature, you may enjoy the opportunity to take some artistic liberties in your interpretation without sacrificing the essential character of what you are drawing.

In other instances, there is an underlying structure that is more rigidly adhered to, and an inaccurate interpretation of curves and contours will result in a drawing that is not believable. The human body is a good example of this, along with objects that are more predictable or uniform in their structure. For example, the series of contour changes along the length of the human body (regardless of its position) must take into account human anatomy and the location of bones and muscles. Although not readily visible, anatomical influences have a tremendous impact on what we see on the surface of the body (Figure 1-36). Likewise, a musical instrument such as a violin has very specific contours and structure. This "anatomy" of the violin must be respected if your drawing is going to accurately convey the instrument, regardless of the viewpoint you have.

Straight-line construction is a process by which you investigate the curves and contours of a form by

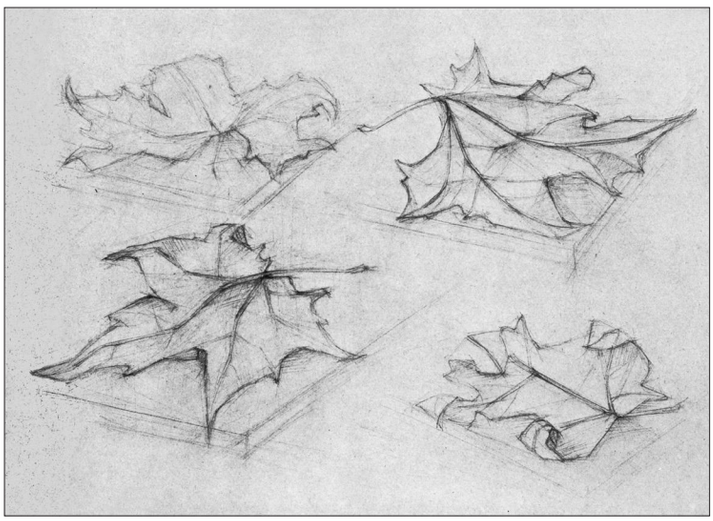


Figure 1-35. Student work (School of Design, Basel, Switzerland). The structure and contours (both interior and exterior) of various leaves are investigated using a very sensitive and delicate application of straight-line construction.

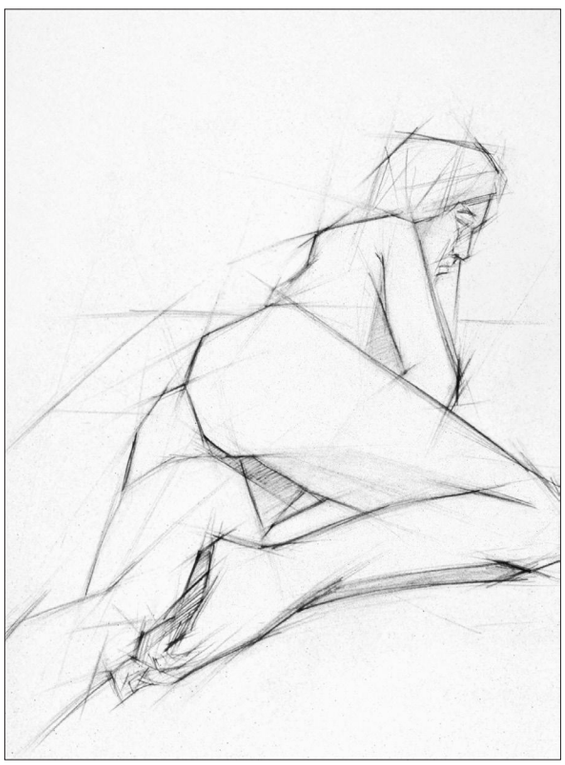


Figure 1-36. Student work. Straight-line construction is used to investigate the series of contours specific to this particular figure and its position in space. Care has been taken to correctly position contour changes so that they coincide with the underlying anatomy of the figure.

translating them into a series of straight lines that describe and emphasize those places where contours shift, overlap, or change direction. This exercise forces you to pay careful attention to the location of contour changes, the subtlety or abruptness of these changes, and the relationship of the parts to the whole.

There are a few ways you can approach this exercise. You can start with a delicate gesture drawing, followed by a broad-based straight-line analysis, working from general to specific. Larger curves and contours can then be broken down into smaller curves and contours. This helps you to maintain overall proportional relationships as your drawing develops. You can also move from a gesture drawing directly to a full straight-line analysis of contours. Keep in mind that gesture drawings are not always proportionally accurate, and adjustments will need to be made as you more carefully observe the form you are working with.

It may be helpful to initially explore this exercise using a form that has some angularity built into it (Figure 1-37). This may help you to see the straight lines more readily and prepare you for the challenge of dealing with more curvilinear contours. If the form you are analyzing is complex, be especially attentive to defining the general size and placement of the major components of the form before moving to a more specific straight-line analysis of the component parts. You can emphasize points of intersection or directional change by shifting the pressure on your drawing tool and gently darkening these passages as a further visual reminder of their significance. It is interesting to note that, with a successful straight-line analysis, you can erase or lighten everything but those places where contours meet, change direction, or overlap, and the form will typically remain readable and coherent.

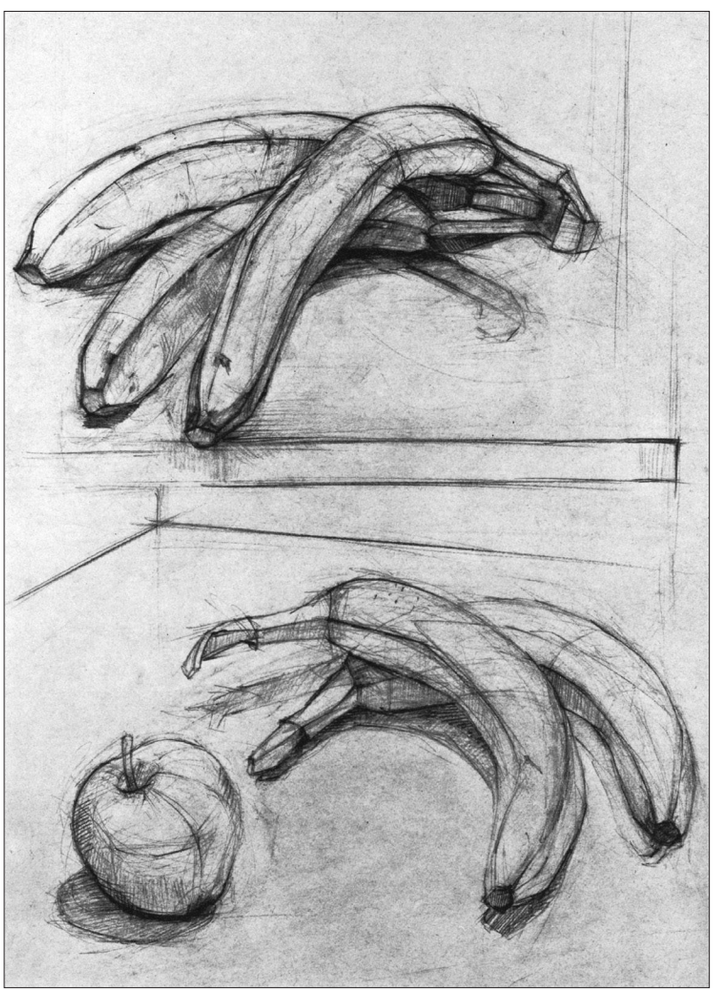


Figure 1-37. Student work (School of Design, Basel, Switzerland). The subtle angularity and planes of the groupings of bananas provide a good opportunity for beginning to explore straight-line construction. This particular study utilizes straight lines along some edges and curvilinear lines along others, making for an informative comparison between the two.

A good straight-line analysis will be composed of a variety of line lengths but will not necessarily engage with minute contour changes or fine detail. This exercise is intended to yield a more general analysis of contours as a guideline for the structure and proportion of what is being drawn and for an eventual translation from a series of straight lines into fluid and descriptive line work and line variation.

PLANAR CONSTRUCTION

Although not strictly an exploration of line, planar construction is a natural extension of straight-line construction and begins with the use of line. Just as contours or edges can be analyzed through straight-line construction, the surfaces of an object or form can be analyzed using planar construction, a process that helps us to understand the dimensional character of what we are observing and drawing. While it is relatively easy to identify the planar surface of houses, a pile of cardboard boxes, or a discarded collection of cinder block bricks, it is another matter entirely to identify planes on a form that is not specifically composed of flat planes, and especially challenging to apply this exercise to an object that has very rounded surfaces (Figure 1-38). It requires a careful analysis of the structure of a form and an imaginative leap requiring interpretation and abstraction in order to better understand that which you are drawing. No two artists will analyze the planes of a human hand, an old leather boot, or a grouping of fruits or vegetables in precisely the same way. In essence, what you are doing is visualizing how a series of flat planes that join together can best describe the directional changes on the surface of whatever you are drawing, using lines to define the intersection of planes and value to define the orientation of planes to the light source.

It is always best, regardless of your subject, to look first for the largest planes that make up the form, progressing gradually to refining those larger planes and identi-

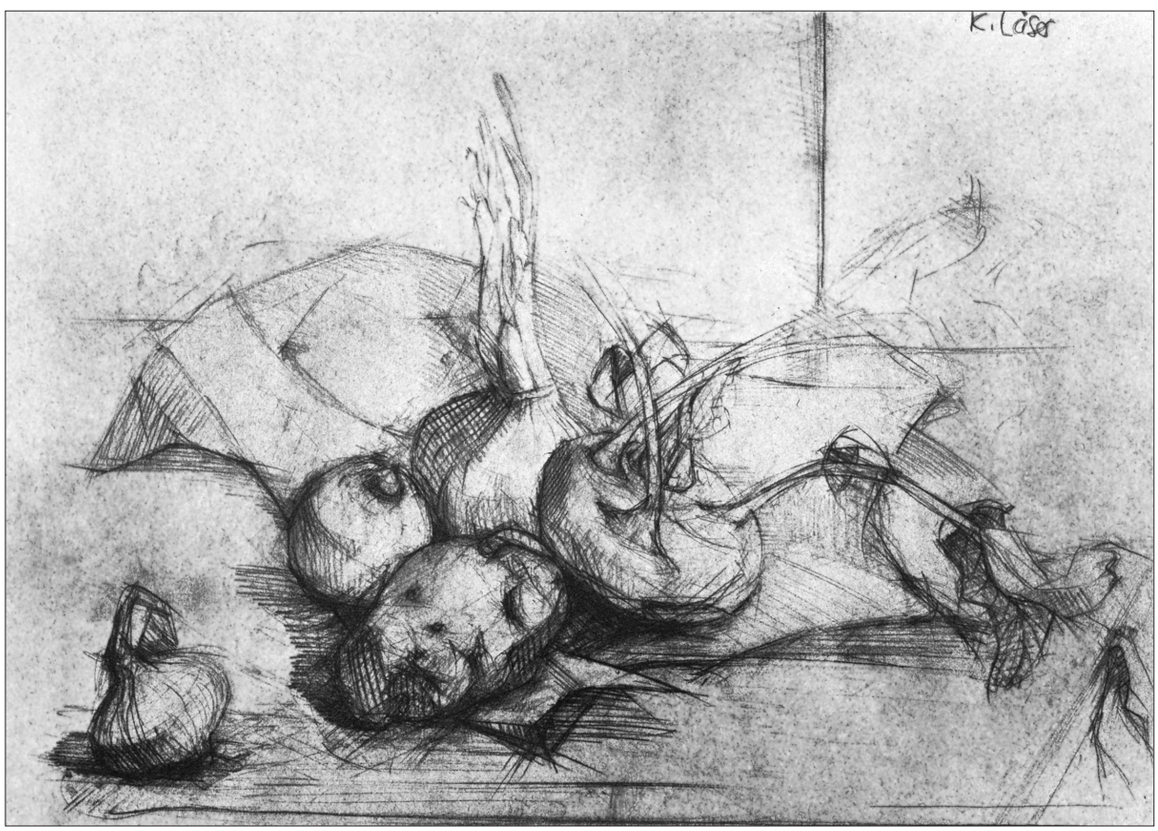


Figure 1-38. Student work (School of Design, Basel, Switzerland). This student study of assorted vegetables begins to define planes on some of the spherical forms, which are heightened with hatching and cross-hatching.

fying yet smaller planes that subdivide the larger planes (Figure 1-39). This process makes use of a general-to-specific approach. It can be helpful to incorporate some cross-contour lines that explore the topography of the form as a basis for locating shifting planes (Figure 1-40). Work in a flexible medium, as you will undoubtedly wish to make changes and adjustments as your drawing progresses. A good directional light source can help you to identify planes simply by noting where there is a transition from light to shadow. When value shifts or changes in response to dimension, it is a clue that the planes of the surface are shifting as well.

When you have defined all the planes you wish to define, you can then strengthen the illusion of dimension by blocking simplified value structure into the individual planes (Figure 1-41). Begin by first noting basic tonal shifts between large planes. You may decide that you want to initially assign a middle value to planes in shadow and maintain the white of the paper for planes in light. Once you begin to block in these tonal changes, you will begin to see a more dimensional quality in your planar analysis, and you will be able to assign a broader range of values to the planes if so desired.

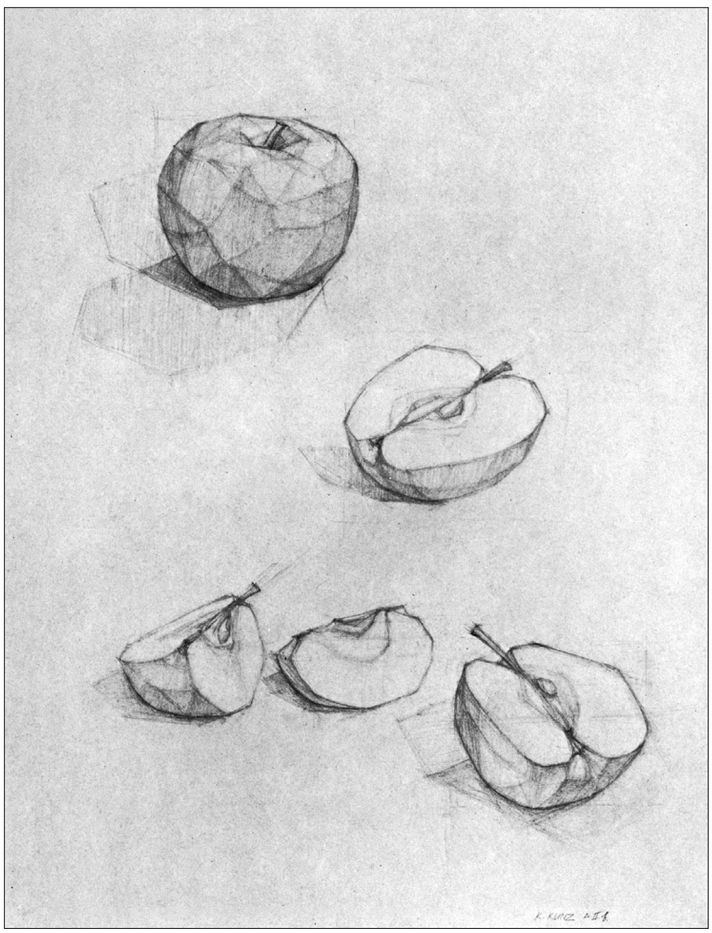


Figure 1-39. Student work (School of Design, Basel, Switzerland). This beautiful and sensitive study of an apple and apple slices combines straight-line construction, planar analysis, and line variation as a means of better understanding the volume and structure of the forms. The addition of subtle value structure helps to reinforce light source and dimension.

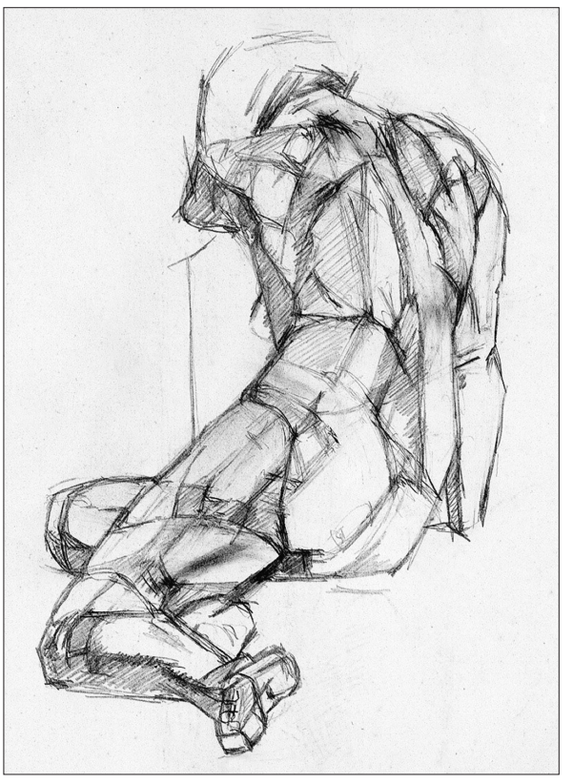


Figure 1-40. Alberto Giacometti, Swiss, 1901–1966, *Nu assis de dos,* c. $19^{22}/_{23}$. Pencil on paper, 50 × 32.8 cm, Kunsthaus Zürich, Alberto Giacometti-Stiftung. Best known as a sculptor, Giacometti was also a painter, drawer, and printmaker. His planar drawings of the figure, both heads and full bodies, likely resulted from his early interests in cubism, in his analysis of form, and in his assertion that "figures were never a compact mass but like a transparent construction." His planar drawings, very different in feel from his attenuated figurative sculptures, can easily be imagined as three-dimensional wire "drawings."

Sighting and the Use of a Sighting Stick

Some of you have been introduced to sighting, and some of you have not. Even for those of you who have been introduced to this method of observation, students often acknowledge that they go through the motions of sighting without really understanding what they are doing and why it works. In this situation, sighting provides little assistance to you and may simply contribute to a sense of frustration and confusion. A basic understanding of the principles of sighting goes a long way in helping you to embrace and use the process to your advantage.

WHY USE SIGHTING?

Many of you have found that you are shining stars when it comes to copying photographs or working from other existing two-dimensional sources. But you may be confounded when you discover that drawing from observation of three-dimensional forms does not yield the same results, the same degree of accuracy to which you are accustomed. It is helpful to understand why this occurs.

Drawing or representing a three-dimensional object on a two-dimensional surface requires in essence a language translation. The language of two dimensions is different than the language of three dimensions in that three dimensions have depth, occupying space both up and down, side to side, *and* forward and backward. You must observe the three-dimensional form and *translate* it into a language that will be effective on a two-dimensional surface, such as a piece of drawing paper. When you draw from an existing two-dimensional source, such as a photograph, the translation from three dimensions to two dimensions has already been made for you. But when you are referring to the actual form in space, you must make the translation yourself. The process of sighting provides a great method for making this translation easily and effectively.

GUIDELINES FOR SIGHTING

A sighting stick is the basic tool for the process of sighting. I recommend using a 10″ to 12″ length of ⅛″ dowel stick. Suitable alternatives include a slender knitting needle, a shish kebab skewer, or a length of metal cut from a wire clothes hanger. Your sighting stick should be straight. I discourage the use of a drawing pencil as a sighting stick simply because the thickness of the pencil often obscures information when sighting. A more slender tool interferes less with observing what is being drawn. However, in the absence of a more suitable tool, a pencil will suffice. Some people like to add color to their sighting stick so that it is visually distinct from what they are observing.

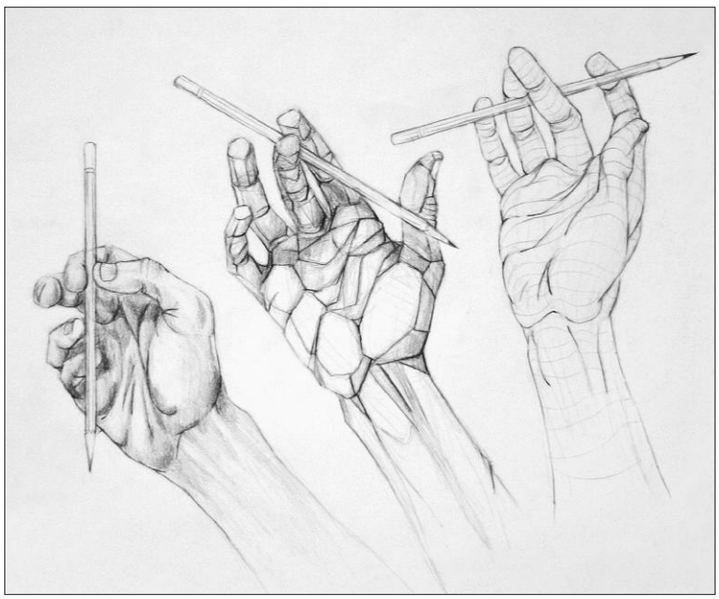


Figure 1-41. Student work (detail). Will Wonderlich. The cross-contour analysis of the hand on the right helped guide the student toward understanding planar shifts and planar construction in the centrally positioned hand study.

It can be helpful when learning how to sight if you initially practice making your observations from a projected image or an enlarged print of a still life or a figure. If you choose to do this, the two-dimensional image you are sighting should be large enough to see with ease and should be positioned on a wall far enough away from you so that you can fully extend your arm. Sighting from two-dimensional information is much easier than sighting from three-dimensional information because the image is already in a two-dimensional language. Once you begin exploring sighting in relation to actual three-dimensional objects, you will recognize the increased complexity.

Because the objective of sighting is to translate observed information into a two-dimensional language, all of your sighting observations will take place in an imaginary two-dimensional plane that is parallel to your face. It may be helpful to imagine that a pane of glass is floating directly in front of your face at arm's length. If you

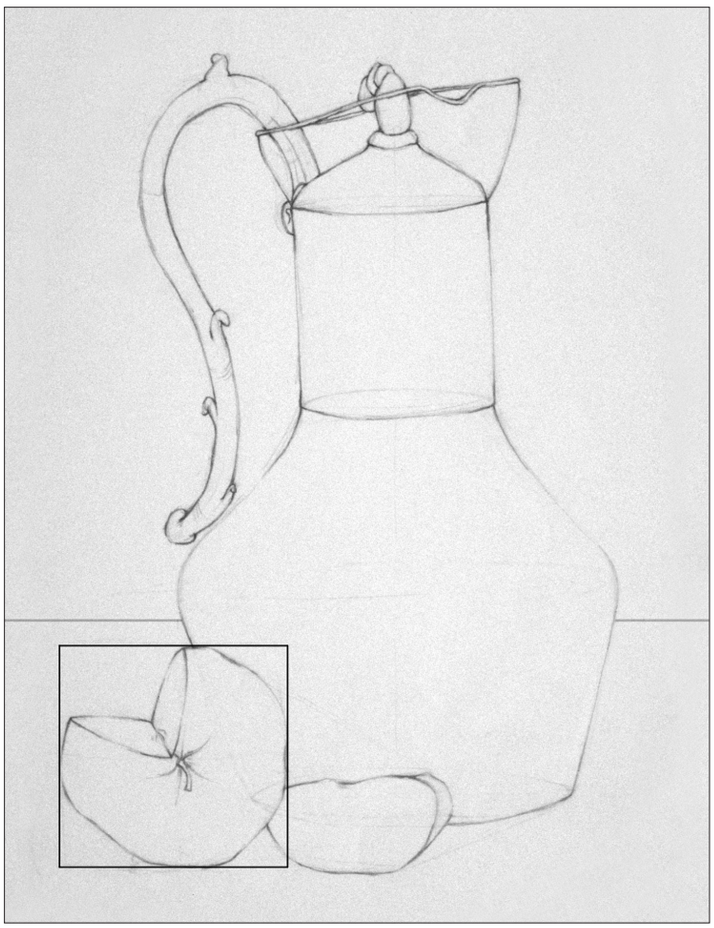


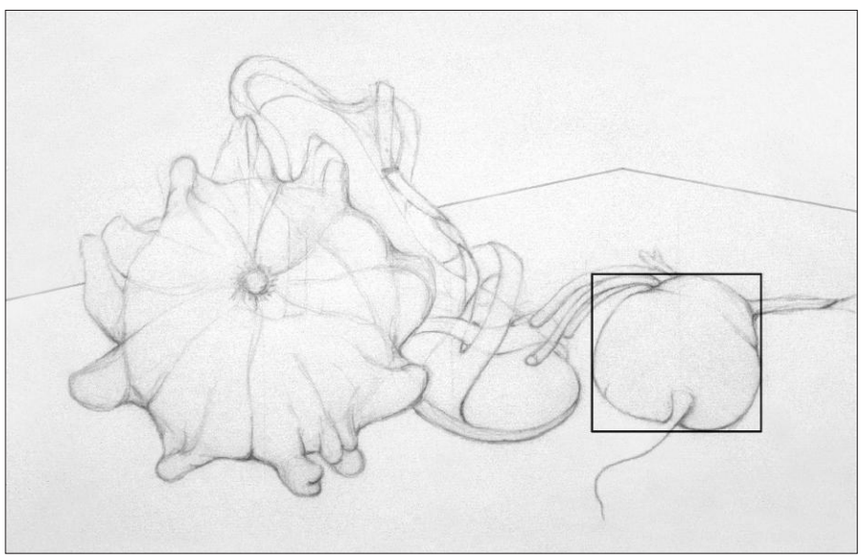
Figure 1-42. Student work. Jennie Barnes. The apple in the foreground of this simple still-life arrangement, boxed in to show relative height and width, is an effective unit of measure.

are looking straight ahead, the pane of glass is parallel to your face. If you are looking up to make your observations, the pane of glass tilts along with your head and remains parallel to your face. If you are looking down, the pane of glass again tilts along with your head. It is *always* parallel to the plane of your face. This imaginary pane of glass represents your picture plane or your drawing surface, and all of your measurements and observations will take place in this two-dimensional plane.

Always keep your arm fully extended and your elbow locked when sighting. This establishes a constant scale, which is especially important when you are sighting for relative or comparative proportional relationships. You can rotate your sighting stick to the left or right, but you cannot tip your stick forward or backward. This is especially tempting when sighting things that are foreshortened. You can reinforce keeping the sighting stick within the two-dimensional pane of glass by imagining that if you tip the stick forward or backward, you will break through the pane of glass. It is also helpful to close one eye when sighting, which further reinforces the translation to a two-dimensional language by using monocular vision (one eye) that flattens what you see rather than binocular vision (two eyes).

If more than one object or a still-life arrangement of multiple objects is to be drawn, you must begin by establishing which object will serve as your *point of reference* or *unit of measure*. Ideally it should be an object that you can see in its entirety and that can be visually broken down into at least two observable relationships—height and width (Figures 1-42 and 1-43). When working

Figure 1-43. Student work. Jennie Pavlin. The extensions of the beet (root and stalks) are extraneous to the main body of the form, and so are initially excluded in sighting the height and width relationship.



with the human figure, the head serves as a good unit of measure (Figure 1-44). In instances where the head is not visible or is partially obscured, another unit of measure will need to be established.

When sighting, you are often dealing with what I refer to as "landmarks." A landmark is any point on any form that you can find or refer back to over and over again, a point that is identifiable. Landmarks usually occur at places where different parts of a form meet or come together (also called *points of articulation*), or where there is a sudden directional change found along the edge or surface of a form, or where forms meet or overlap. It will not necessarily have a name and will not necessarily appear to be a significant part of the object being drawn, but it will be an easily identifiable reference point (Figure 1-45).

APPLICATIONS OF SIGHTING

There are three essential uses for sighting that aid in observing and recording information accurately. The first deals with relative or comparative proportional relationships, the second deals with angles and their relationship to verticals and horizontals, and the third deals with vertical and horizontal relationships between various points or "landmarks."

First Application: Sighting for Relative Proportions

Before beginning the actual sighting process, it is helpful to observe the form(s) you wish to draw (ideally through a viewfinder) and do a delicate gesture

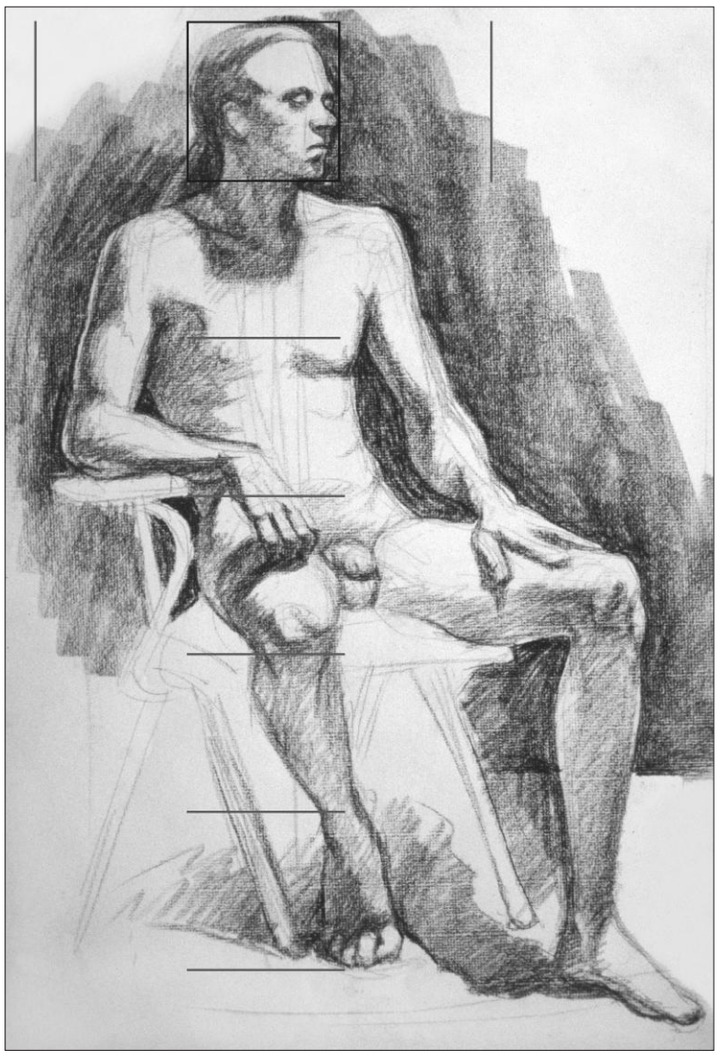


Figure 1-44. Student work. Gypsy Schindler. The head as a unit of measure is sighted from farthest points left to right and farthest points top to bottom.

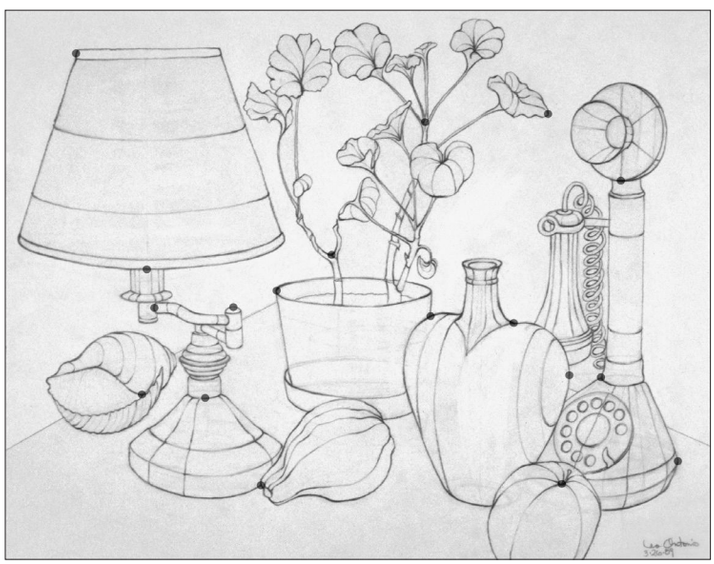


Figure 1-45. Student work. Lea (Momi) Antonio. Numerous landmarks in this still-life drawing, which do not have a particular name for identifying them, are indicated by gray dots.

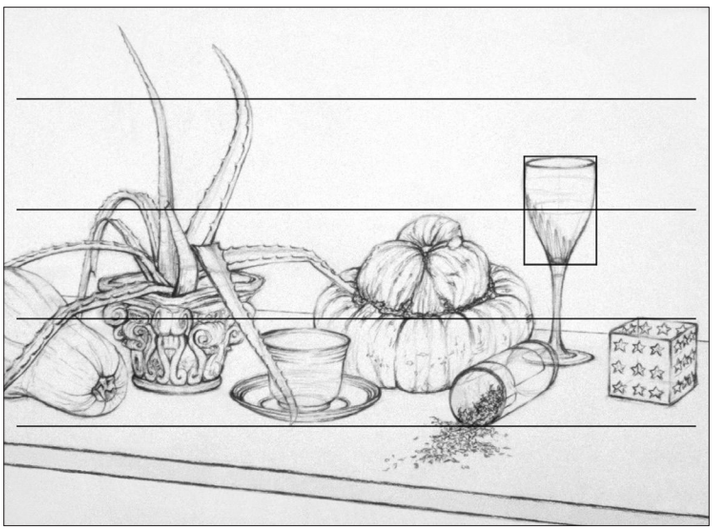


Figure 1-46. Student work. Kirk Bierens. The body of the wine glass has been chosen as a unit of measure. Horizontal lines show the height of the unit of measure in relation to the entire still life.

drawing based on what you see. This helps to "break the ice" of a blank piece of paper and gives a sense of how the objects being referred to will occupy the paper surface. More information on using a viewfinder is found later in Chapter Two.

In beginning the actual sighting process, remember that your point of reference should be sighted and drawn first (Figure 1-46). By aligning one end of the sighting stick visually with one part of a form and placing the tip of your thumb on the sighting stick so that it corresponds visually with another part of that form, you are able to make a relative measurement of the distance between any two parts or points. By understanding this simple procedure, you can apply sighting techniques in a number of ways to help you attain greater accuracy in your drawings. When sighting for relative or comparative proportions, begin by sighting to establish the relationship between the total width of the form (distance from farthest left to farthest right point) and the total height of the form (distance from highest to lowest point) (Figure 1-47). For example, you can sight the width of a fruit or vegetable or a bottle at its widest point by extending your sighting stick at arm's length and recording the distance from one edge to the other through the placement of your thumb on the stick. Keeping your thumb in position on the sighting stick, rotate the stick to a vertical position and observe how many times the width of the form repeats itself in the height of the form. You can then maintain this same relationship in your drawing, regardless of how large or small you choose to represent the object on your drawing surface. I recommend that you sight what you perceive to be the smaller measurement first, and then compare that smaller measurement to the larger measurement. Remember to begin the process by observing what you wish to use as your unit of measure.

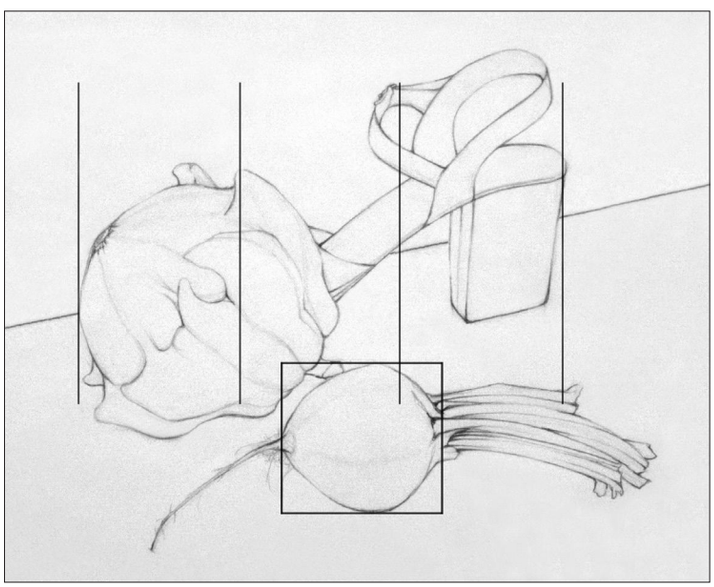


Figure 1-47. Student work. Emily LaBue. The body of the beet, which serves as the unit of measure, is isolated from the root and the stalks that are added later. Vertical lines show the width of the unit of measure in relation to the entire still life.

Begin to visually break the object down, if it is more complex, into component parts, sighting the size relationships between different parts. Work from