PENCIL SKETCHING
Second Edition
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John Wiley & Sons, Inc.
to my wife Jacqueline and my sons Joseph, Andrew, and Matthew
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The purpose of revising *Pencil Sketching* is to update the content and to make it more suitable to the needs of today's users. Although the pedagogical intent established 20 years ago remains valid and intact, most of the examples were in my opinion outdated. There are also techniques I learned after over 25 years of teaching and practice that I want to incorporate in the new publication. Since the purpose of this book is to teach pencil sketching, I believe that a new book, with all new writings and illustrations, will serve the purpose well. Sketching with color pencil is intentionally left out because I feel strongly that the basics in learning how to sketch and draw must start with a simple black and white medium. Pencil is very special because the traditional sketching techniques often go way beyond the tool itself and into the mind and body of the artist. To me, this is the only way to learn and to master pencil sketching. Pencil sketching is the door to all other drawing media, and good pencil sketching skills lay the foundation for a good artist. There are many great "technicians" who can draw, but what I really want is to make you an "artist." I hope this book will continue to be a helpful guide to all future artists.
Pencil: The Medium

Pencil is special. Pencil is versatile. There is not a single drawing medium that can perform so many tasks as a pencil. Because it can produce lines of different widths, the same pencil can be used for shading, texture making, and emulating a wide range of tonal differences.

To some, a pencil is no different from a pen or a marker because they can all be used for sketching. This kind of thinking ignores the fact that the look of pencil is unique and cannot be duplicated. The ability to visually understand and appreciate the differences is essential. The intention of this book is to clarify the differences between pencil and other sketching media. Many publications on pencil sketching and drawing never venture to the heart of things and discuss in detail the unique characteristic of pencil. They all speak rather briefly about the medium and move quickly into techniques and demonstrations. Very few spend time talking about the “art of pencil sketching.”

To me, the real understanding of pencil sketching goes beyond knowing the “state-of-the-art” pencils and accessories. It is about creative seeing, such as how to isolate things from a complex visual field. It is about emotions and feelings and the communication between artist and object. I believe that the in-depth discussion of the fundamentals is what will set this book apart from other similar publications.
Windtower in Bahrain; 3H pencil
Why Sketching?

The trends of drawing in the last decade have included concerns about colors, styles, expression, and speed. These features are responses to new technology and our contemporary lifestyle. Yet these trends have little to do with the pedagogy of design education and drawing. I see sketching as the foundation of a strong design curriculum and a prerequisite course for all future designers. Sketching is about eye–hand coordination. We see, observe, and then record. Pencil becomes the medium through which images are transferred and documented. Pencil becomes the physical link between the eyes, the mind, and the hand. It happens to be the ideal sketching tool because it is easy to pick up and inexpensive to cultivate as a hobby. The flexibility and fluidity of pencil sketching is again another unique feature ideal for beginners. Knowledge and skills learned from pencil sketching are easily transferable to other design subjects, and the benefits are immeasurable and permanent.
Ninomiya Harbor in Japan; ebony pencil, emphasizing contrast
Sagami Bay in Japan; ebony pencil, emphasizing dark value.
Venice, Italy; 2B pencil
Pencils

I always recommend that beginners start with the lowly number 2 yellow pencil. Number 2 is equivalent to HB grade in terms of the hardness of the lead. Its markings are medium in darkness and the lead has a moderate wear, which means that it doesn’t need frequent sharpening. It handles well and has a friendly touch. It’s a perfect pencil for a beginner.

There are many types of pencils that do more or less the same task. The key is to find the few that you are comfortable with. An ordinary pencil comes in different grades from high Bs to high Hs. Harder pencils have the H markings and softer pencils bear B markings. Hard pencils are used primarily for drafting and technical purposes because the hard lead can maintain a very thin, sharp, and consistent line. It was very popular among architects before the age of computers because small and tidy lettering was required to accompany the carefully prepared architectural drawings. However, these high-H pencils are not suitable for normal sketching and drawing purposes. But soft pencil is ideal. Softer leads create darker values and they glide more easily on paper. Yet, because the point of the lead will wear away quickly, the lines from a soft pencil will inevitably become wider and less consistent.
**TYPICAL PENCIL VARIETIES**

- medium = 2 or HB
- soft = 3 B
- extra soft = 6 B

**TYPICAL LEAD HOLDERS**

- the top holder holds 1⁄4" diameter soft lead
- the other two are mechanical lead holders for drafting only
There are also charcoal pencils, layout pencils, flat sketching pencils, ebony pencils, etc. Charcoal pencil has a charcoal core and it works just like regular charcoal stick except for the fact that the tip can be sharpened like a pencil. Because it is encased in wood, it is a lot cleaner to use. I like the flat sketching pencil because it contains a square or rectangular lead that becomes a flat chisel when sharpened. It produces wide, broad strokes with many dynamic variations when twisted and turned. One of my favorites is the classic “draughting” pencil commonly known as 314. It has a rounded, dark brown wood casing with the lead no less than 1/8” in diameter. Because of the large lead, the exposed tip of the 314 is about half an inch long after sharpening. The long tip is valuable in sketching because it can do so many things from making a thin line to a broad half-inch stroke by holding the pencil on its side. It has dark values and the tone is very intense.
Five major pencils and the differences in line quality.

Mars Lumograph H

2/HB (regular pencil)

314 (draughting pencil)

Ebony pencil

Charcoal
Pressure

Light

Hard

Mars Lumograph H

2/HB (regular pencil)

314 (draughting pencil)

Ebony pencil

Prang charcoal
Quick sketch using 314 pencil on sketching vellum. The soft pencil and the fine tooth of the vellum surface are perfect partners in sketching. (Portofino, Italy)
Papers

Pencil sketching can be done on just about any kind of surface from dinner napkins to fancy, smooth bristol board. For beginners, the most important thing to remember is to use the least expensive white paper. I always recommend starting with a plain 8½" x 11" white sheet. The advantage is not just because of the cost but because you can work with one sheet at a time. It is a lot harder to learn sketching on a tablet or sketchbook if you have never done so. The thickness of the tablets and their edges can be a major hindrance to hand movement. This situation is definitely not the best way to build confidence with your pencil. A single, flat sheet allows the beginning artist to rest the palm of the hand comfortably on the drawing surface. The table also serves as a security anchor and allows for better balancing of the hand and prevents shaking. If one side is full, you can turn the paper over and work on the other side. (But try doing this on a thick sketching tablet: working on the back side of each page can be just as hard as sketching on the right side.) Use these inexpensive papers for shading practices or other loosening-up exercises. Once you gain enough confidence and control with your hand, you can then move on to something more fancy.

Good sketching paper comes in many weights and textures. Weight refers to the heaviness (i.e., thickness) of the paper. A 110-lb. paper is heavier or thicker than a 40-lb. paper. Normal drawing paper is between 50 to 110 lbs. Texture refers to the degree of grain of the drawing surface but, unfortunately, there is no numerical standard for the differences. The standard practice is to identify them by their names. Watercolor paper is rough and very grainy while plate bristol is smooth and shiny. There are many commercial brands of paper makers and you should choose by your sketching intent.
Shading and lines on illustration paper (smooth/glossy stock). Notice the lack of variation in value and line quality.

Shading and lines on regular copy paper.

Shading and lines on watercolor paper.
and by how much you can afford. Remain neutral on the issue of cotton fibers versus wood pulp and the whole business of recycled paper, as the differences between them will not affect the outcome of your sketch.

My own definition of a good sketching paper is one that has a moderate degree of roughness; its surface should have a little bit of “grain” or “tooth” that can grab and hold onto the lead. The surface of a very smooth illustration board, however, is not recommended for general sketching. It is too smooth and is therefore given to deep grooves or indentations from the pencil markings which makes it difficult to draw back over them. Although some argue that a smooth surface is better for building up textures, I do not think it is ideal for beginners.

On the other hand, cold-press watercolor paper has a very rough surface and can easily wear out a typical pencil point. It is so rough that the pencil has a very hard time navigating it. A beginner will have trouble controlling the line quality and making a decent sketch. A well-intended straight line often turns out broken and the shaded area becomes laced with small white dots. Rough paper is very difficult to master and is only recommended for advanced artists who are looking for a certain kind of effect.

My favorite paper is the plain sketching or drawing paper in moderate weight (around 80 lbs.). It often comes in several sizes, from small sketching pads to large easel-size sketch tablets. I often carry a small 8½" x 5" sketch book with me for quick visual recording on the run. This is a habit that I developed in my early college days and it has proven to be a most useful practice for someone who loves to draw.
Quick sketch (Serena Inn, Zanzibar, Tanzania; 3H pencil on watercolor paper)
### Accessories

You can sharpen your pencil with a small pocket knife if you don't have an electric pencil sharpener, but I prefer the latter because it tends to produce a longer exposed tip, which is good for the very reasons discussed in the first section of this chapter. A longer tip also prolongs the life of the sharpened lead and thus maximizes the time interval between each sharpening. Sanding boards, emory pads, and sandpaper are all improvised devices to help keep the tip sharp. Use whatever you prefer. Strike on a piece of rock or pavement if you don't have any of the above.

I am not a fan of erasers because I think they produce an attitude of dependency, and this is counterproductive to improvement. I prefer sketching over the mistakes or building on them to create something new and non-static. In case you need one, use either a kneaded eraser or a soft white plastic one. The soft rubber of the kneaded eraser simply absorbs and picks up the unwanted graphic markings without leaving crumbs on the drawings. The plastic white eraser can pick up a great deal of the residue, but leaves crumbs that require sweeping. Neither eraser can erase cleanly. Each will mar the sketching surface and change the texture of the paper. A smooth paper is very unforgiving and any attempt to erase can easily lead to disaster.
LINE DRAWING

The use of simple pencil lines to describe the object. Except in the areas under the arches where spacing between lines becomes very close, the rest of the lines are independent, with clean and single pencil strokes clarifying the spatial edges of the tower.

LINE AND TONE DRAWING

Shading is used to differentiate the light and shaded planes. Short and continuous pencil strokes are used to give a suggestion of shadows; this technique tends to reinforce the three-dimensional quality of the tower.

LINE AND TONE DRAWING DONE WITH 314 PENCIL

The softness of the lead gives a better value definition of the black. It also simplifies the shading process because you can actually use fewer strokes to cover the same area than when you use a traditional No. 2 pencil.
Holding the Pencil

There are many ways to hold the pencil but the key word to remember when sketching is “relax.” Avoid holding the pencil as if you were writing because the writing grip is rather firm and tight. The sketching grip is comparatively looser and easier. Hold the pencil approximately two to three inches from the tip of the lead. The grip position should involve the thumb and the first two fingers only, with the pencil resting comfortably on the inside of the tip of the third finger. Use the second finger and the thumb to stabilize the pencil and to prevent it from slipping out.

The relationship between the second finger and the thumb usually dictates the type of lines and sketching style. When the tips of the two are relatively close together, anchoring the pencil, the entire hand generally folds inward; and thus the mobility and reach of the pencil movement is limited by how far the fingers can stretch. This position is called Position A and is quite similar to the writing grip. It is very useful in sketching short strokes and details, and it gives the artist more control of the tool while it is less prone to making mistakes.

Control the pencil with three fingers.

The grip should be relaxed but firm. Control the movement with the same three fingers.
WRITING POSITION
• tight grip
• no flexibility
• hold very close to lead

SKETCHING POSITIONS
• looser grip
• flexible
• hold farther up the shaft
Position B is when the tips of the second finger and thumb are far apart. The second and third fingers are usually straight instead of being curled inward, increasing the mobility and reach of the pencil. By sweeping up and down with the extended second and third fingers, the strokes can reach six to seven inches. This is an ideal position for shading because the grip is loose and the fingers are much easier to move. This position also allows the artist to hold the pencil sideways and maximizes the effectiveness of the entire pencil tip. Broad strokes are one result of this grip. Simply extend the fingers of the entire hand with the palm down and glide the pencil across the page. The angle of the pencil must be adjusted to the individual artist’s hand and degree of flexibility. One should be able to switch from Position A to Position B in a continuous movement without hesitation or stoppage.

The third position (Position C) involves holding the pencil as if holding a putty knife or small hand tool. The pencil is held between the thumb and the second finger. This eliminates any form of finger or hand movement and is therefore mainly suited for long and broad strokes. The entire forearm is used, giving the artist maximum reach. Depending on the size of paper available and the reach of the artist’s arm, pencil strokes can reach over three feet. This position can also be used to create chisel strokes. Just hold the pencil and strike it up and down using short and abrupt strokes.
Perfect example of sketching in Position A. Focusing on architectural details requires a tight grip of the pencil (for better control). Down/up and lateral movement is minimal. Mars Lumograph H pencil was chosen for the hard lead.

Lower Manhattan, New York; H pencil
Pressure

Applying pressure (force) to the pencil is what gives grace and liveliness to a line. Without pressure, the strokes and lines are plain and boring. A simple line drawing in pen and ink can be quite beautiful when there is a consistency in the lines, as this kind of uniformity can bring out the clarity and lightness of the sketch. A pencil is not a pen, however, and a pencil line should not strive for consistency. A hard lead can provide a line that is relatively consistent when compared with a softer lead. But the beauty of pencil sketching lies in the artist’s ability to apply pressure to the pencil in order to alter the quality of the lines. The striking, lifting and rotating, the occasional nudging and twisting, and the sudden change of the angle of the lead all contribute to a multitude of effects which are unique to pencil sketching. And it is this uniqueness that makes pencil special.

A pencil should and must be treated as an extension of the artist’s hand, arm, and fingers. After all, it is only through this kind of intimate joining that a sketch can be produced. The mechanics of sketching involve not just the motion of a hand holding a pencil, but the entire sensory relay from eyes to brain to hand, and so forth. We observe and examine with our eyes; simplify with our brain and eyes; reason with our brain about what should be kept; record with our hand; evaluate with our eyes again to see if the image looks at all like the one we saw earlier; make instant changes and reevaluate everything again in a perpetual cycle. This is the sketching process in a nutshell. And just as sketching is undoubtedly a mental process that is very personal and intimate, so too is the act of applying pressure to the pencil a personal and intimate experience. There is no scientific standard for how much force one should exert on a certain lead. It is basically a trial-and-error process because you learn from your mistakes and successes. You do it repeatedly to achieve a consistent pattern and you try to keep it that way, but no one can teach you how to do it. Finding the right force...
STROKE AND PRESSURE

Mars Lumograph H

2/4B

314

Ebony pencil

Charcoal

Begin lightly  Increase pressure  Press hard
and knowing how hard to press the lead is something which novices dream about. It takes time and devotion, and there are certainly no shortcuts on this journey of learning and experiencing.

...Time to return from getting too philosophical and Zen-like. There are actually a few tricks one can learn in the exploration of pressure and force. The key here lies in the grip. Since pressure emanates from the fingertips, the grip and the contact between the fingers and pencils are extremely crucial. For example, using the Position B grip, when the thumb is the only finger that exerts the force, the third finger becomes the receiving side and must offer some form of resistance. This knowledge can be taught and learned. The amount of resistance is the key in determining the value of the shading. A darker value is due to less resistance and vice versa. To alter and vary the value of the pencil shading depends entirely on the artist's ability to press and lift at the appropriate moment. Unlike learning how to hold the pencil, this is not something that can be quickly taught, but it must be practiced over time.

I hope this helps to clarify what I said earlier about the personal and intimate experience of sketching. Yes, pencil is the easiest sketching practice to learn. But it is nevertheless a very hard practice to master because of the nature of the material. Still, this should not keep you away from learning how to sketch with a pencil. On the contrary, I hope that this quality will attract you to the medium.
Abbey of San Fruttuosa, Italy
Movement of the Hand

In essence, movement of the hand refers specifically to the act of sketching. The three grip positions described in the previous chapter correlate directly to the three different kinds of movement.

Finger movement (Position A)

Because the grip is relatively tight in this position, movement is limited to just the fingers. Lines and strokes can be drawn by the gentle motion of pushing and pulling the pencil with the thumb and the second and third fingers. Vertical strokes can be easily drawn by moving the fingers up and down while planting the hand steadily on the drawing surface. Horizontal strokes, however, require fixing the finger grip while moving the wrist from left to right and keeping the hand loose at the same time. By turning the hand slightly to the side, you can increase the reach. This gives the artist more freedom to move the pencil and the ability to create longer strokes. The shift in the grip and angle signals the gradual change from Position A to B.
Hand movement (Position B)

The grip in Position B is slightly higher and gives the artist the greatest flexibility to draw a wide range of strokes and lines. By moving the hand, the strokes can cover a larger area. The fingers must be locked in a fixed position, allowing the entire hand to move freely, pivoting from the wrist. The center of the wrist in this kind of movement becomes the center while the hand becomes the radius. Strokes therefore tend to appear as an arc but the effect can be modified by extending the arm.

Strokes tend to be more diagonal; consistently adjust the position of the hand to change the direction of strokes; notice the strokes tend to get wider because of the angle at which the lead strikes the paper.

Position B

Up and down movement of position B. (Note the longer reach and slight arc.)
Taking advantage of the low angle of the pencil and using the entire side of the exposed lead to strike the paper; an ideal position for broad strokes.

Arm movement (Position C and others)

Sketching goes “big time” when the arm begins to get involved. It’s also when you need to move beyond the small 8½” by 11” sketch pad and onto something bigger. By changing the grip and by moving and extending the entire arm, an artist can create long, sweeping strokes that fly across the page (or wall, if necessary). Large format sketching must be accompanied by a proper sketching medium, such as a large pencil with soft lead. Charcoal stick is also a very appropriate medium to use. This kind of movement is very suitable for expressing landscape scenery on a grand scale.
Lines and Strokes

Line refers to a long and continuous thread with a consistent width, while strokes are comparatively short and broken lines in a variety of widths. Line is the residual mark left on the paper as a result of a pencil gliding across it. It is graceful and fluid in nature. Strokes, on the other hand, are strike marks and they are often bold and deliberate.

In sketching, line is used to define spatial edges and describe objects. A variety of widths can be achieved by simply adjusting the angle of the lead. In theory, a hard lead produces a thin and light line, while a soft lead produces a dark and thick line. However, a good quality, soft sketching pencil is equally capable of producing a wide range of lines by itself. It is quite unnecessary to stock yourself with an array of leads because one or two simple pencils will do all the tricks.

In sketching, it is always a good idea to try to use a variety of line widths to avoid a monotonous look. For example, a profile line (a thicker line width) is used to visually lift the object from the background and to make the object look more three-dimensional. Different line widths within a sketch give the sketch a better sense of depth and space. This is especially evident when sketching landscape.
BASIC TEXTURES

A. Short individual strokes; change direction occasionally to create a cross-hatching effect.

B. Short, continuous strokes; change direction occasionally.

C. Continuous M-strokes; change direction constantly.

D. Continuous W-strokes; change direction constantly.

E. Very short M-strokes with constant direction.
Begin with small finger movement; increase pressure on pencil; expand movement to include moving of the hand; use the wrist.
2/HB pencil

Focus primarily on finger movement; adjust angle of hand accordingly.
2/HB pencil

Short up/down strokes using finger movement; glide the hand across the page to repeat stroke; rotate pencil.
314 pencil
Bandstand in Zanzibar, Tanzania; H pencil
Use texture to separate planes and explain the three-dimensional quality of the object.

Use texture to explain the sun/shade relationship.

Use texture to help describe the shapes.
CREATIVE USE OF TEXTURES

Texture and foliage

Separate wall from roof

Describe ground

Describe receding planes

Create contrast

Use contrast to push building forward
Introduction

The ultimate goal of sketching is to graphically interpret the image correctly. Although the manner of interpretation and presentation is an individual matter (and every artist has his or her ways of expressing it), the final outcome of a sketch is often governed by some agreeable standards. The sketch must have some degree of realism and the subject of interpretation must be somewhat recognizable. For example, on the simplistic level, a sketched tree ought to look like a tree and not a person. On the more advanced level, an old tree should not look like a young sapling. The trunk and the bark should somehow reveal its age. A house with a stone facade should be drawn so that the subtle differences in the joints and mortar can be revealed and highlighted.

A page from the sketchbook.
Observation and Recording

In order to correctly interpret the image that we are attempting to sketch, we must spend time observing it carefully. Careful observation is a very important first step in the making of a good sketch. Observation must be keen and sharp. Repeated observation and recording are required to truly understand the subject. Sometimes measurements are taken just to make sure that the proper relationship is correctly portrayed. Landscape sketching (and particularly the sketching of trees) provides one of the best vehicles to demonstrate the importance of observation and recording. Measurements and recordings have an amazing benefit for designers because these correct and properly proportioned images can become the visual data bank from which they can later derive inspiration and ideas for future work.
The size of the picture frame is at the discretion of the artist.

The picture frame (same as picture frame in composition) can be the paper itself.

The picture frame is a hypothetical frame between the object and the artist.

The picture frame is used to isolate the object of interest.
Landscape Sketching

A simple landscape sketch often includes the following components: trees, shrubs, grounds, hills, water, and some man-made elements, like houses. A good landscape sketch is a careful composition of some or all of the above components. We seldom sketch a single tree, a lonely hill, or a body of water without including its surroundings. It is hard to imagine a hill without trees unless it is in a desert environment. Therefore, we must train our eyes to see these landscape components as a picture of good composition. This means first selecting an appropriate viewing angle. When and if nature fails to give us that kind of ideal setting, we must then move the components around in order to achieve a good composition. I will discuss composition in detail in a later chapter. At this time, the focus is to emphasize the accurate recording of the images, and the first step begins with keen observation.
Trees

Trees are probably the most important landscape elements of all, as well as the most difficult to sketch. This is because a tree is a living organism and it grows and changes in the course of time. Some trees shed their leaves in winter, and some trees flower in spring. So seasonal differences can alter a tree’s appearance; but so can wind, snow, and ice. The species of tree can dictate the branching structure, and thus the entire appearance, with or without leaves. Individual trees with plenty of room to grow look different from trees found in a group setting. The trunk of an older tree often reveals the crackling of the bark as well as broken or twisted branches near the base of the canopy. Often, a portion of the roots at the base of the trunk is revealed as the soil near it is slowly eroded away. These characteristics are a result of careful observation and recording. Every artist should have his or her own way of observing and looking out for details and special features. They must also find a personal way of recording the results. Recording is how sketching begins.
Mature tree with smooth bark (e.g., beech)
Mature tree with cracked bark (e.g., oak)
A mature elm
A mature maple
Step 1: Outline the form and major trunk structure.

Step 2: Fill in minor branching.

Step 3: Add details and shading.
Trees in the Foreground

Foreground trees are used mostly as framing elements in composition. They frame the picture and direct your eyes toward the center of the page where the theme of the sketch often resides. Foreground elements should be drawn with some degree of detail because they are, after all, closer to the viewers. However, these details, such as bark textures, twigs, leaves, etc., should be drawn in such a way that they do not steal the attention from the center of attraction. Use contrast in the level of details as well as contrast in light and dark to differentiate the fields of visual grounds.

Left side was a rough outline and unfinished portion of the sketch. (#2/HB pencil)
Trees in the Background

Trees in the background are often seen in groups. The different levels of depth are therefore compressed and the details are often lost. However, the form and shape of trees must not be forgotten even as they dissolve into the background. Use simple lines and appropriate line width to express these masses. Use shading to simplify the layers of foliage, and use dark shading and highlights to bring out the three-dimensional quality of the subjects in the background.
STROKES, TEXTURES, AND FOLIAGE

Sun

Shade

3H pencil
Landforms

Landforms consist of hills and valleys and flatlands with occasional rock outcrops. These elements do not appear alone in most landscapes but exist with one or more other elements. For example, hills and valleys often appear together as contrasting and complimentary elements; the horizon of a flat landscape is often interrupted with outcrops of rock formations or mountains in the background. These combinations make the picture more interesting to look at and are better subjects to sketch. They provide more layers and help create a more interesting composition.

Again, in sketching landforms, the artist must carefully observe the interaction and expression of these elements. Simplifying the multi-dimensional layers of the land into a few simple line strokes is the key to all good pencil sketching. The trick is to avoid sketching and recording all the details. Look for the structure of the land and identify the major flows of the hills and valleys. Identify the major breaks in the ridge lines and use simple pencil strokes to rough out the profile of the ridge. Observe the direction of the sun and how the ridges and valleys react to the specific light conditions. Observe how the sun interacts with the ridge lines and how the valleys react to shadows and shades. Test and see how a singular twist-and-turn pencil stroke can simultaneously express the three-dimensional aspect of the landforms. Use parallel shading to express the slopes and rough terrain.

Pencil is by far the best medium to render landforms because of the expressiveness of the soft lead tip. Because it is so responsive to pressure, the soft tip can turn into a broad chisel point within seconds. The width of line can vary with each turn, creating a simple yet expressive illustration of landscape profile. No other drawing media can accomplish as many effects as the pencil.
SIMPLE EXPRESSION OF LANDFORM

A simple ground line

Slight undulation (notice slight pressure as the lines are pulled across the page)

Suggests distance landscape is higher

Suggestion of valley

Valley deepens
Distant hills

Shading increases sense of depth

Series of mountain ranges—shows roughness of the topography
#2 pencil on watercolor paper

Qüląng, China; #2 pencil
Water

Bodies of water are usually contained as a lake, a pond, a river, a waterfall, or an ocean. In other words, water cannot be seen and drawn alone. There is often something else besides water, something that holds it, something that frames it, or something that allows water to fall on it. There are the riverbanks, the shorelines, the edge of a swimming pool, the edge of a fountain, and the rocks or cliffs beside the waterfall.

Water can also be expressed indirectly by sketching the associated subject matter. For example, by sketching a boat with waves around it you imply that the boat is bobbing in the water. A few sails on the horizon line create an image of a distant regatta in full action. Reflection brings out the mirror effect and stillness of the water’s surface.

Water seeks a level and horizontal surface, so the best way to sketch it is to start with a simple horizontal line by pulling the pencil across the page. To maintain a sharp and consistent line, turn the pencil slightly when pulling it across. Use short horizontal strokes to create an uneven surface, and use slightly curved horizontal strokes to show the waves in action. Repeat these patterns in a horizontal manner down the page if necessary to give the sketch a sense of depth. Varying the values of the lines and shading also suggests motion on the water’s surface as well as how the water reacts with light.
SIMPLE EXPRESSIONS OF WATER

Horizon lines, with no sense of distance.

Landmass on both sides encloses the water.

Tonal differences in shading reinforce the sense of distance and strengthen the presence of water.

Adding sailboats further reinforces the feeling of water.
Water can be best expressed by showing that it is contained and framed.

For example:

1. Waterfall
   • shows the rock outcrops and vegetation on both sides of the fall

2. River
   • shows the riverbank, with or without vegetation (depends on scale and distance)
Shading portion of sky as framing device.

Different size sailboats suggest distance—depth of visual field.

Shading the sea to suggest waves.

Use curvilinear lines to highlight the wave action.
Drawing buildings can be a lot of fun. Basic building form is somewhat rectangular in shape and it modulates light and shadow more vividly than landscape does. Because of the angular relationship between the planes, the tonal contrast between them is sharp and strong. Vertical planes include all the walls, columns, windows, gateways, doors, etc. Horizontal planes include ceilings, floors, terraces, tabletops, flat roofs, and minor horizontal surfaces. A pitched roof is an inclined plane, and the inside of an archway is a slightly curved plane. These planes come together to create spaces. Depending on the direction of the sun, one or more planes may be in sunlight while the opposite sides of the same planes are in shade. Similar planes also cast shadows, and the tonal values of the shadows are generally darker than those of the shaded planes. A good sketch is the result of looking for ways to develop a meaningful pattern and manipulating the various tonal values. For example, the details and pattern of the masonry of a very interesting house may have to be sacrificed if the plane happens to be in direct sunlight, as it is sometimes more important to establish a strong tonal contrast than to show the details.
Geneva, Switzerland; #2/HB pencil
Bear in mind that texture and pattern play a very important role in the sketching of a building. Patterns are used to suggest materials and methods of construction. They are sometimes used as tonal fillers to cover a void, perhaps a blank wall. The purpose is to use them strategically to clarify the different layers of planes and articulate the three-dimensional quality of the object. Most of the patterns are made up of different strokes that are drawn in many directions, from parallel lines to cross-hatching. The key is to follow the direction of the plane while avoiding obvious consistency and dullness. Always use some diagonal pattern to break up the monotony, and liven up the situation by reserving some strong white planes for contrast. Use dark shadow to exaggerate the depth of the space and to enhance the readability of the subject.
Street scene in Basel, Switzerland; #2/HB pencil
Sketching the Cityscape

City and town are filled with visual excitement and are some of the best subjects to sketch on location. Cityscape tends to be dominated by buildings, but it is the spaces between buildings that become the most attractive thing of all. In addition to the different styles of architecture, street furnishings such as streetlights, signs, awnings, storefronts, and display windows all contribute to enhancing the colorful street life. This sort of multidimensional space is ideal, as it has all the proper ingredients to make a good sketch. They include: a controlled space with strong vertical and horizontal reference planes; interesting architecture; great potential to manipulate light and tonal values; and most important of all, a scale which allows the viewer to walk right into the space through the sketch. The emotional affinity possible in this kind of sketch is far more seductive than a wide-open landscape.
I mentioned the act of observation in the previous chapter as the most important part in sketching. Here I would like to reemphasize it. A good sketch begins with careful observation and creative seeing. Creative seeing has to do with learning how to isolate things. Earnest Waton said in his book *The Art of Pencil Sketching* that “in pencil drawing, one always avoids any leaning toward photographic simulation.” How true that is. Sketching is about capturing the essence of the real thing. A sketch represents a new language, very much like a shorthand that records the real thing with abbreviated symbols of lines and textures. Creative seeing is about finding the prominent feature, showcasing it, and discarding the rest. It is about capturing the skeletal structure and the spirit that transcends it. Surely, the real thing can be a disorganized mess, but a good sketch knows what to discard.

Composition is part of the entire creative seeing process. It involves visual selection, visual ranking, and visual focus. Perhaps we know what to discard, but what do we do with the items that we keep? How do we rank them in the order that we want to emphasize them in a sketch? For example, should the focus be on the doorway or the windows? How do we isolate the point of interest and use contrast to highlight the importance? How do we balance tone and value, and how do we frame the sketch in order to visually lead the viewers into the picture? By addressing these questions successfully, a good composition has the rare ability to unite the artist and viewer both visually and emotionally.
A quick tonal study to explore light and shade; explore ways of framing the picture area.

SKETCHING: ISOLATION AND ABSTRACTION

EXAMPLE 1: TYPICAL LAS VEGAS STRIP SCENE

Knowing that there is too much to sketch, one must first isolate the object of interest by putting a frame around it.

Isolate image area; sketch a quick massing diagram to check scale and proportion.

A quick tonal study to explore light and shade; explore ways of framing the picture area.
FINISHED SKETCH (full-size with ebony pencil)

Shade the roof and use contrast to separate it from the domes and tower.

Ignore cars and other foreground material; move palms over to the left to use as foreground framing device.

Highlight overhangs and eaves with darker tones to exaggerate the 3-dimensional quality of the architecture.
EXAMPLE 2: PLAZA, TOKYO FORUM

The intent is to sketch the space between buildings; the frame in this case must therefore include the two rows of trees (which creates a large picture frame).

SKETCHING: ISOLATION AND ABSTRACTION

• establish a simple massing study
• identify all reference planes
• a row of trees is a typical vertical reference plane
• the ground plane is a typical horizontal reference plane

THUMBNAIL
FINISHED SKETCH (Full-size with 3H pencil)

- avoid overdoing it
- take out details, simplify the forms
- use simple lines and shading.

Shading of ground plane clarifies the tree forms.

Darker contrast at center of vision—this is where you want your eyes to focus.
SKETCHING: ISOLATION AND ABSTRACTION

EXAMPLE 3: MOUNT AUBURN CEMETERY

The intent is to sketch the tree in the foreground plus a few tombstones and the monument. The key is to ignore most of the background; you must learn how to visually lift your objects of interest up from the messy background.

THUMBNAIL

Consolidate all backgrounds into a simple shaded plane.
Notice the broad strokes created by the rectangular chisel-pointed lead; it can cover an area quicker than using a sharp, hard pencil. The chisel point is an excellent choice for sketching trees—especially the branches and twigs.
KEY ELEMENTS OF COMPOSITION

1. FRAMING
   • using foreground devices to frame the image area
   • using foreground devices to direct the attention toward the
     "theme," which is placed near the center of the page

A typical sketch

Framing device

Framing device
Foreground tree, tree trunk

Foreground foliage, hanging branch, and rocks

Corner of a foreground building.
Shadows of trees on the ground

Contrast between dark planes and bright object

Framing by balance—strategic placement of the theme and using the "Void" as a frame (reverse framing)
A seemingly balanced composition may be static and boring.

A composition taking advantage of the frame and shifting the thematic elements to one side; using the sky as counterbalance.
The key in learning balance is to avoid equal emphasis within the same picture frame.

This shows a static composition.

This shows a more dynamic composition by moving the pivoting point ("p") off to one side.

This arrangement takes advantage of the space to the right of "p" and uses it to balance "A"—a very effective strategy when used with framing.
3. **CONTRAST**
Tonal contrast; difference in lighted and shaded planes; difference between light-shade-shadow.

- Plane in the sun
- Plane in the shade
- Shadow

Diagrams showing light and shadow effects in architectural designs.
Tonal contrast at the base of the canopy is used to separate the trunk from the canopy.

Tonal contrast between building and tree trunk.

Reflection in water suggests the height of the buildings and the movement of the water’s surface.

Tonal contrast between foreground and background landform suggests the valley in between.
I believe sketching from memory is a discipline that produces great designers. Design is, after all, a creative process that involves recollection and imagination. Sketching from memory deals with the recollection of imagery, perhaps from many different situations, and rearranging them to make a new composition. This is design. It takes imagination to put these images together; and new images (sketches) are often the vehicles that help the designers visualize their new designs. Therefore, design effectiveness to some extent depends on the speed and fluidity of recollection and sketching.

Sketching from memory requires a resourceful memory bank and the only way to stockpile the memory bank is through creative seeing and on-the-spot sketching. The more you sketch, the better you can remember. Many students can draw trees and buildings well but find it difficult to tackle cars or people. The reason is very simple. They seldom spend time observing people and cars; they seldom observe the relationship between different parts, how they interact, how they
SKETCHING FROM MEMORY

1. You must first establish a reference frame (a way to contain the image area).

2. Horizon: i.e., eye level
   Ground: foot level

The assumption is that the normal distance between horizon and ground is approximately five to six feet. This establishes a reference scale.
affect textures, and how they modulate light and shadow. The physical eye is very similar to a camera’s lens. It captures everything without discrimination and filtering. Creative seeing, as described in the previous chapter, is a selective seeing process. Our eyes must search, identify, compare, isolate, and filter everything we see. This in combination with a methodical way of sketching will make sketching from memory an easy and natural task.

Depending on the subject matter you want to sketch, the first step in sketching from memory is to draw a horizon line across the entire page. Pick a center point on this line and draw two lines from the center towards the lower left and right corners. Then draw a second horizontal line across the page approximately one inch below the first horizon line. At the two points where this lower line intersects with the two diagonal lines, draw two vertical lines about 3 to 4 inches high. This move establishes a framework for all the recalled objects. The distances between the reference lines are all relative and must be judged with your eyes from trial and error. Likewise, the scale and size of the objects can be adjusted accordingly.

**Creative Use of Visual Scale**

- Take the distance between horizon and ground as five feet.
- Repeat the same distance on the ground line three times to get 15 feet.
- Transfer the 15 feet up as vertical reference line.
Use initial 15-feet reference to construct the side of the building. Set the window at a certain height.

Use initial 15-feet reference to approximate the bottom of the tree canopy.

Use initial 15-feet reference to construct shorter buildings.

Put a larger human figure in front to suggest the depth of space.

Extend horizontal lines forward to suggest pavement.
Finished drawing in pen/ink (mark-up sketch done in pencil).
Pencil sketching can be done anywhere. Most of these sketches were done on the spur of the moment while traveling, and without too much consideration for composition and framing. They are spontaneous and quick. They record rather than express, describing the facts instead of interpreting hidden meanings. They are intended to be simple in order to illustrate how easy a technique pencil sketching can be.

Most of the sketches were drawn with regular number 2 pencils. They demonstrate that pencil sketching does not have to be an elaborate process. Unlike water coloring or painting, there is virtually no “prep” time involved. All you need is a piece of paper and a pencil.
Hotel in Pasadena, California; #2 pencil
3H pencil
Japanese temple, #2 pencil
Curbside check-in at Kansai Airport, Japan; #2 pencil
Steel, glass, stone (subway station at Tokyo Forum; HB pencil)
Series of 5 sketches from Zanzibar done on 70-lb. regular drawing paper with Mars Lumograph pencil.

Dispensary building, Zanzibar; Mars Lumograph H pencil used for detail and good lead.
Waterfront in Zanzibar
Series of 5 sketches of interior furnishings done on 100-lb. vellum bristol sketching paper with 314 draughting pencil.
#2 pencil for first sketch; 3H pencil for finished sketch
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