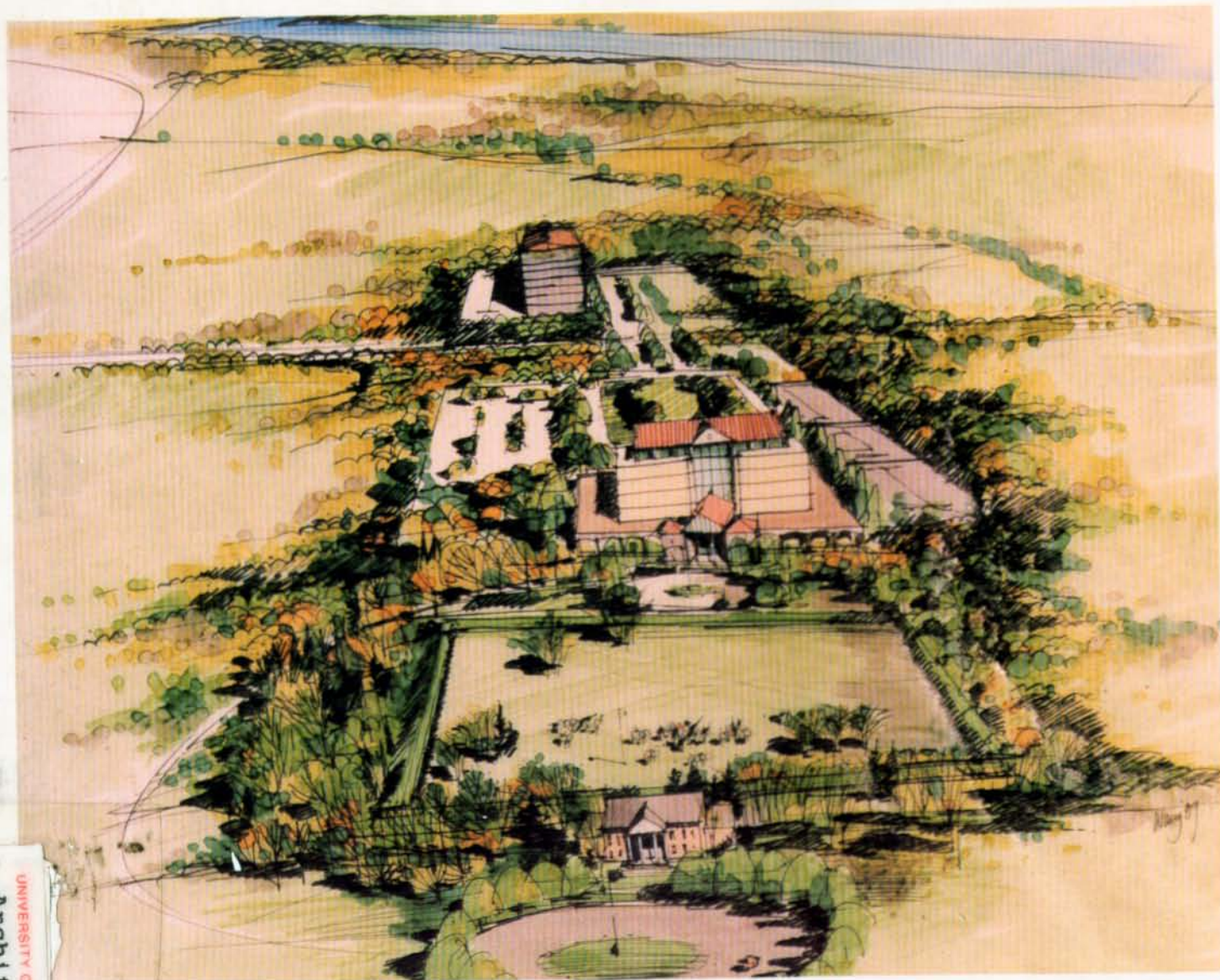


# S K E T C H I N G



WITH

# MARKERS

---

SECOND EDITION

THOMAS C. WANG

UNIVERSITY OF SYDNEY  
Architecture



*To Joseph, Andrew,  
and, Matthew*

**Title:** New Territories, Hong Kong

**Original size:** 9 x 17 inches

**Medium:** Pilot razor point and watercolors

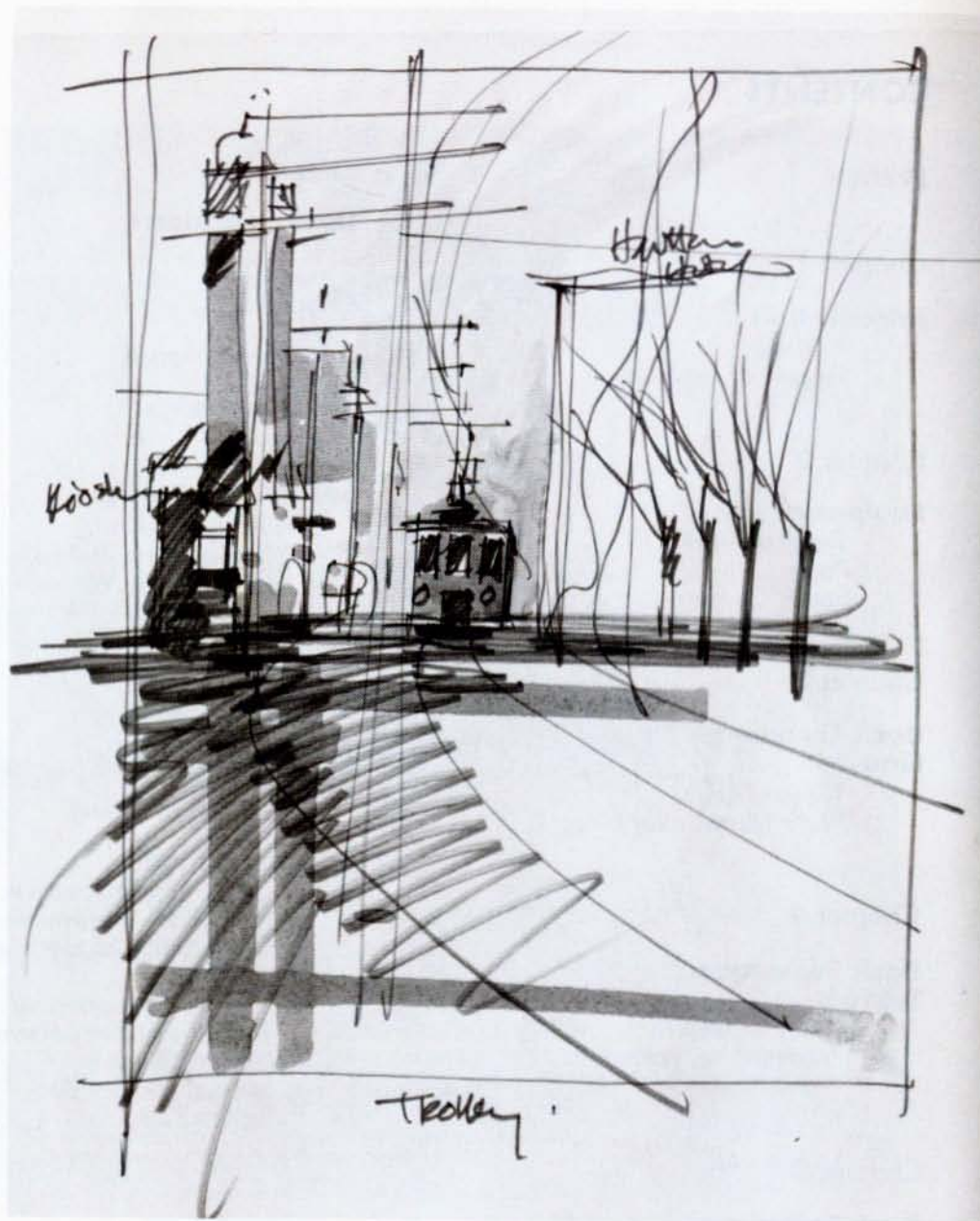
**Technique:** wash



## PREFACE

Markers are probably one of the most popular sketching media. They are versatile, expressive, colorful, and, above all, easy to use. Yet, because of their ability to adapt to a wide range of drawing techniques, markers are still used primarily as a substitute for other traditional sketching media. For example, the fine-point marker can be used to duplicate the performance of an ink pen. Likewise, the rainbow selection of Flair pens is used like an ordinary color-pencil set. Markers are popular because of their ease in handling and simplicity, rather than for their uniqueness, construction, and range of nib sizes and inks. This, unfortunately, does not encourage the development of drawing techniques specifically for markers. If this pattern persists, markers may always hold a second-fiddle position to pen and pencil, which have an ancient and respectable heritage.

This book emphasizes the unusual versatility of this remarkable drawing instrument and demonstrates its unique ability to combine its own quality harmoniously with many other media such as watercolor, pen, pencil, and ink. It is my intent to encourage the use and increase the awareness of the marker as a superior sketching tool with unique qualities that can only be expressed thoroughly through the art of sketching.



**Title:** Urban Spatial Study

**Original size:** 8 x 11 inches

**Medium:** markers on white tracing paper

**Technique:** quick sketch



## INTRODUCTION

### A Sketch

A sketch, by definition, is a rough drawing that represents the chief features of an object or scene. To be more precise, a sketch should accomplish the following:

- capture the essence of an image
- give a simplified version of a complex scene
- provide an abstract graphic description of reality
- create a graphic expression with the minimum amount of lines, tones, and textures
- serve as a quick reproduction process

**Title:** Washington, D.C.

**Original size:** 9 x 13 inches

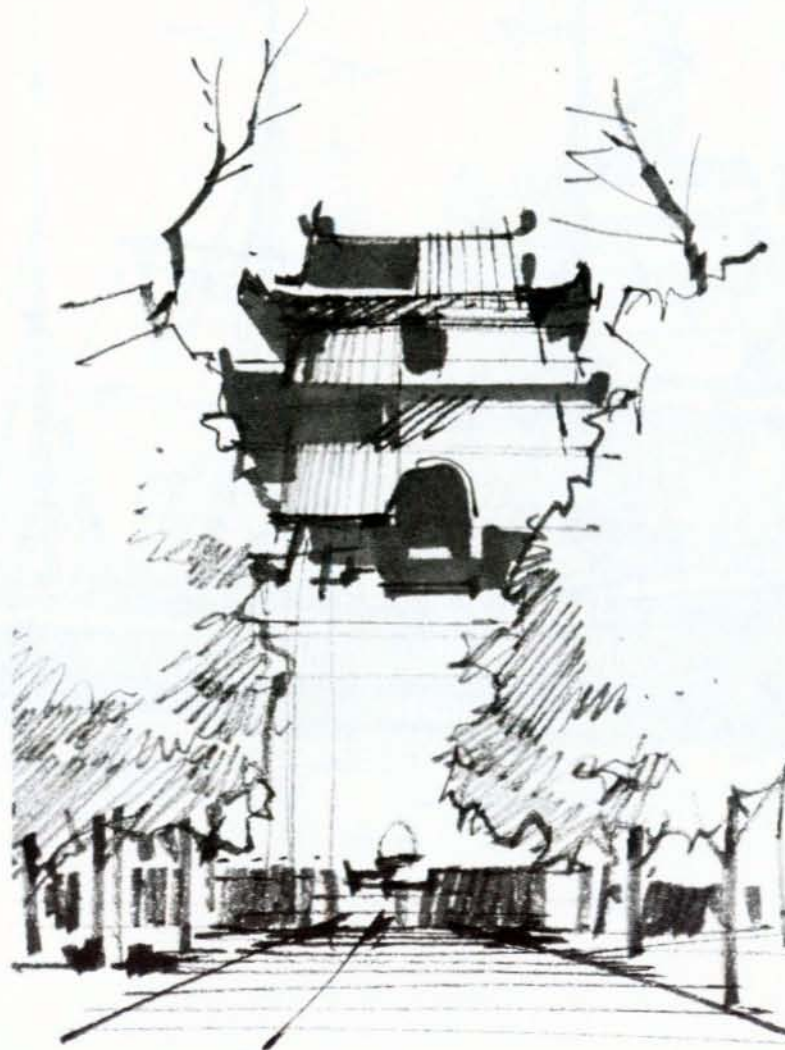
**Medium:** black Eberhard Faber (pointed-nib) on Aquabee felt-tip-marker paper

**Technique:** quick, semibroad strokes

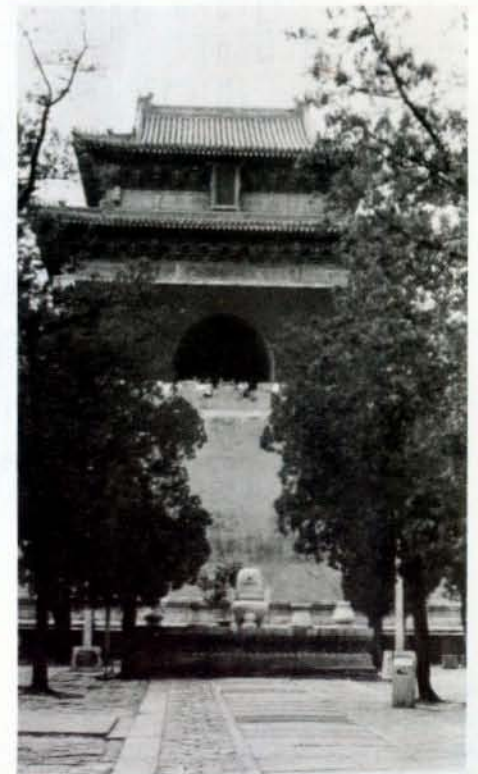


## Degree of Abstraction

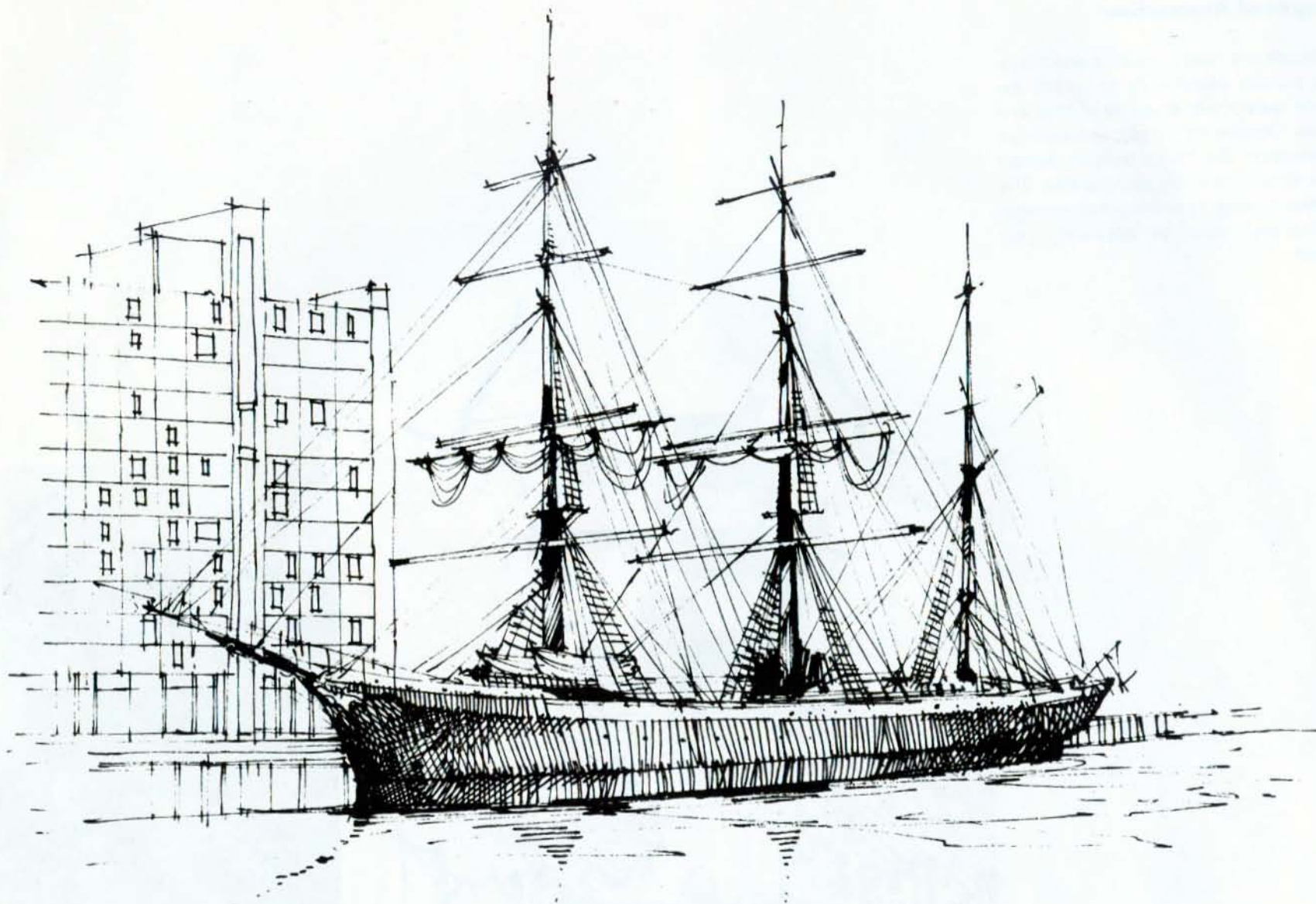
A sketch is a form of graphic shorthand. The primary objective is to record the image quickly with a variety of lines and tones. Despite its simple, semiabstract appearance, the theme (subject matter) of a sketch must be recognizable. The relative proportion and scale of all major components must be accurately portrayed.



a abstract interpretation



b reality



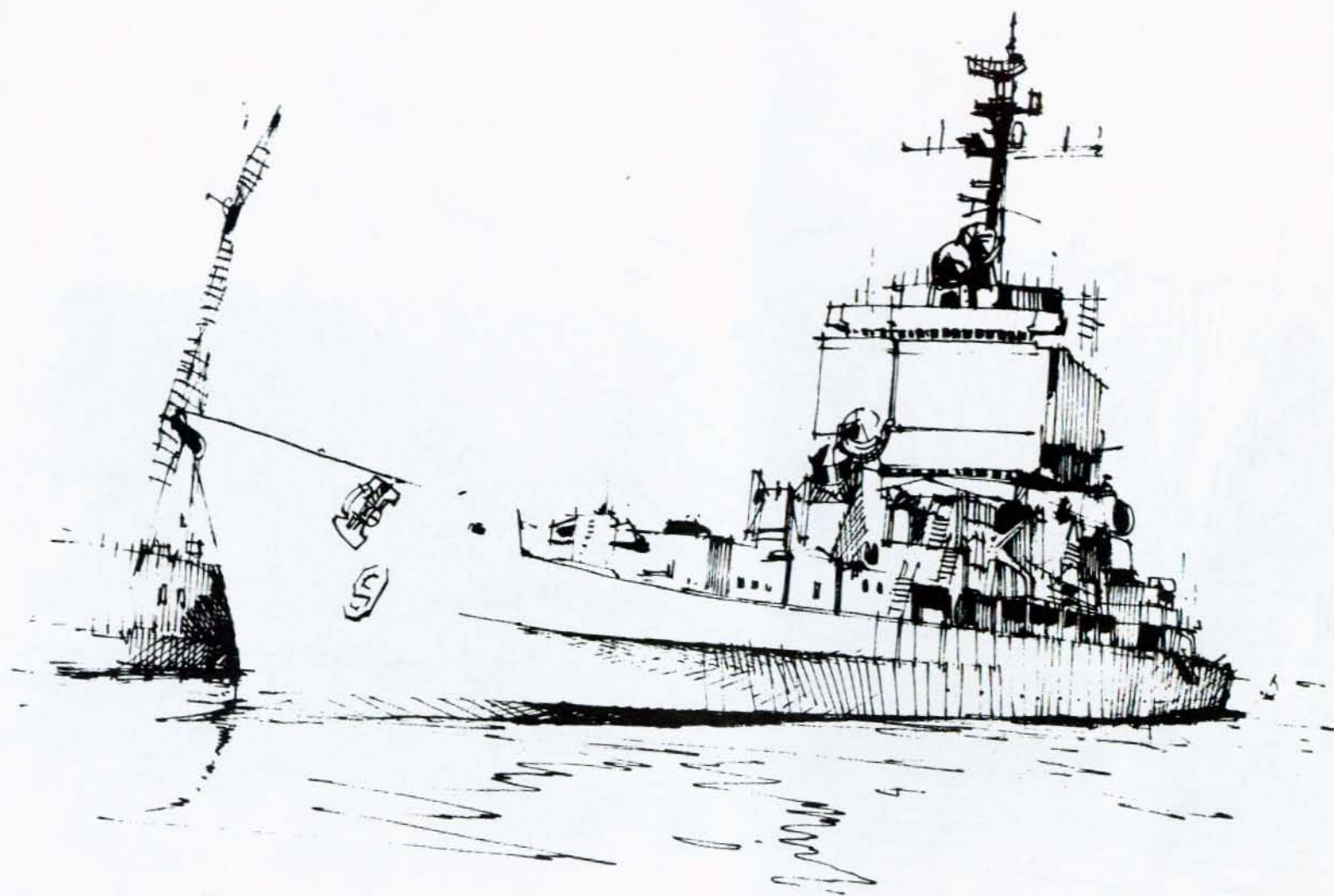
**Title:** Boats

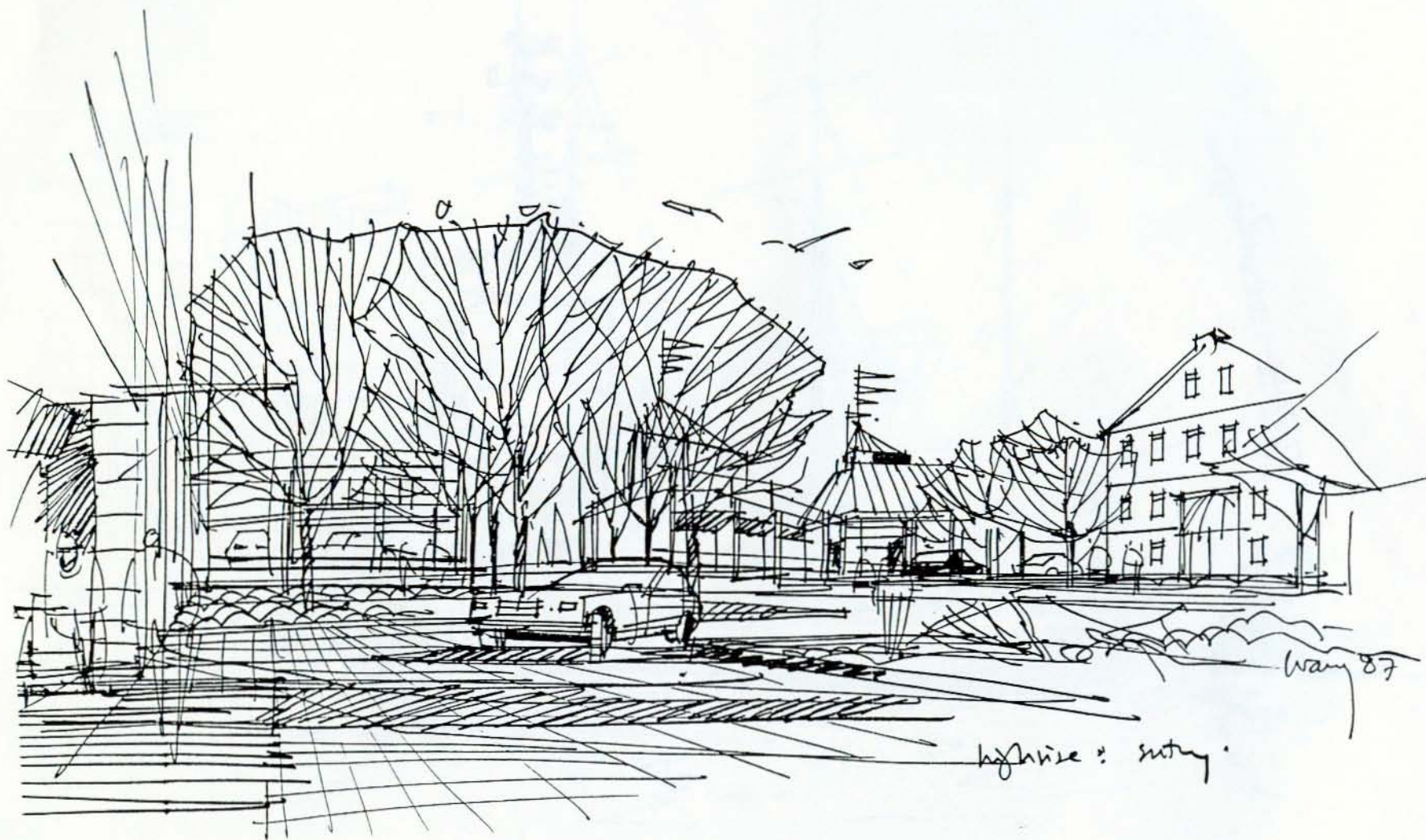
**Original size:** 9 x 13 inches

**Medium:** Pilot razor point on bristol board

**Technique:** combination of line and  
line texture







**Title:** Design Study

**Original size:** 11 x 17

**Medium:** thin felt-tip markers on  
white tracing paper

**Technique:** line drawing





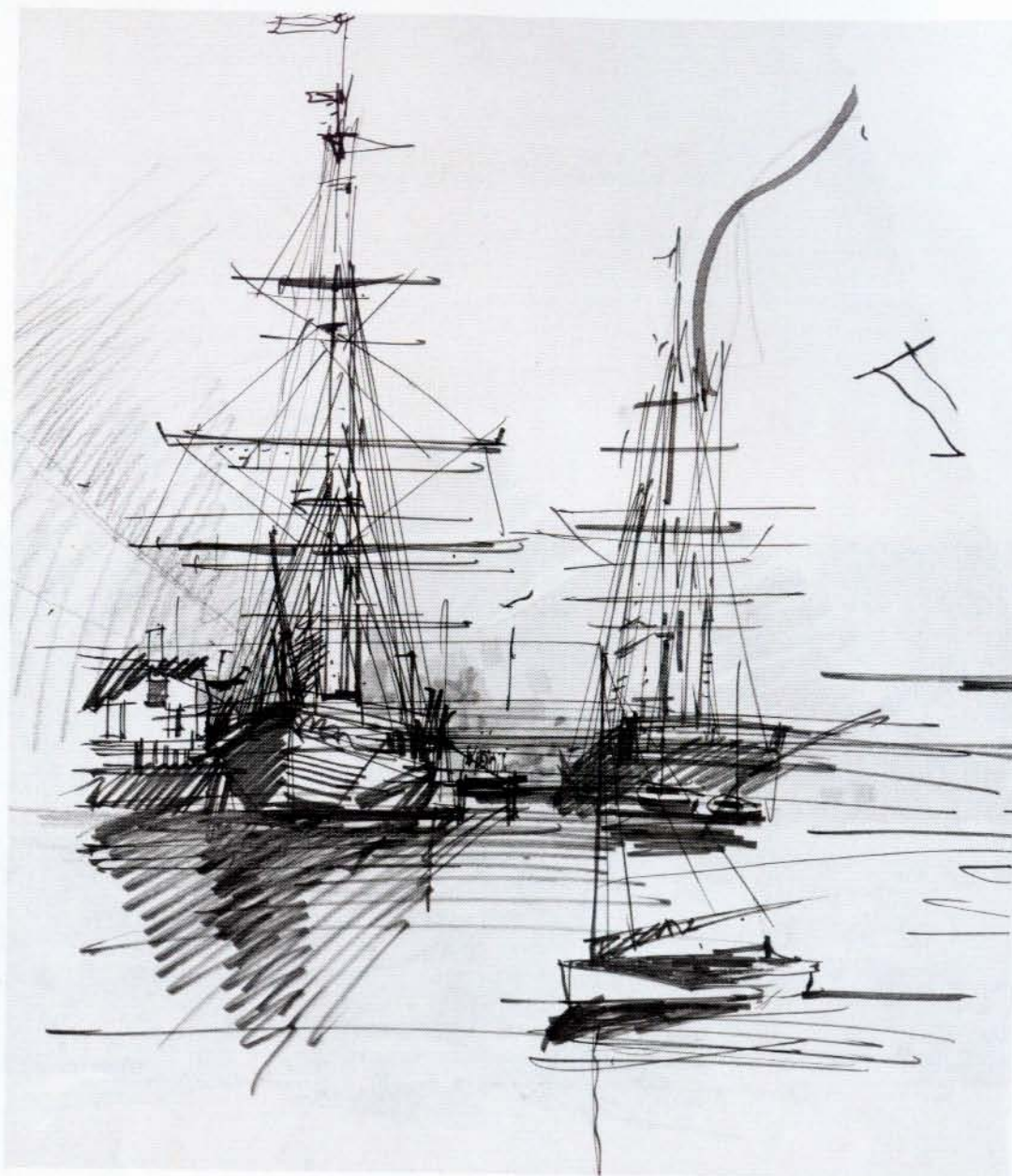
**Title:** Housing Study  
**Original size:** 11 x 20 inches  
**Medium:** felt-tip markers and pencil  
on white tracing paper  
**Technique:** line and tone sketch

## EQUIPMENT

The style and quality of markers are constantly improving. Henry C. Pitz, in his book *Sketching with the Felt-tip Pen* (1959), referred to the felt-tip pen as "the new tool." At that time it was a new invention and was certainly a novelty to artists. The marker has since evolved into one of the most popular drawing media, replacing pen, pencil, and other color media. It is widely used for a number of good reasons: it is simple to work with; it dries fast and it usually does not smudge; it comes in numerous pre-mixed colors and a variety of tip designs; its nib is often soft and penetrating; and, above all, the marker is convenient.

The marker also has its drawbacks. It is not an inexpensive medium. It also has a relatively short shelf life. The penetrating effect of most markers requires special paper, and bleeding is extremely difficult to predict and control. The convenience of premixed color eliminates the creative possibilities of color mixing. Over all, its ease in handling is welcomed by most students, who think of it as a lazy man's tool.

The marker should be looked upon as a unique medium. It is neither pen nor pencil and should not be used as such. It has a unique tip that responds to pressure, surface conditions, and fluid characteristics. These features make markers excellent sketching tools. Therefore an *intimate* understanding of their characteristics is vital to successful sketching.



**Title:** Tall Ship

**Original size:** 11 x 17 inches

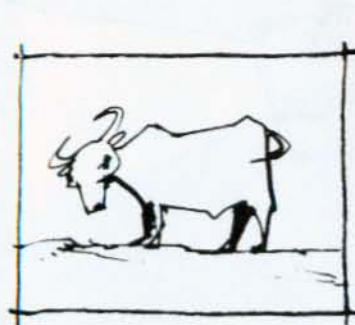
**Medium:** felt-tip markers on white tracing paper

**Technique:** line drawing, textural shading

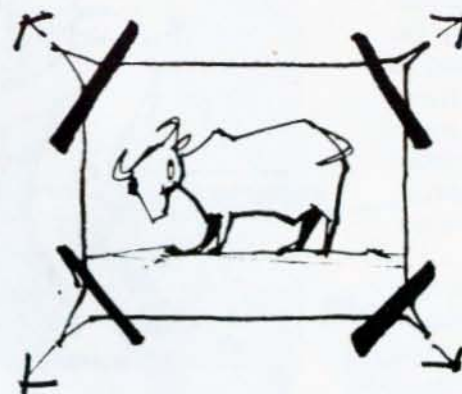


## FRAMING

The four corners of the paper create dynamic interest and lead the eye away from the sheet. This situation should be corrected by reshaping the sheet with stoppers (Figure a), such as trees, bushes, rocks, human figures, or a corner of a building (Figure b). Their job is to form an edge perpendicular to the diagonal in order to prevent the eye from moving away from the point of interest. They also function as the foreground subject and should be rendered with bold and heavy strokes. Stoppers should always establish a strong tonal contrast with the rest of the picture. The position and type of stopper used should be studied carefully on thumbnail sketches (Figure c).



a reasons for framing

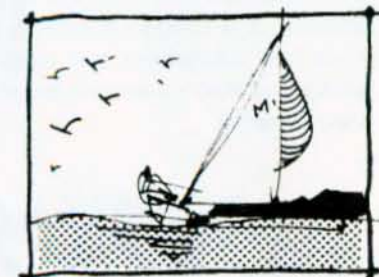
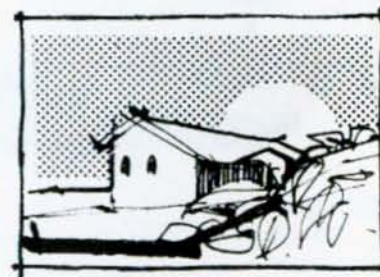


b types of framing

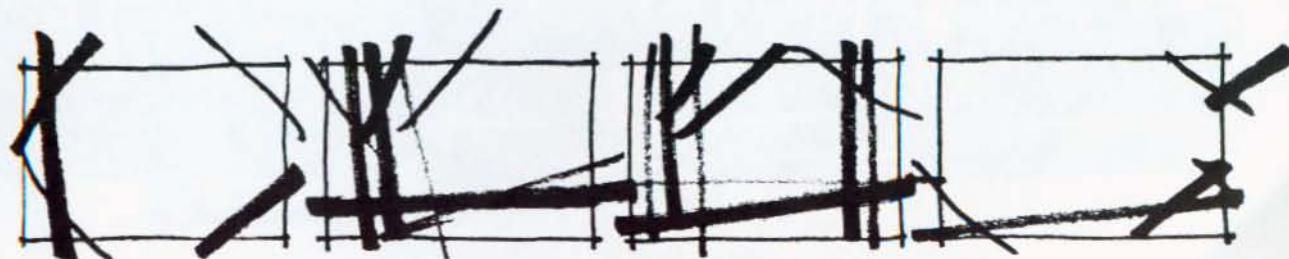
a reasons for framing

b types of framing

c framing exercises



c framing exercises





## Paper

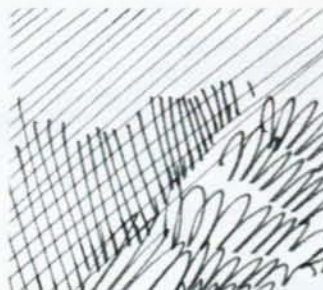
The character of a sketch relies a great deal upon the surface on which it is drawn. Pay close attention to the type of paper you use and understand its characteristics as you get acquainted with your markers. There are many choices, and you should discover your favorites by a process of trial and error. In general, avoid papers that can be penetrated and that bleed easily, unless you desire a special effect. The beginner should try Aquabee felt-tip-marker paper, which has a waxy coating on the reverse side, or Aquabee magic visualizer. Advanced and daring sketchers can try watercolor paper, tracing paper, rice paper, or even white dinner napkins. Your creativity and imagination are your only limits, and appropriateness is a matter of taste.

Some popular varieties of paper are the following:

- Bristol board is smooth, thick-bonded, with a high gloss, and is excellent for fine-line drawing.
- Blueprint paper is soft, absorbent, and loose in fiber; bleeding and penetration are difficult to control.
- Rice paper has a coarse texture, is highly absorbent, and exhibits an unpredictable bleeding pattern. It has an explosive effect when wet. There is a vast range in quality.
- Watercolor paper, which has a coarse, rough surface, will wear out fine-nib markers. It has an excellent surface for tone and mixed media, but it is not suited for line drawing.

bristol board

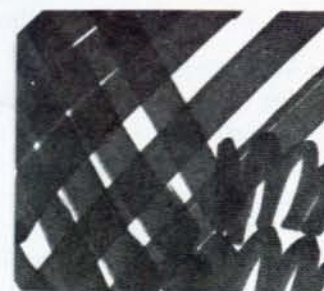
fine-point



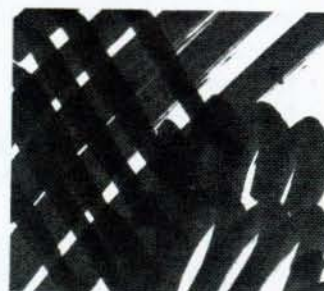
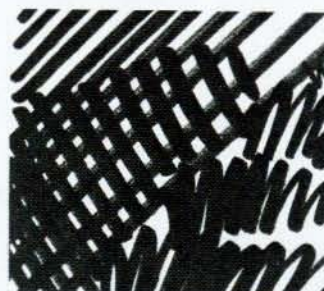
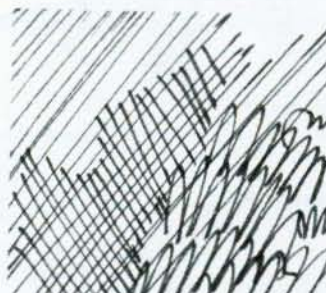
pointed-nib



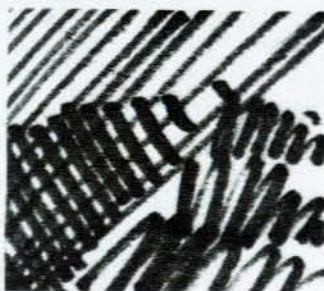
wide-tip



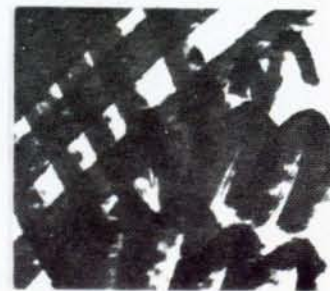
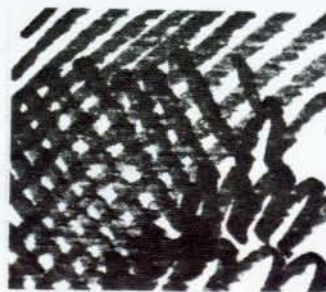
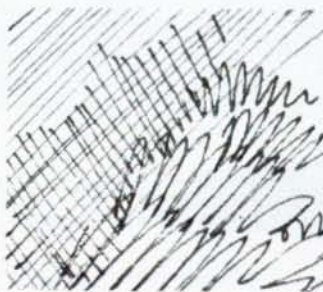
blueprint paper



rice paper



watercolor paper







**Title:** H. H. Richardson's Railroad Station,  
Easton, Massachusetts

**Original size:** 9 x 12 inches

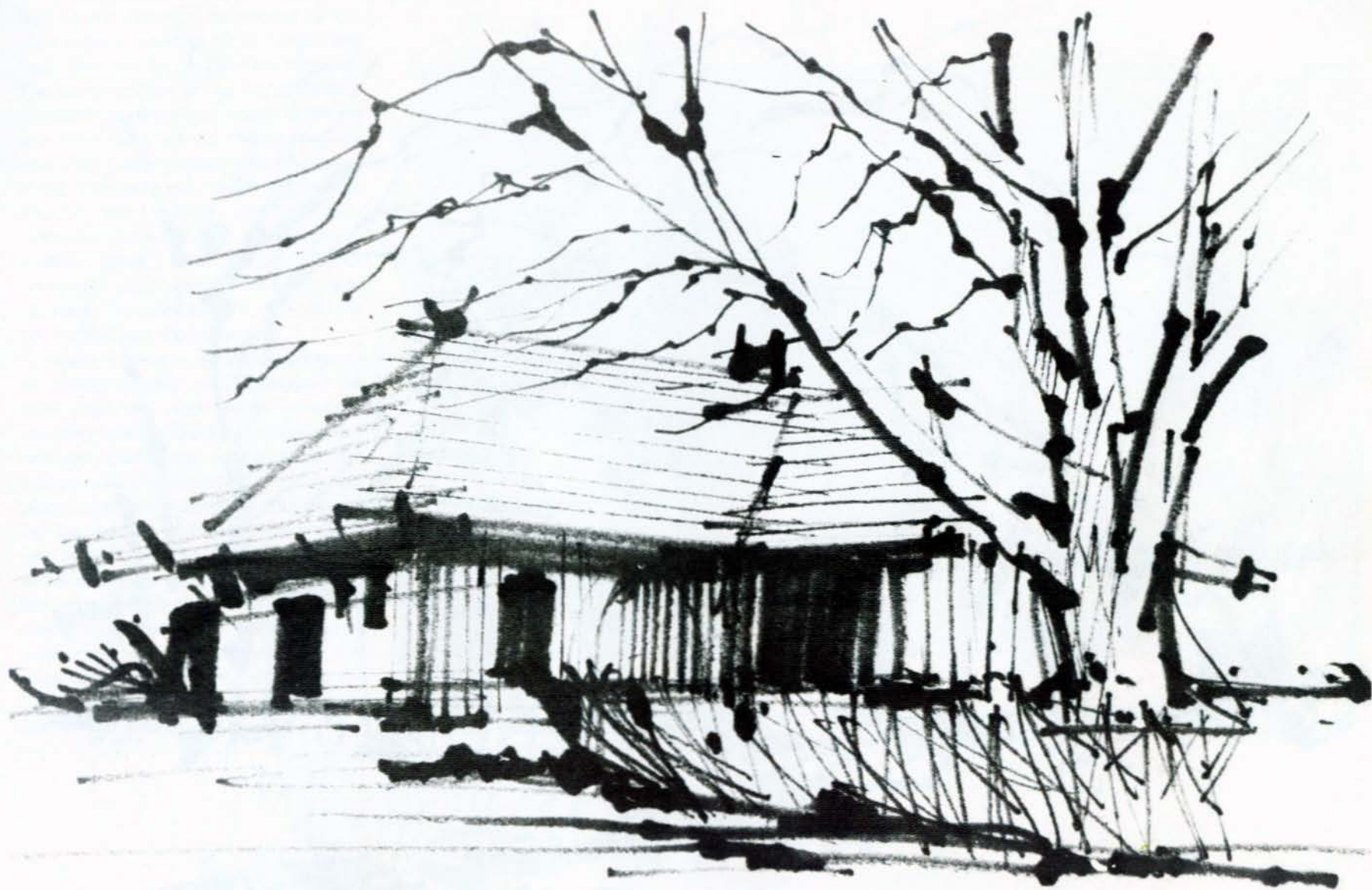
**Medium:** Eberhard Faber (pointed-nib)  
on bristol board

**Technique:** line drawing



**Title:** same as page 19  
**Original size:** same  
**Medium:** Eberhard Faber (pointed-nib)  
on watercolor paper  
**Technique:** line drawing

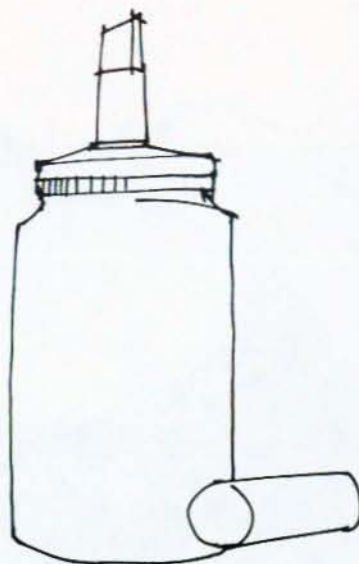




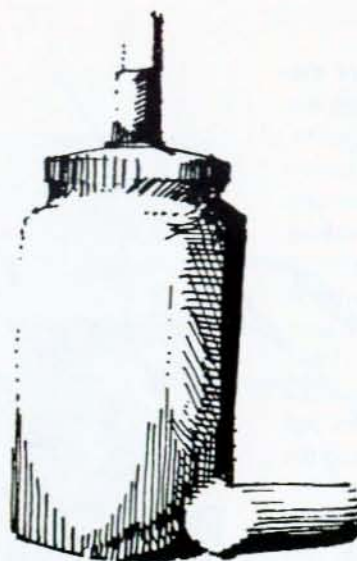
**Title:** same as page 19  
**Original size:** same  
**Medium:** Eberhard Faber (pointed-nib)  
on rice paper  
**Technique:** line drawing

## BASIC TECHNIQUE: LINE

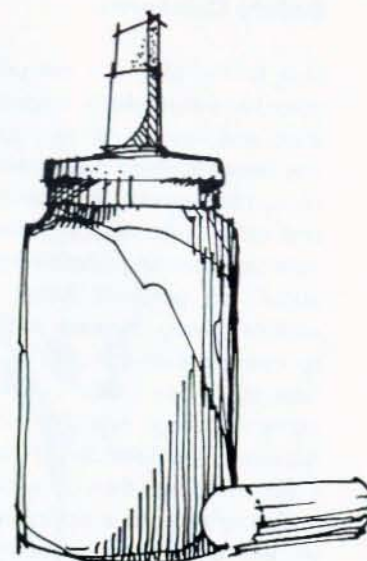
A line is a straight or curved connection between two points. It defines a spatial edge that separates a mass from a space. It delineates detail and renders the effects of a light source. It brings out the three-dimensional quality of an object. Line can be expressed in many ways: according to width, length, density, orientation, and appearance. Marker line produces texture and tone easily due to nib variations. Line quality is an evaluation of line function, type, movement, and expression. A line drawn with a marker is inherently and characteristically different from one drawn with a pencil. A marker line is controlled by the size and condition of the nib and the type and quantity of the ink storage. The art of working with markers is also unique because of the nib construction and size variation. For example, ink flow in a new marker is quite consistent; in order to lighten the tone, you must switch to a lighter-color or a semi-dry marker. Variation of hand pressure is not applied to control tone, but rather to control line width and movement.



line profile



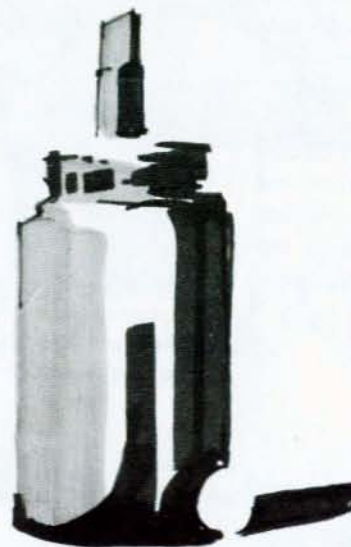
texture



line and texture



tone (high contrast)



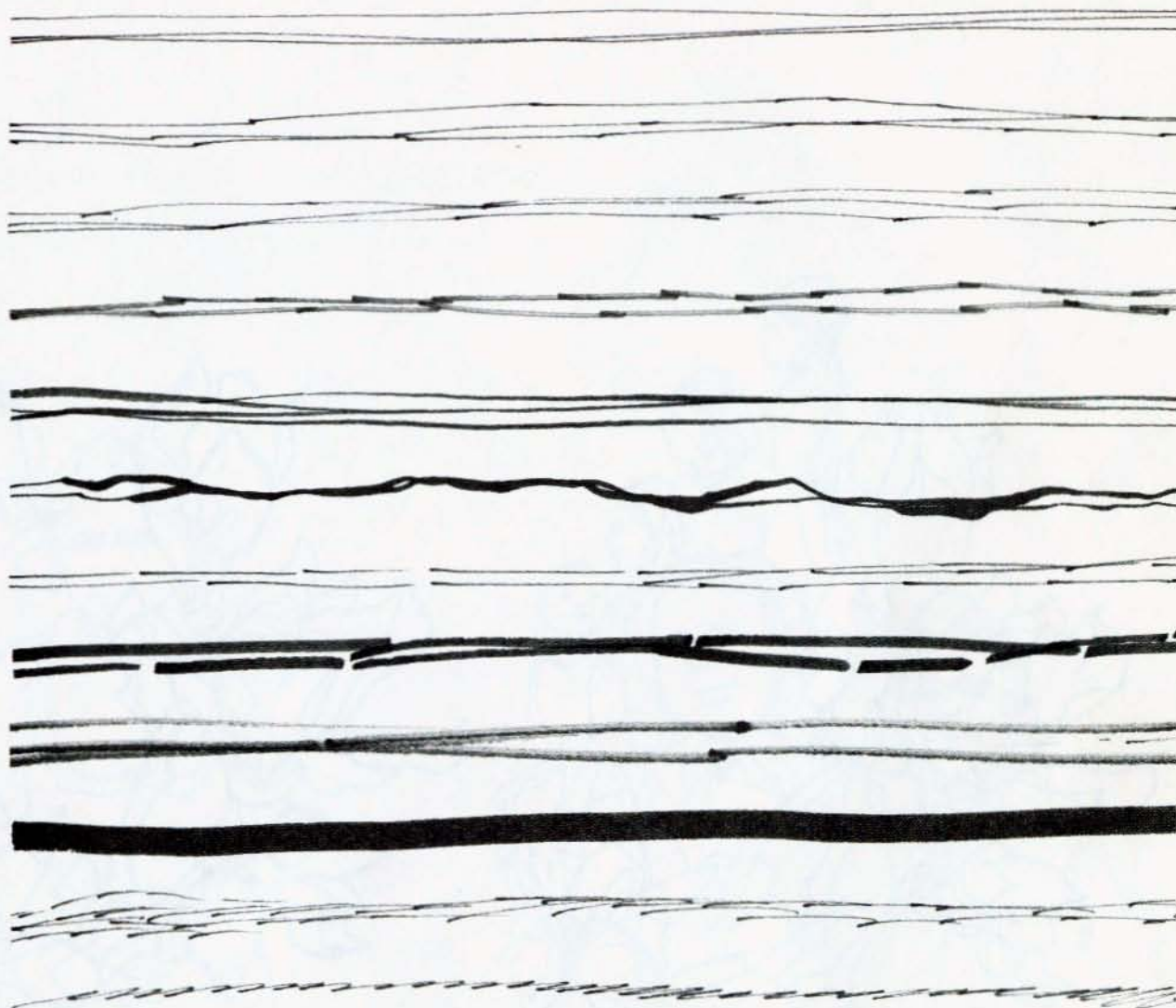
tone (with grays)

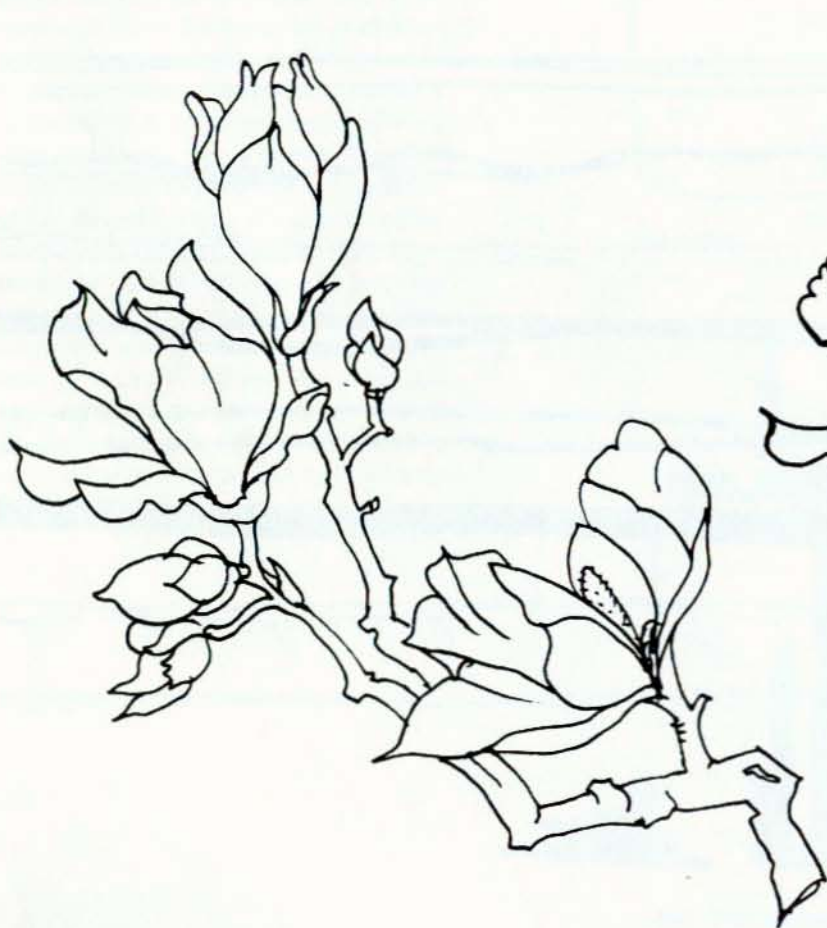


## Types of Lines

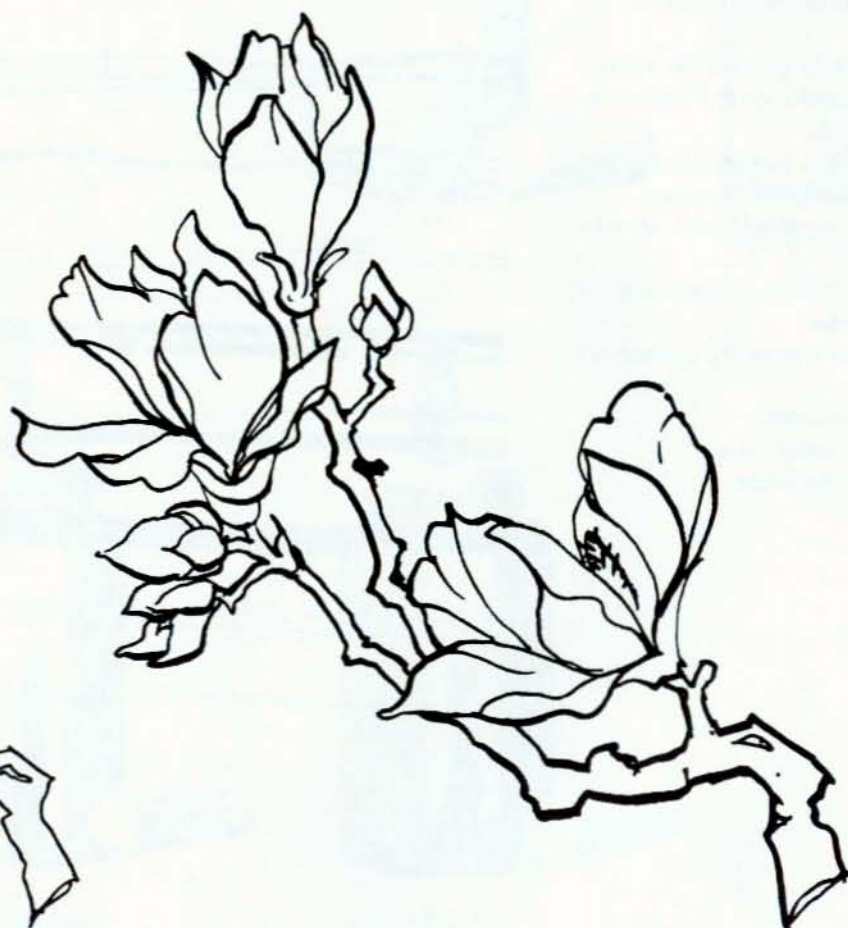
There are many types of lines:

- lines drawn with even pressure, pulled from left to right (fine point) (Figure a on page 16)
- lines drawn in a series of short pauses at random intervals, with the marker remaining on the paper (fine point)
- lines drawn in a series of short pauses at random intervals, with the marker removed from the paper (fine point)
- short strokes
- lines drawn with a pointed-nib marker, varying the pressure on the point (Figure b on page 16)
- lines drawn with a pointed-nib marker, twisting and varying the pressure
- casual, short nondirectional strokes (fine point)
- casual short strokes drawn with a pointed-nib marker
- lines drawn with a semi-dry pointed-nib marker
- wide-tip-marker strokes
- series of short, casual arcs
- series of small, flat loops





a line drawn without varying pressure on the point



b line drawn by varying pressure on the point





**Title:** Egyptian Children  
**Original size:** 8½ x 11 inches  
**Medium:** Eberhard Faber (pointed-nib)  
 on bond  
**Technique:** line



**Title:** Egyptian Men  
**Original size:** 8½ x 11 inches  
**Medium:** Eberhard Faber (pointed-nib)  
on bond  
**Technique:** line



## Wide-Nib-Marker Lines

The wide-nib marker is a unique drawing tool because of its broad  $\frac{1}{2}$ - to  $\frac{1}{4}$ -inch felt nib. As a tone medium, it is ideal for filling in areas between lines. As a line medium, the broad strokes can quickly define an area and therefore simplify the sketch. Semitransparent juxtapositioning of broad strokes injects new life and character into a drawing by giving it contrast and motion. The application of the wide-nib marker to sketching is similar to the use of pastels and oil-painting brushes: all have a premeasured applicator. It is this characteristic that makes markers unique. Rather than simply using them to fill in areas, a task that can be done with many other color media, this characteristic should be creatively exploited.



one stroke (define the shape)



two strokes (define the spatial edges)



five or more strokes (fill in with texture)



a line drawing  
(fine-point felt-tip pen)



a line drawing  
(wide-nib marker)



**Title:** Mosque in Cairo, Egypt  
**Original size:** 9 x 12 inches  
**Medium:** Pilot razor point on bristol board  
**Technique:** line texture



**Title:** Palace at Heliopolis, Egypt  
**Original size:** 9 x 12 inches  
**Medium:** Pilot razor point on bristol board  
**Technique:** line texture





**Title:** Street Study  
**Original size:** 8 x 11 inches  
**Medium:** felt-tip markers and pencil  
 on white tracing paper  
**Technique:** line and tone drawing



**Title:** Downtown  
**Original size:** 14 x 30 inches  
**Medium:** felt-tip markers on yellow  
 tracing paper  
**Technique:** line drawing

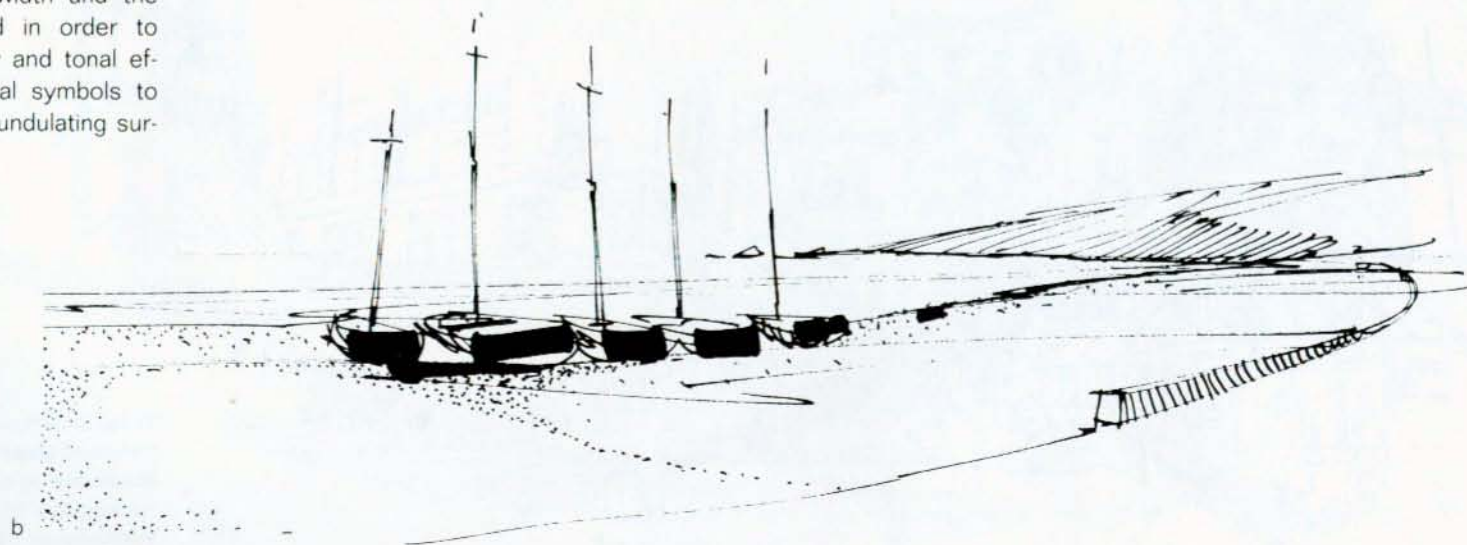
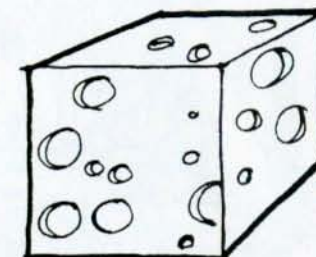
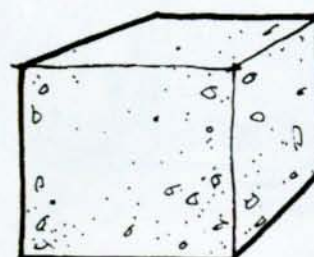
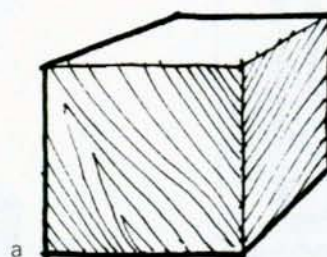
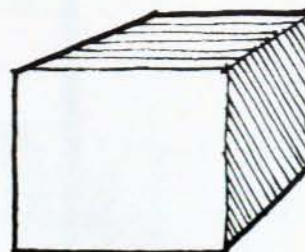
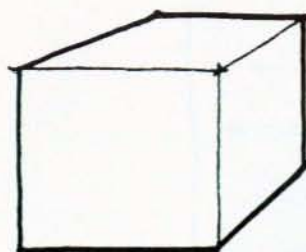


## BASIC TECHNIQUE: TEXTURE

Texture consists of semiabstract graphic symbols that signify the surface or material of the drawn object. The tonal effect of texture also helps to enhance the sensation of depth in two-dimensional representation.

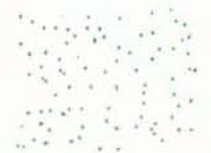
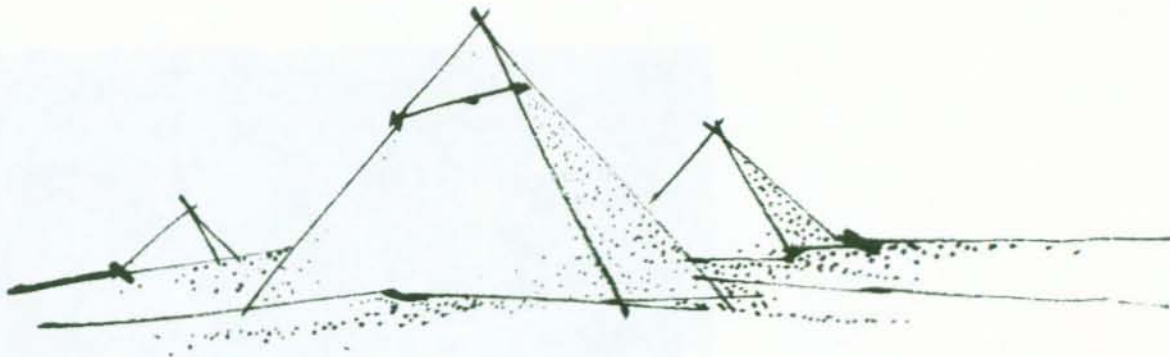
There are two basic types of texture: lines and dots (screens). The meaning and effect of these textures depend upon the interpretation of size, overall density, line orientation, spacing, and overall tonal effect.

Line texture can be divided into parallel and nonparallel (better known as "squiggles" or "scribbles") patterns. Parallel lines (including cross-hatching) are often used to express vertical or horizontal planes that have a smooth surface. The spacing between lines and the line width should be kept consistent throughout a rendered plane. It is an abstract expression, and the artist should not be too concerned with the literal meaning of the material. Nonparallel lines are a bundle of loose threads. The line width and the spacing are often varied in order to achieve a desired density and tonal effect. These lines are ideal symbols to depict vegetation and for undulating surfaces.

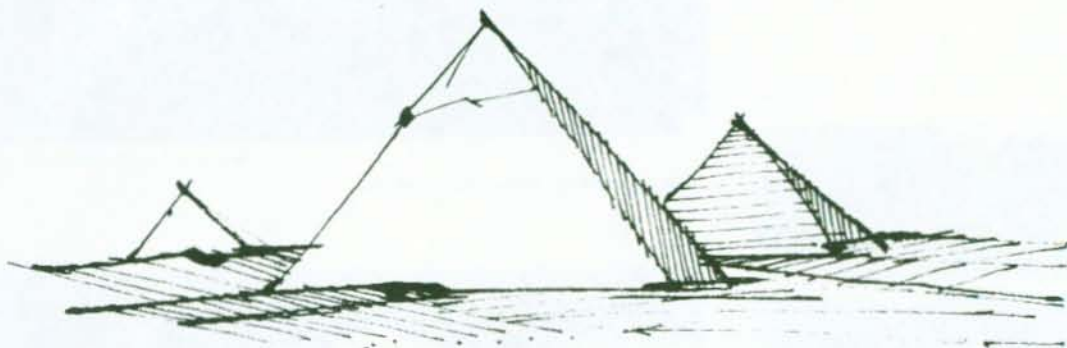




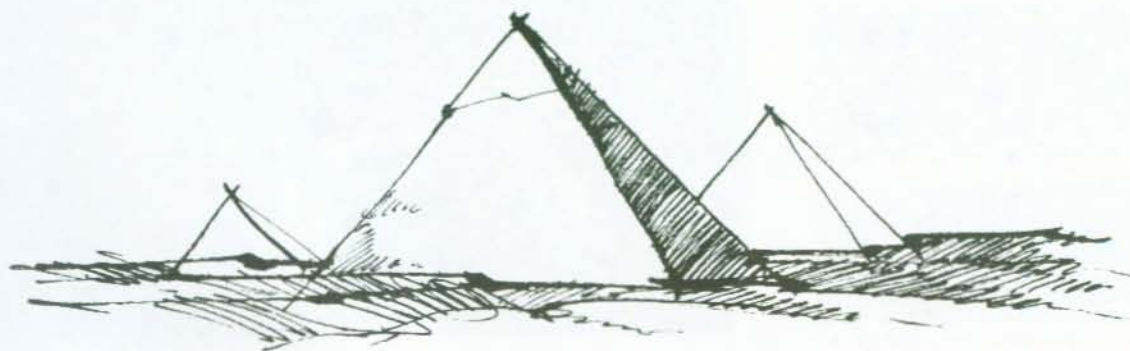
## Types of Texture



dots



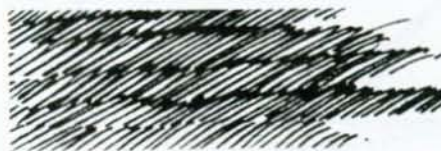
lines (parallel)



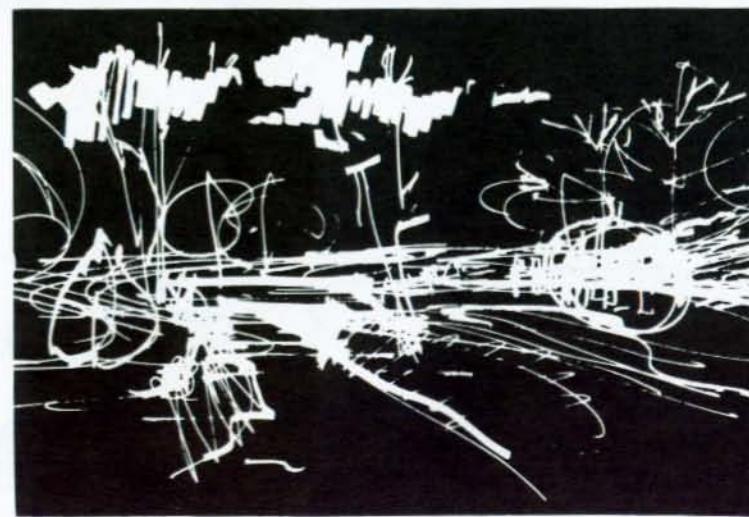
lines (scribbles)



texture (scribbles) drawn with a fine-point marker

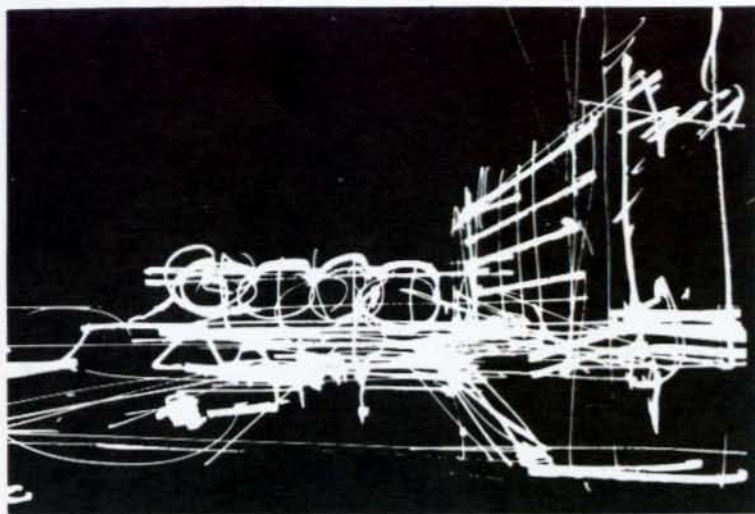


layout sketch done with a pentel

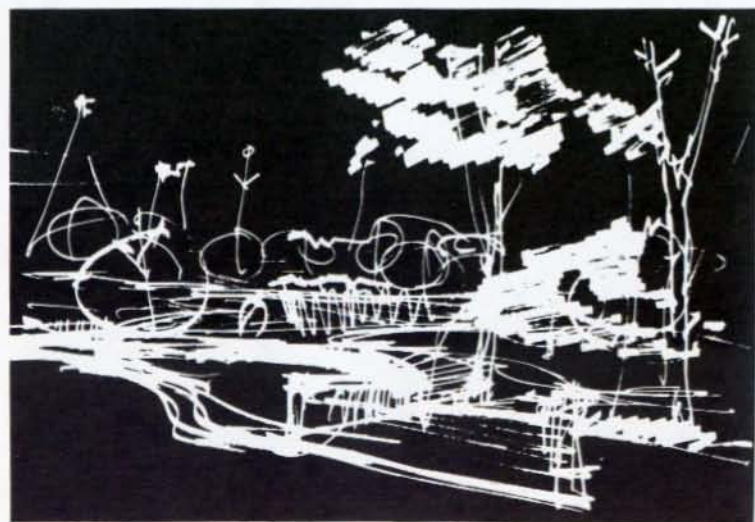


layout sketch done with a pentel





layout sketch done with a pentel



layout sketch done with a pentel



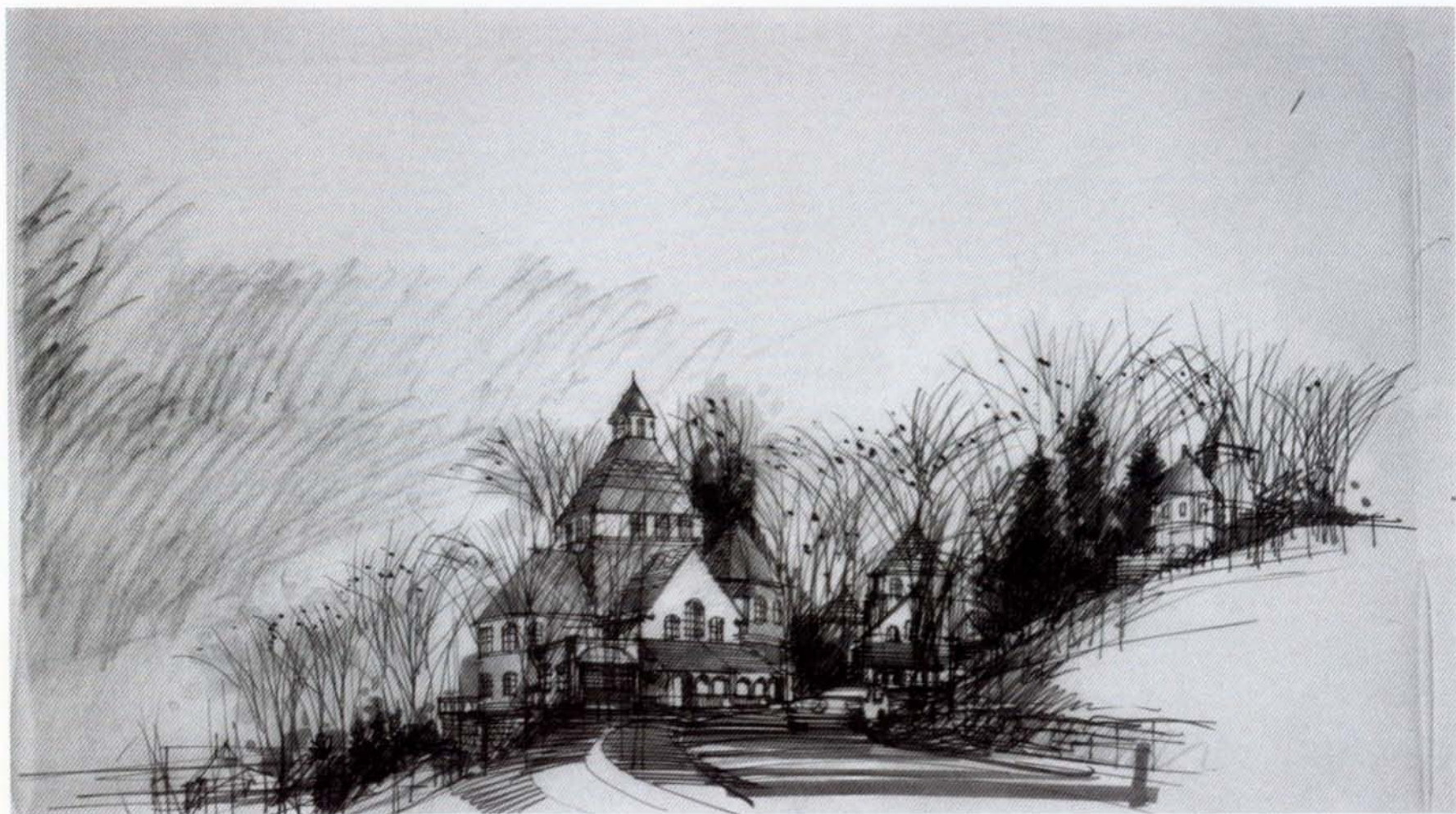
texture (scribbles) drawn with a pointed-nib marker





**Title:** Berkshire Spa Study I  
**Original size:** 18 x 24 inches  
**Medium:** color markers and felt-tip  
markers on white tracing paper  
**Technique:** color markers over felt-tip  
line sketch





**Title:** Berkshire Spa Study II

**Original size:** 18 x 24 inches

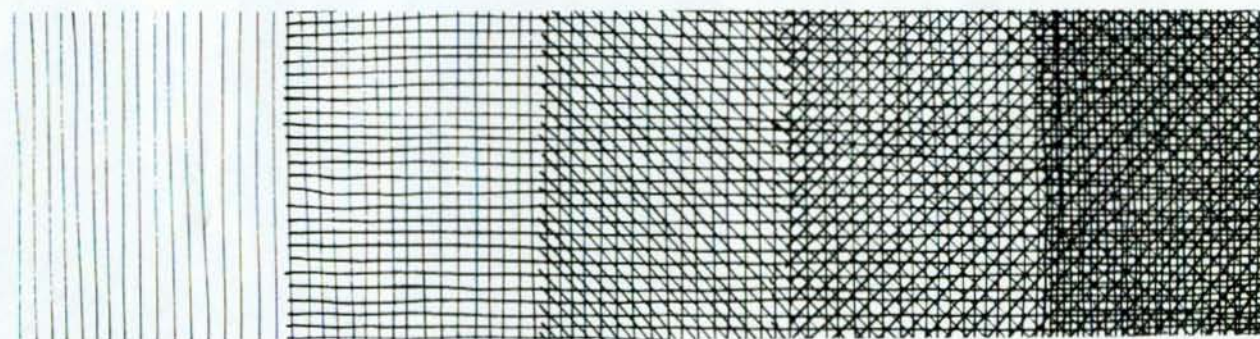
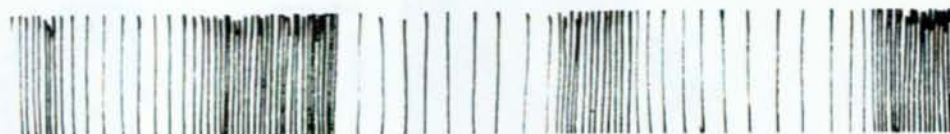
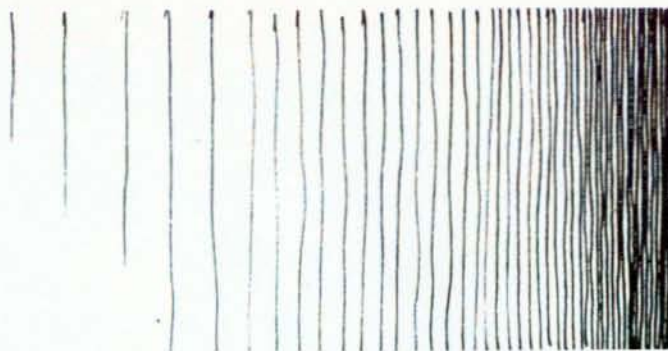
**Medium:** color markers and felt-tip  
markers on white tracing paper

**Technique:** color markers over felt-tip  
line sketch



## BASIC TECHNIQUE: TONE

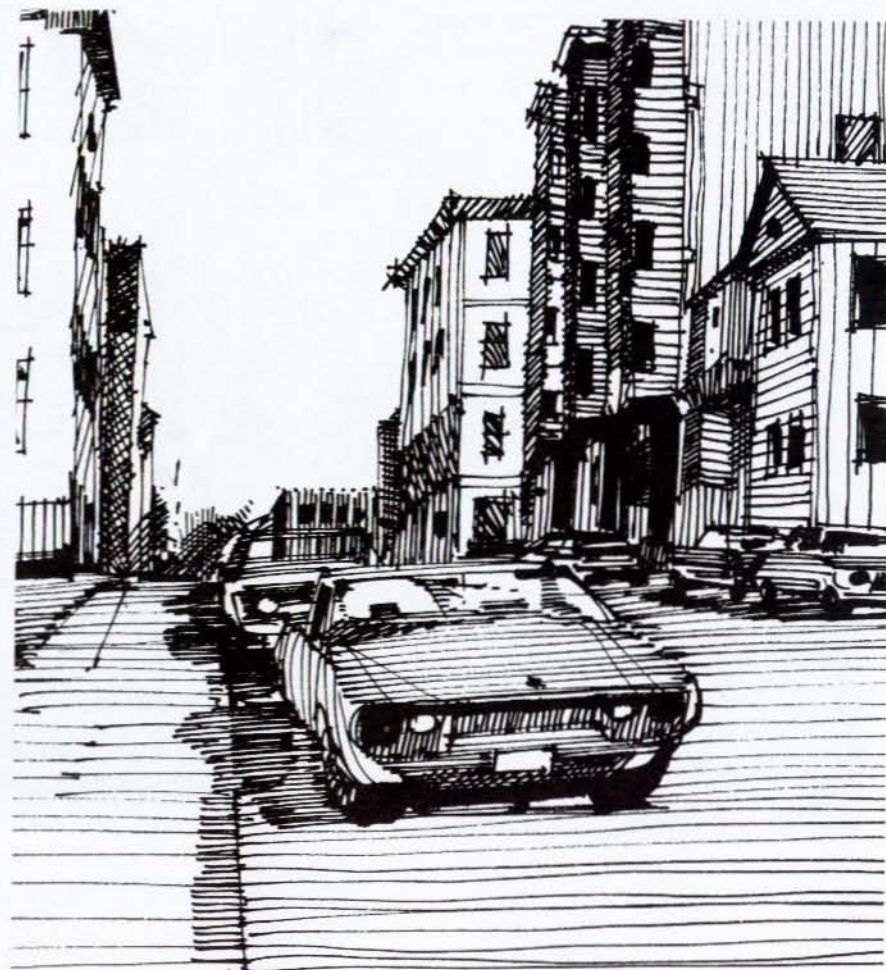
Tonal value can be achieved either through textural density or varying line widths. It is used in most sketches to increase the feeling of depth and to bring out the three-dimensional quality of the various components. Generally speaking, the sun side should be brighter (less dense) than the shaded side. The shadow pattern is often rendered in black, dark gray, or dense, thick lines. Tonal contrast is important in reading depth, so a substantial white area should be preplanned and reserved in order to achieve this special effect.







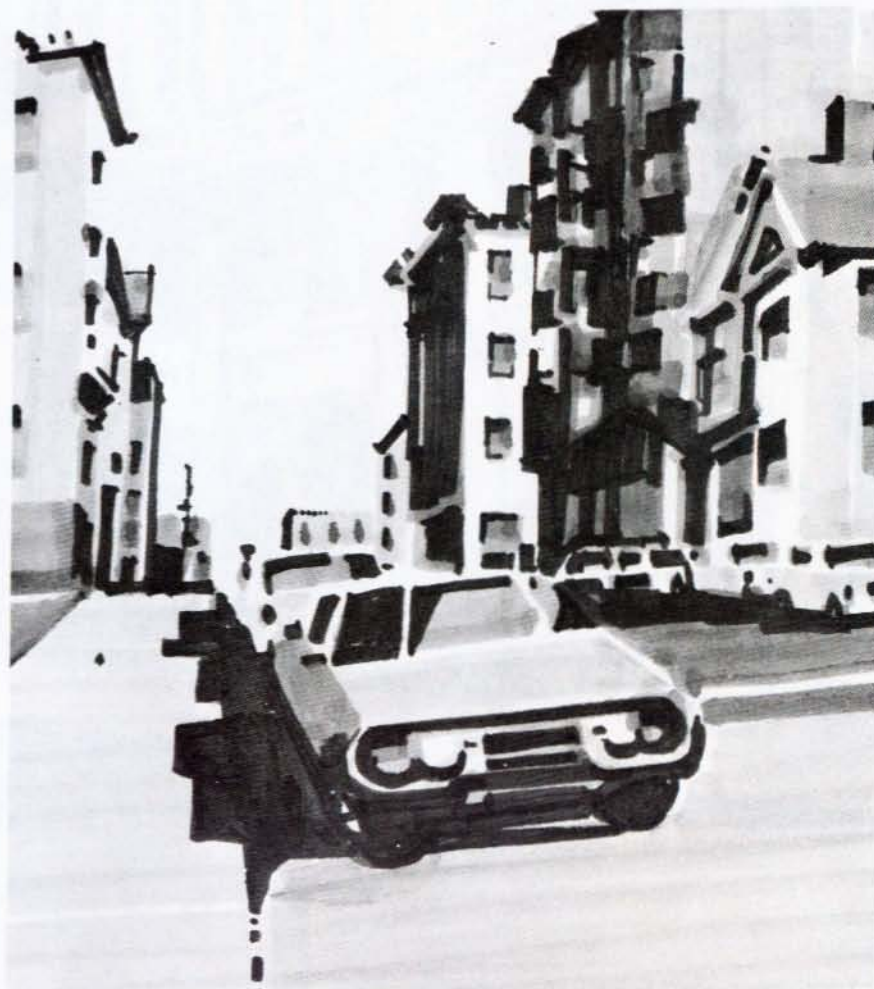
photograph of a street



line interpretation



tone interpretation I (high contrast)



tone interpretation II (gray tones)

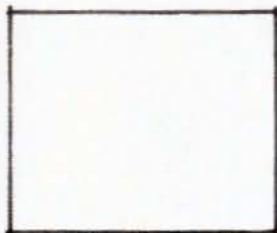


## Gray Markers

A gray marker is ideal for the creation of tone. However, the result is often unpredictable and the effects are inconsistent. The warm-gray and cool-gray ranges are excellent tone media. There is not much perceivable difference between two consecutive grays: for better and sharper differentiation, try skipping at least one shade. Warm-gray is better for blending with other colors. Cool-gray has a metallic appearance and tends to stand out.



black



white



tone created by a semidry wide-tip marker

2 3 4 5 6 7 8 9 black



cool grays

2 4 6 8 black



warm grays

2 4 6 8 black



cool grays





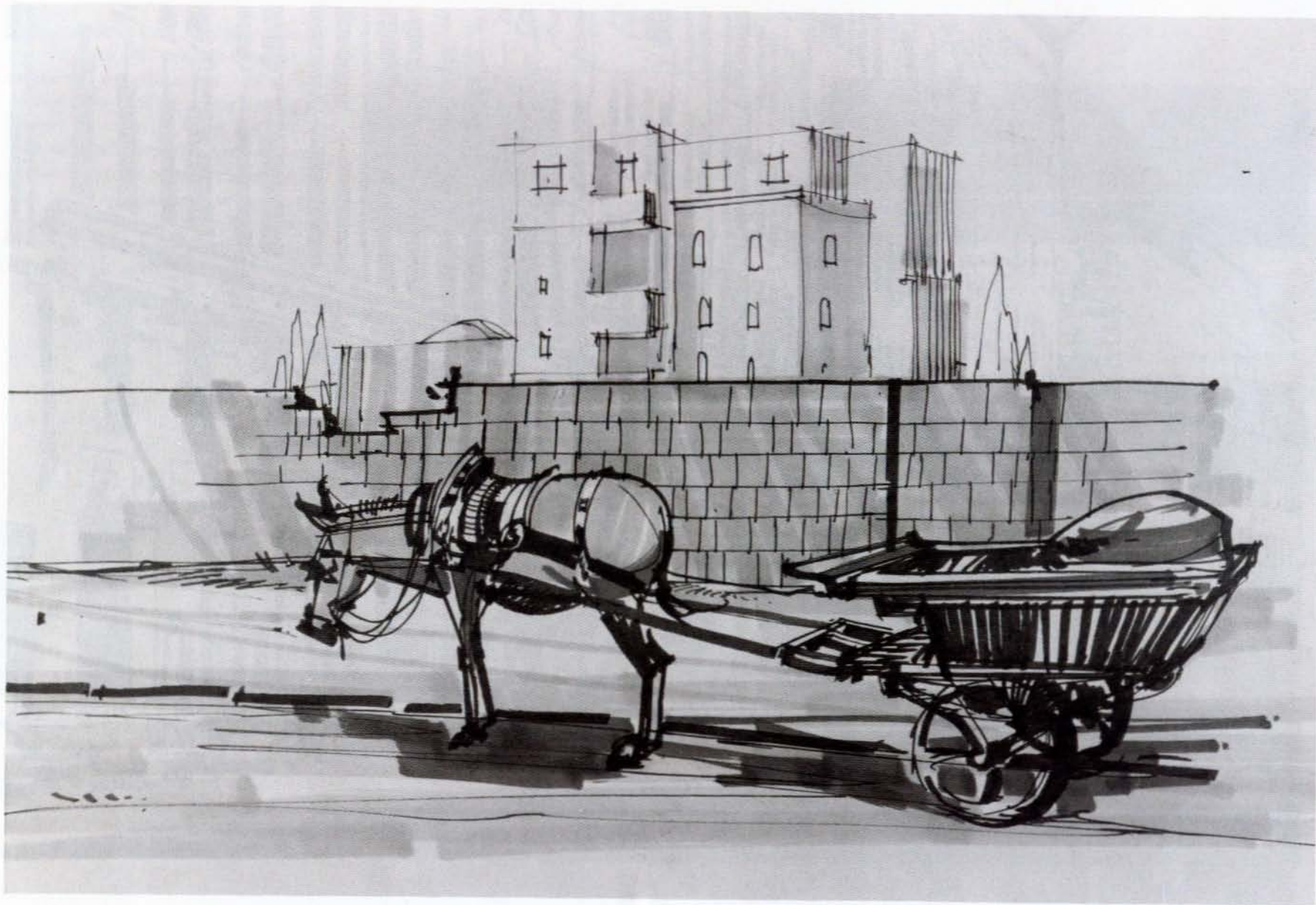
**Title:** Building in Boston

**Original size:** 24 x 30 inches

**Medium:** black marker on brown  
butcher paper

**Technique:** copy from slide; black marker  
used to produce the high-contrast look; use  
of line to define spatial edges is minimal



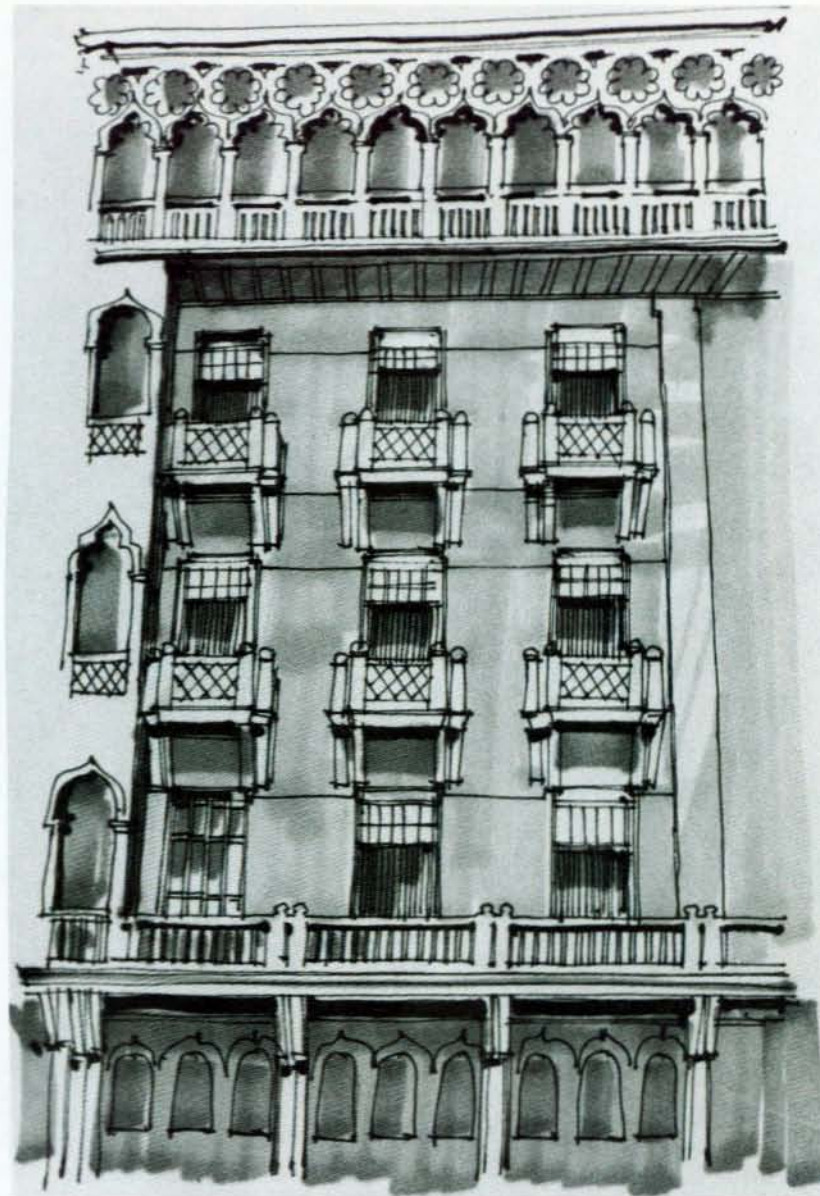


**Title:** Egyptian Donkey Cart  
**Original size:** 9 x 12 inches  
**Medium:** black and gray markers on  
bristol board  
**Technique:** line drawing and broad  
marker strokes



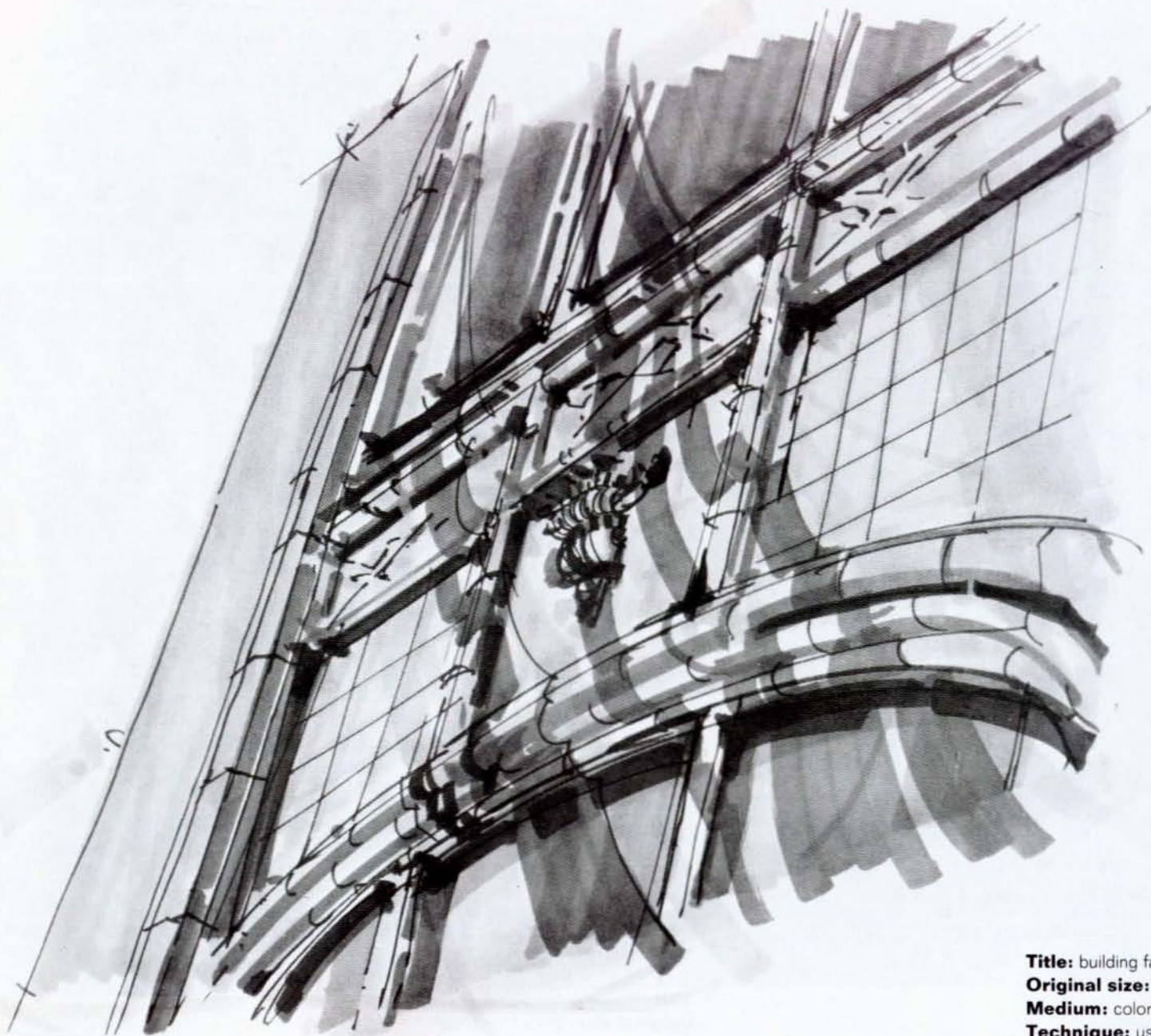


**Title:** Quechee Lake, Vermont  
**Original size:** 9 x 12 inches  
**Medium:** gray and black markers on  
 bristol board  
**Technique:** line drawing filled in with  
 gray markers



**Title:** House in Alexandria, Egypt  
**Original size:** 8½ x 11 inches  
**Medium:** Pilot razor point on bristol board,  
 shading in gray marker  
**Technique:** line and tone drawing





**Title:** building facade (detail)

**Original size:** 8½ x 11 inches

**Medium:** color markers on bristol board

**Technique:** use lighter colors to cover large areas; details picked up by thinner strokes; shadows done with gray and #6 applied at the very last minute





**Title:** Austin Hall, Harvard University  
**Original size:** 8½ x 11 inches  
**Medium:** black and gray markers on felt-tip-marker paper  
**Technique:** outlining done with Pilot fine-point



## Selection of Color Markers

Color choices of markers are ever increasing. It is indeed difficult to start a useful collection because of the many variations of styles and colors and because of the cost factor. You should choose colors according to basic need rather than on impulse. Look for colors that blend well with each other instead of setting up a kaleidoscopic selection. Limit your selection to not more than fifteen or twenty markers. You can always add to your collection as you progress. To ensure intelligent and practical choices, there are three major criteria for consideration. The first is color. There are three separate but closely related functions of color:

- Prime colors (base colors) are used to cover a large area, such as vegetation, architecture, water, or sky. They should be soft and warm and should be able to blend well with all the adjacent colors.
- Supporting colors enhance prime col-

ors. They are used for textural buildup, shading, and edge sharpening.

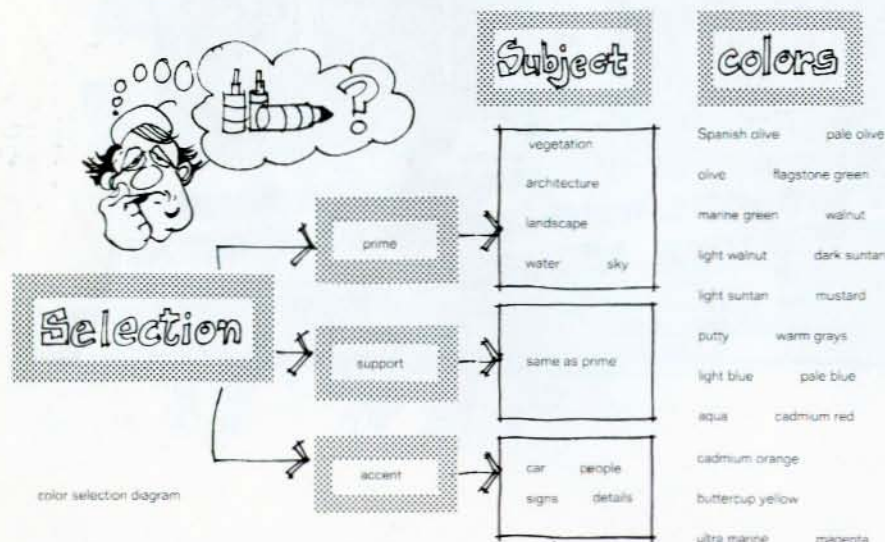
- Accent colors are for highlighting. They are usually bright, attractive and contradictory. They are often used for cars, signs, clothing, and the like. The location of these colors should be carefully selected: don't overdo them. Since the area of coverage is relatively small, pointed-nib markers are more suitable than wide-nib markers.

The second criterion for marker selection is function. Markers come in different nib sizes and materials. A soft felt tip produces a broad and even stroke while a hard nylon tip produces a thin and consistent streak. The broad and soft nib markers are ideal for filling in large areas, while narrow tips are suited for line and texture drawing. Lines define spatial edges and clarify objects in space. It suggests volume and clarifies depth. The decision here lies in the subject matter and the type of artistic expression that the artist

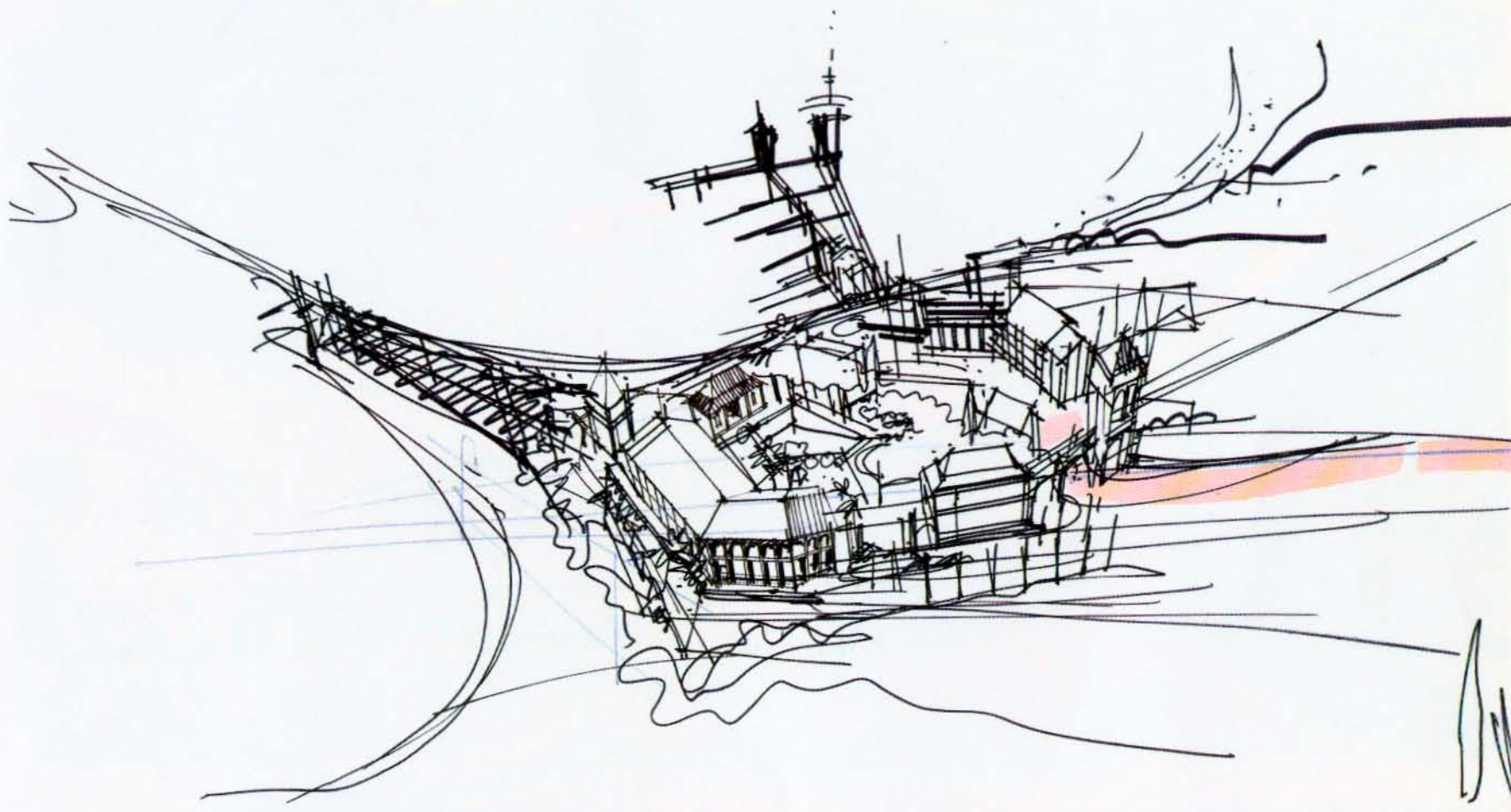
seeks to communicate through his/her sketch.

The last selection criterion involves convenience. This category has less direct impact on the quality of the sketch but nonetheless affects the sketching act. Here are some considerations: the design of the cap and the ease of recapping the marker properly; the shape of the cartridge to prevent the marker from rolling off an inclined surface; the shape, sizes, and weight of the markers and the ease of carrying them to the field; the durability of the nib to stay sharp; smell, fume, and safety concerns; and perhaps cost and affordability. Many of these factors are so trivial and personal that they are matters of individual preference.

In conclusion, the choice of markers should never become a burden that may take the fun away from this creative activity called sketching. To enjoy sketching, the choice of what kinds of marker to buy should be flexible and spontaneous.



## DEMONSTRATION I



**Title:** Waterfront Village Concept Sketch

Lay out the composition with bold and fluid strokes, sketch in the individual element, refine and straighten all spatial edges with repeated lines, identify the direction of light source, and begin to highlight the sun-shade contrast by darkening the shaded sides. You may have to repeat this process several times and on several layers of tracing paper.





Copy the refined version on good quality tracing paper. Avoid becoming tense by maintaining the fluidity of line strokes. Fill in details as necessary and apply appropriate colors with markers. Colors that cover large areas such as ground, water, trees, or sky should go first. Layer a darker shade of the same color to achieve a three-dimensional effect; highlight building roofs and important spatial edges to bring out the feeling of depth.





**Title:** Village Square  
**Original size:** 12 x 20 inches  
**Medium:** color markers on white  
tracing paper  
**Technique:** color markers on  
felt-tip sketch



## SPECIAL TECHNIQUES

### Mixing Colors

One of the most intriguing techniques in marker sketching is called mixing, or blending. It takes advantage of the transparent nature of markers by blending different colors one on top of the other to create new colors and to produce new effects. For example, mixing and blending different shades of green on a tree canopy produces a more realistic appearance. Likewise, lighter spots on dark blue water tend to capture the sparkles and reflective nature of the water's surface. Plain marker strokes can look flat and dull when applied evenly, but mixing and blending will bring out the three-dimensional quality of the sketch.

However, this process can be risky, with often unpredictable results that are difficult to control. The risk lies in the unpredictability. Since mixing is often done halfway into the sketching process, errors of this kind are irreversible and can jeopardize the entire sketch. The only and most effective way to learn this technique is by trial and error, through which one can learn predictable patterns and results by testing and mixing different colors. Keep in mind that different brands of markers and different types of papers also produce different results.

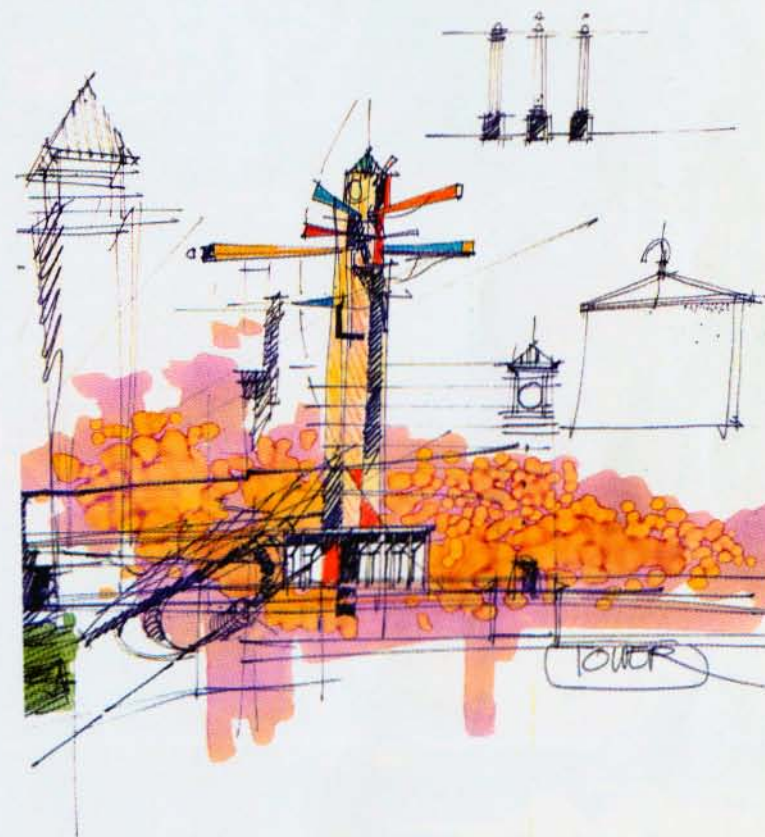
To mix colors, you should be familiar with the color wheel and the nature of color. For example, red mixed with yellow produces orange, and blue mixed with yellow produces green. However, due to the chemical content and the rate at which the marker dries on a particular surface, yellow on red may be different from red on yellow. Again, one must pre-

test to become familiar with this kind of reaction. In addition, the markers used in mixing will no longer retain their original color due to contamination on their felt tips. They should be stored separately and labelled for easy identification.

To create the "bleeding" effect of watercolor, systematically place selective colors on top of the original layer to dilute the original color while it is drying. For a more dynamic result, the wet on wet technique is very effective. To achieve maximum results, layer lighter colors on top of darker ones. Though not absolute, the reversal of this process often leads to a dark, muddy effect.

To achieve a satisfactory mixing result, a slow-drying drawing surface is required. White tracing paper is an excellent medium for test-mixing markers. It does not absorb quickly and it dries relatively slowly. The colors remain brilliant and true. Another excellent medium is photographic paper. The special coating is an ideal surface for mixing and blending, and colors are erasable. However, this special plastic coating tends to lighten the overall color effect. Another drawback with photographic paper is cost. It is very expensive! One should try to avoid any kind of bonded papers made from fibres. This includes watercolor paper, bristol paper, and any paper stocks that have a high absorption rate.

Use lighter fluid—such as Bestine—to erase markers, or a regular white eraser on photographic paper. To erase a large area, a few drops of rubber cement solvent on a dinner napkin pick up and clean a large area. Bear in mind that the type of paper and the coating on the drawing surface dictates the effectiveness of erasing.



**Title:** Architectural Study  
**Original size:** 12 x 8 inches  
**Medium:** markers and colored pencils  
**Technique:** mixing of markers





*Conceptual Sketch: Flats - Tomlinson.*

**Title:** Housing Study

**Original size:** 14 x 18 inches

**Medium:** markers on photographic paper

**Technique:** quick sketch



**Title:** Waterfront Market

**Original size:** 12 x 18 inches

**Medium:** color markers on white tracing paper

**Technique:** color markers on felt-tip line sketch; some mixing and color pencils on sky





**Title:** Fountain Study

**Original size:** 12 x 12 inches

**Medium:** felt-tip marker and colored pencil  
on white tracing paper

**Technique:** quick sketch, with lighter fluid  
drops to create the effect of snowfall.





**Title:** Architectural Study  
**Original size:** 18 x 30 inches  
**Medium:** felt-tip markers, colored pencil  
on white tracing paper  
**Technique:** sketch and photographic  
montage



## Markers and Pencils

The beauty of a sketch done with color marker lies in the brilliancy and transparency of colors. The bold marker strokes and the broad coverage all become parts of the unique "marker style." However, this kind of coverage tends to produce a

relatively flat appearance and lacks fine grain and textural effect. Color pencils compensate for this deficiency. The strokes from color pencils and their deliberate directions become the counterpoint to the flat marker streaks. Pencils add sparkle and fizz to the sketch. The overall effect is refreshing and relieves boredom.



**Title:** Architectural Study

**Original size:** 18 x 30 inches

**Medium:** felt-tip markers, colored pencil  
on white tracing paper

**Technique:** sketch and photographic  
montage



G. 29-80 - Wang.

**Title:** Architectural Study

**Original size:** 18 x 30 inches

**Medium:** felt-tip markers, colored pencil  
on white tracing paper

**Technique:** sketch and photographic  
montage



## Markers and Watercolor

Although the effect of marker sketching is quite similar to that of watercolor, the two media are actually quite different in nature and application. Markers strive for instant effect. The colors are premixed and come ready to use. The result is bright, loud, and perhaps pungent both to the eyes and the nose. On the other hand, watercolor must be mixed; it takes time to achieve the desired effect; it is light, quiet, and reserved. However, despite the differences in style and personality between these two media, watercolor and markers can complement and support each other. Markers are used routinely to supplement watercolor and to increase the intensity of its color effect. Fine-line markers are often used instead of ink pen to create the line-drawing base for watercolor application.

**Title:** Housing Study

**Original size:** 14 x 18 inches

**Medium:** color markers on photographic paper

**Technique:** quick line drawing on tracing paper before copying photographically; mixing of markers





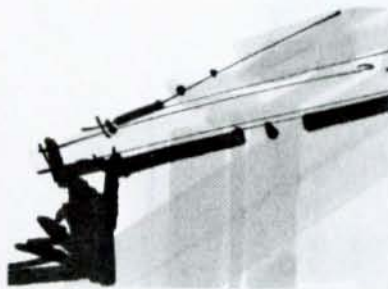
**Title:** Waterfront Market

**Original size:** 14 x 18 inches

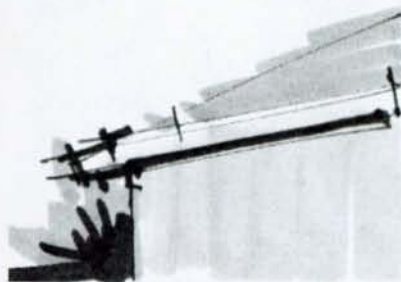
**Medium:** color markers on photographic paper

**Technique:** quick line drawing on tracing paper before copying photographically; mixing of markers as well as color pencil on sky





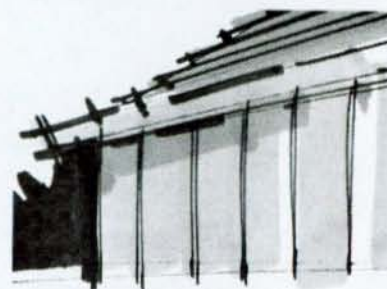
diagonal strokes over vertical strokes create uneven shadow pattern



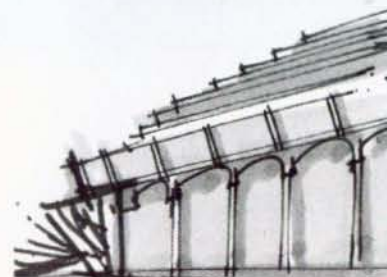
parallel strokes (roof and wall)



gray marker for base color, spatial edges outlined by fine-line marker



spatial edges outlined and sharpened by fine-line marker, wall detail also shown



roof and wall details revealed, darker gray used to cast shadow

no tricks !!  
just practice





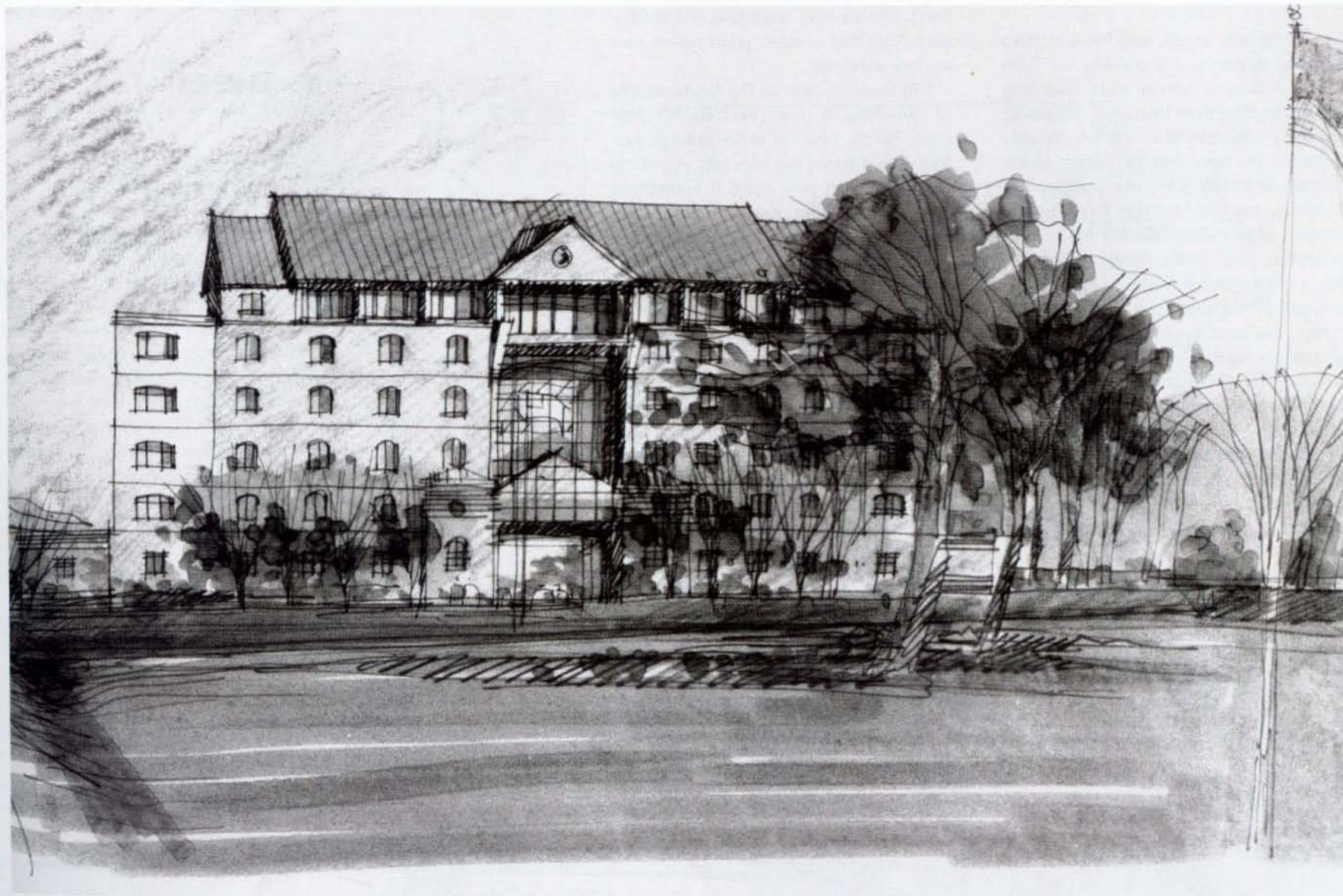
**Title:** Church in Altos de Chavon,  
The Dominican Republic

**Original size:** 8½ x 11 inches

**Medium:** color markers on bristol board

**Technique:** use broad color strokes to  
define masses; thin black outlines done  
at the last minute





**Title:** Architectural Study  
**Original size:** 30 x 36 inches  
**Medium:** color markers and felt-tip markers  
on white tracing paper  
**Technique:** quick sketch, color markers  
over felt-tip line sketch

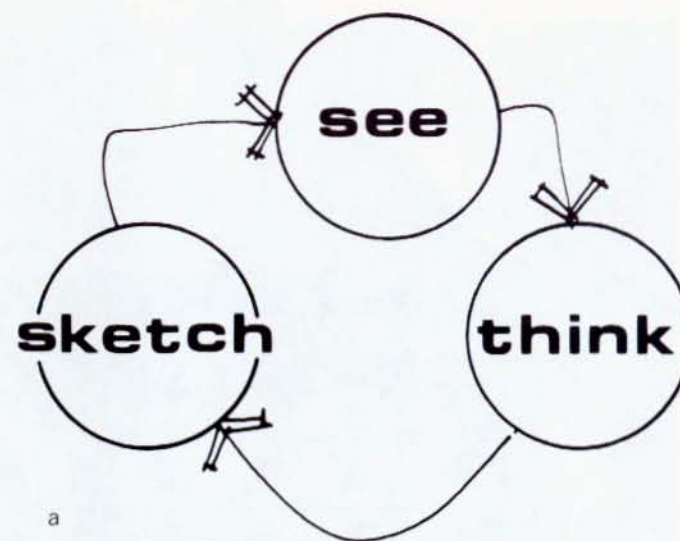


## SKETCHING

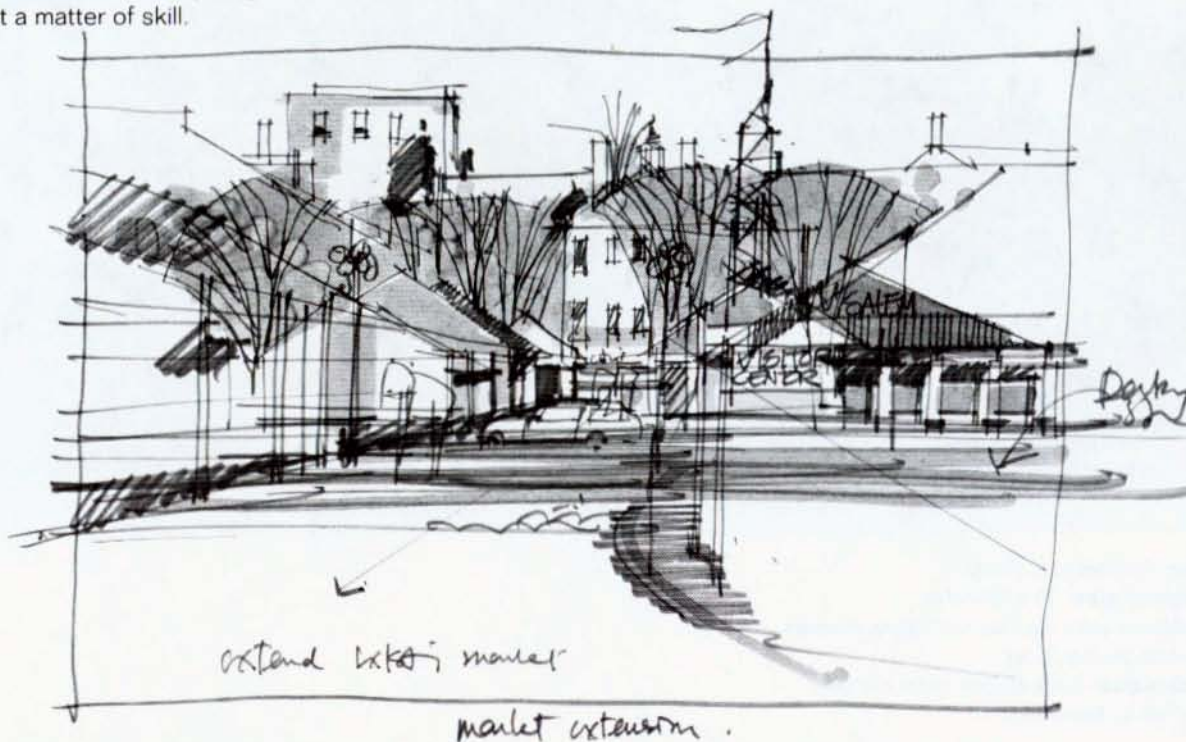
Sketching is an artistic act. There are two types of sketching: life drawing, (i.e., you sketch what you see) or recall sketching (i.e., sketching from memory). Sketching is a very complicated interactive process between the eyes and the hands. In the course of transforming real images into symbols, one goes through three distinct stages: object identification, shape simplification, and finally image recording. Keep in mind that this is an oversimplified analysis of the sketching process. What really goes on in your mind and how you graphically express an image are complex and beyond our understanding. Sketching is a gradual learning process. You must learn how to draw before you can sketch. It is like learning how to walk before you can run. Being able to draw precisely, carefully, and realistically is a necessary discipline before attempting

the more difficult task of graphic shorthand. Life drawing, therefore, is a prerequisite skill that enables you to learn how to draw precisely.

Life drawing sets up the fundamentals of sketching. It is an exercise for your eyes, hands, and the entire linkage system. Life drawing not only lets you study the object with your eyes, it sometimes involves taking real measurement of the dimensions and angles, or recording the materials and textures with photographs. These routines habitually force your eyes to keenly record the image and, therefore, remember it. The fact that you remember the image is crucial to sketching from recollection or memory. Often you cannot recall images because you don't have them in your visual data bank. The idea that we can't draw often derives from the lack of anything to recall. It is not a matter of skill.



a  
a sketching process



b

**Title:** Urban Space Study  
**Original size:** 8 x 11 inches  
**Medium:** markers on white tracing paper  
**Technique:** quick sketch

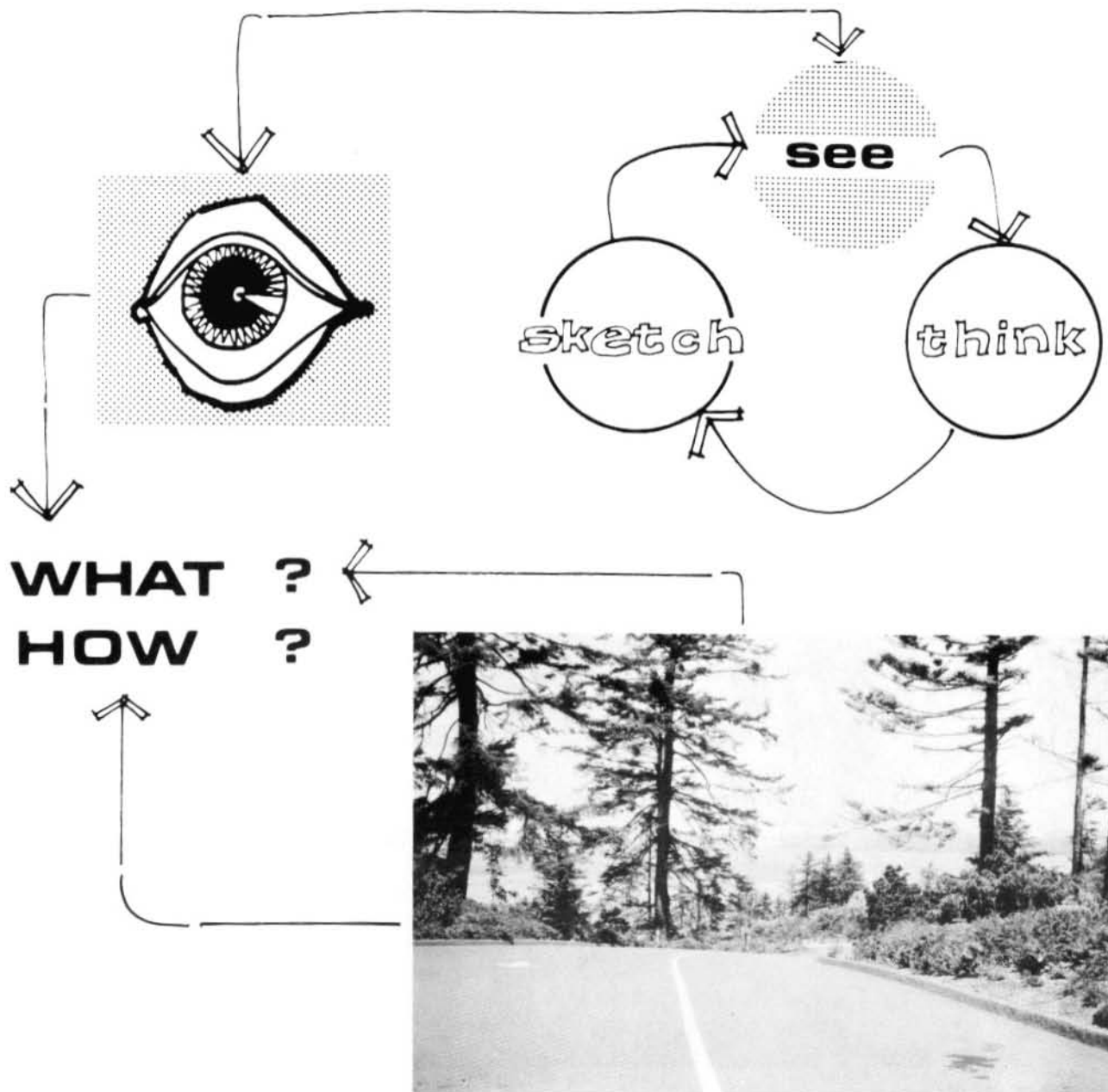


## SEEING

Since sketching records visual experience, the art of seeing and the things we see are indeed the crucial factors in sketching.

Learning to see is the most important step in learning about life drawing. Since the sketching process records visual experience, the art of seeing and the things we see are indeed crucial factors.

Most of our visual experiences have to do with a perceived message. People endow the objects they see with a certain meaning, which is factual and utilitarian. For example, observers may identify a door as a door that leads to a restaurant; a house, as a courthouse. Seeing in sketching should precede such facts. First of all, you should be aware of the juxtapositioning of objects, the changing of colors, the variation in contour and light quality, and the liveliness of lines and edges. Before interpreting the meaning of the things you see, first appreciate the proportion, scale, texture, and composition of the entire image. This is called aesthetic seeing, or formal perception.



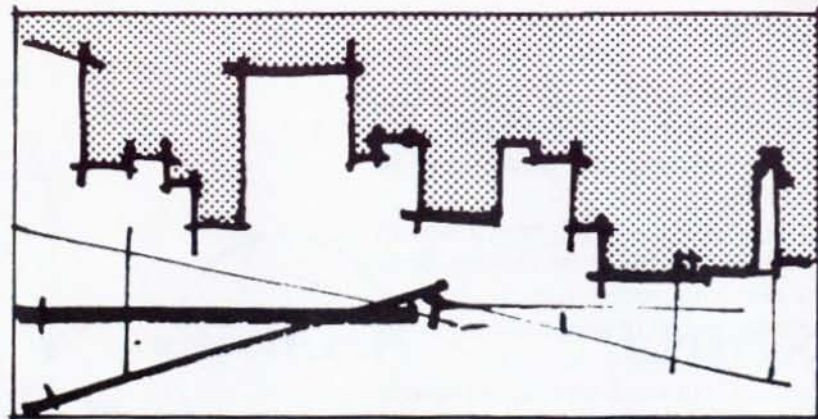
## The Art of Seeing

Kevin Lynch, in his book *Image of the City* (MIT Press, 1961), described edges, landmarks, nodes, and paths as the prime visual attractions of the city. Seeing in sketching is quite similar. The three major categories in formal perception are:

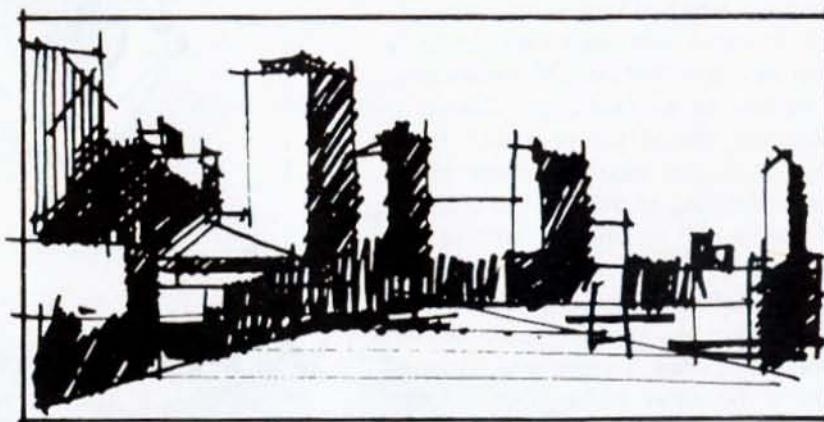
- Skyline—look for the mass, landmarks, nodes, and figure/ground relationship (Figure a).
- Light/shade contrast—identify the light source, as it helps to pictorialize the shape of the masses (Figure b).
- Lines, paths, and edges—these help to identify perspective and locate reference planes and vanishing points (Figure c).



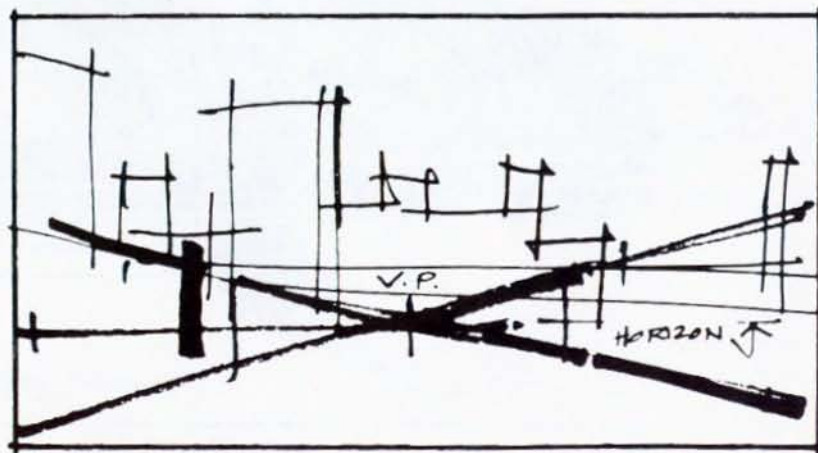
photograph of a city



a profile, figure/ground relationship

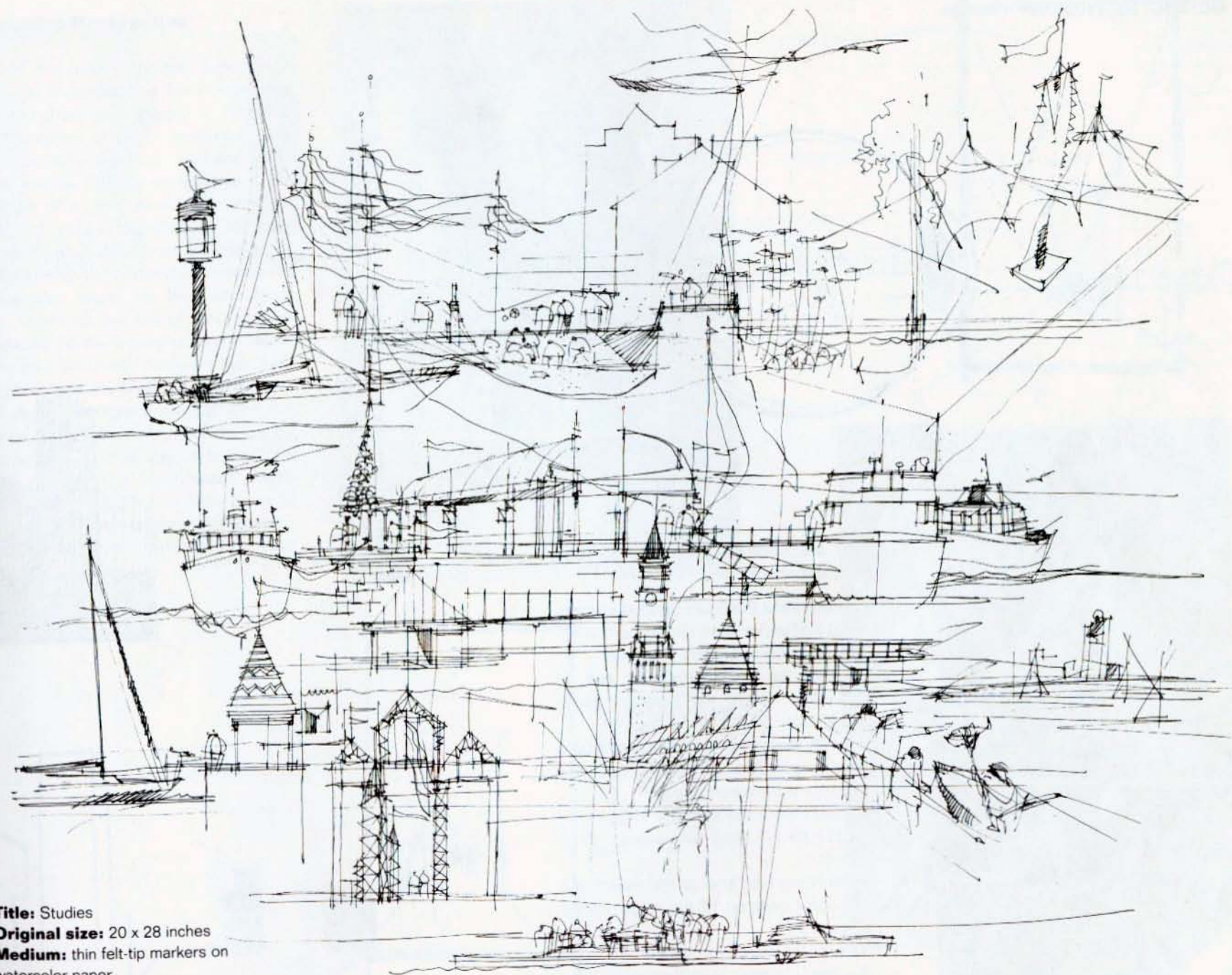


b light/shade contrast, shape identification



c line, edge, and perspective





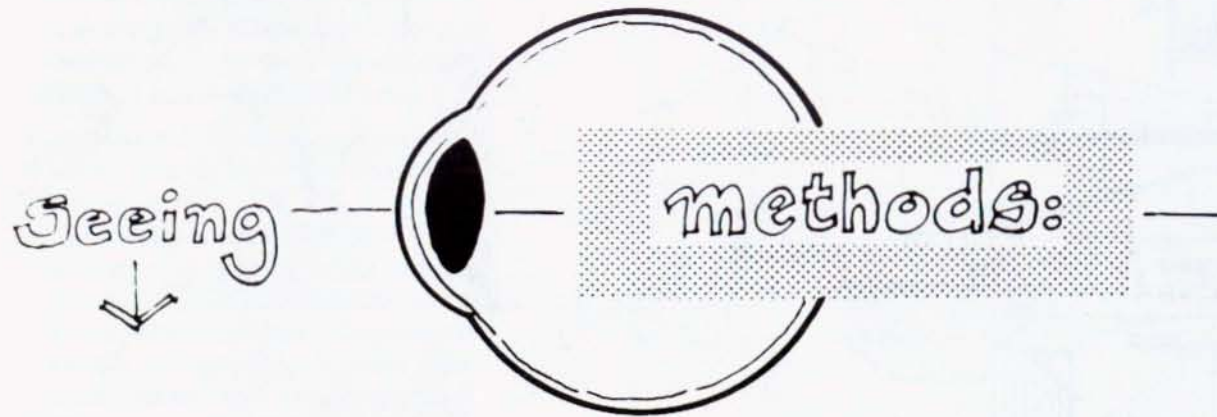
**Title:** Studies

**Original size:** 20 x 28 inches

**Medium:** thin felt-tip markers on  
watercolor paper

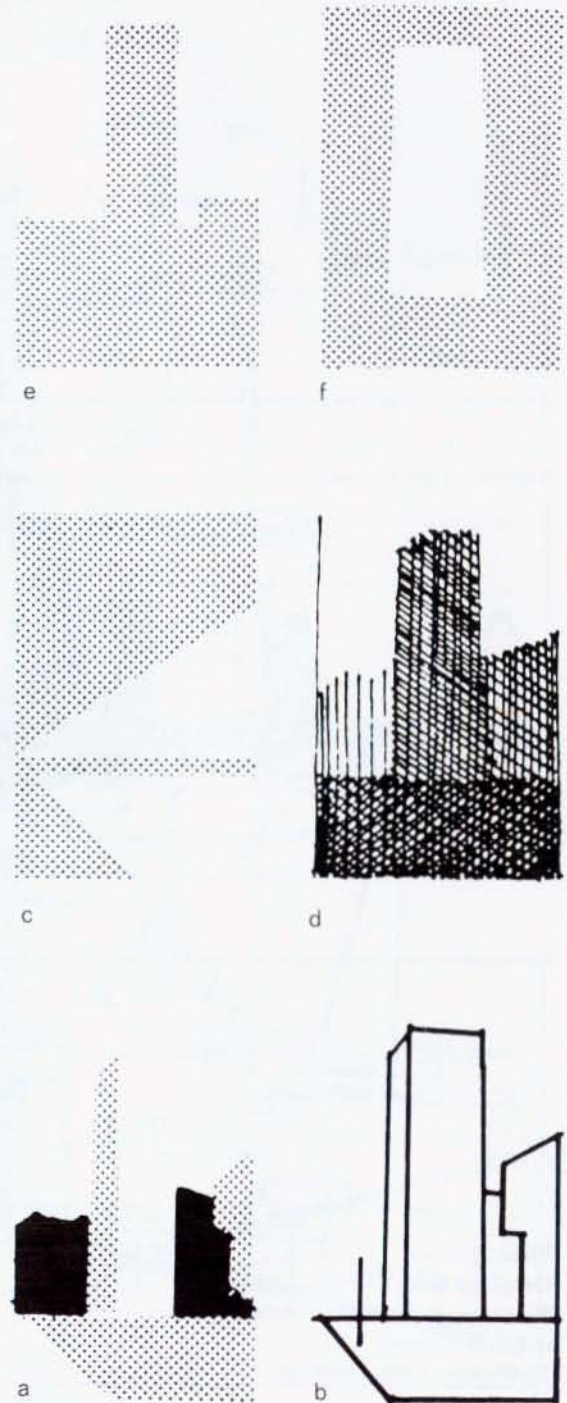
**Technique:** line sketching





Here are several suggestions for aesthetic observation:

- Differentiate the figure/ground relationship and understand the proportion between mass and space (Figure a).
- Identify the prominent mass and its coverage inside the picture frame (Figure b).
- Identify the perspective type and locate the horizon line, projection rays, and reference planes (Figure c).
- Classify the visual field into foreground, middleground, and background. (Figure d).
- Identify the light source and sketch out the tonal contrast of the major planes (Figure e).
- Identify the shape of masses by following the formative lines (horizontal, vertical, and diagonal) (Figure f).

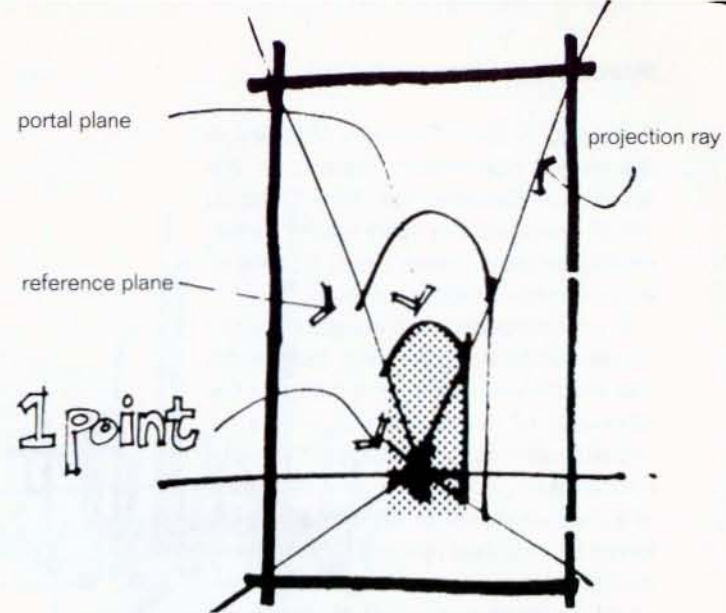
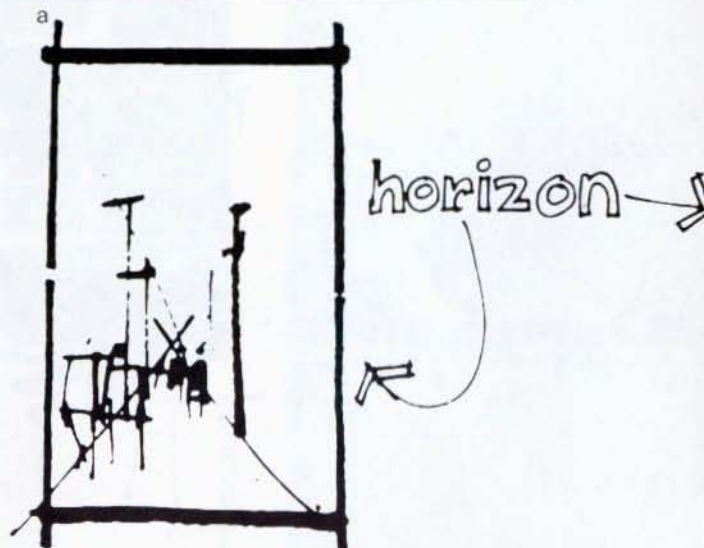




## One-point Perspective

One of the most important aspects of seeing is understanding the perspective type and structure of the scene. They are the foundation of all measurement, and they determine the proportion and scale of the sketch. Correct perspective is the skeleton of a good sketch. Perspective does not yield a duplicate of the perceived image, but it comes closest to, or best explains, our perceptual experience.

Normally, when we face an object (e.g., Figure a), our line of vision is perpendicular to the frontal or portal plane. In Figure a the frontal plane is a hypothetical plane, and the portal plane is the rear wall and stained-glass window. The reference planes (floor, wall, columns, etc.) and projection lines are parallel to the center of vision. Due to the nature of one-point perspective, these lines tend to look as if they are converging at a distant point located on the horizon (eye level) (Figure b).

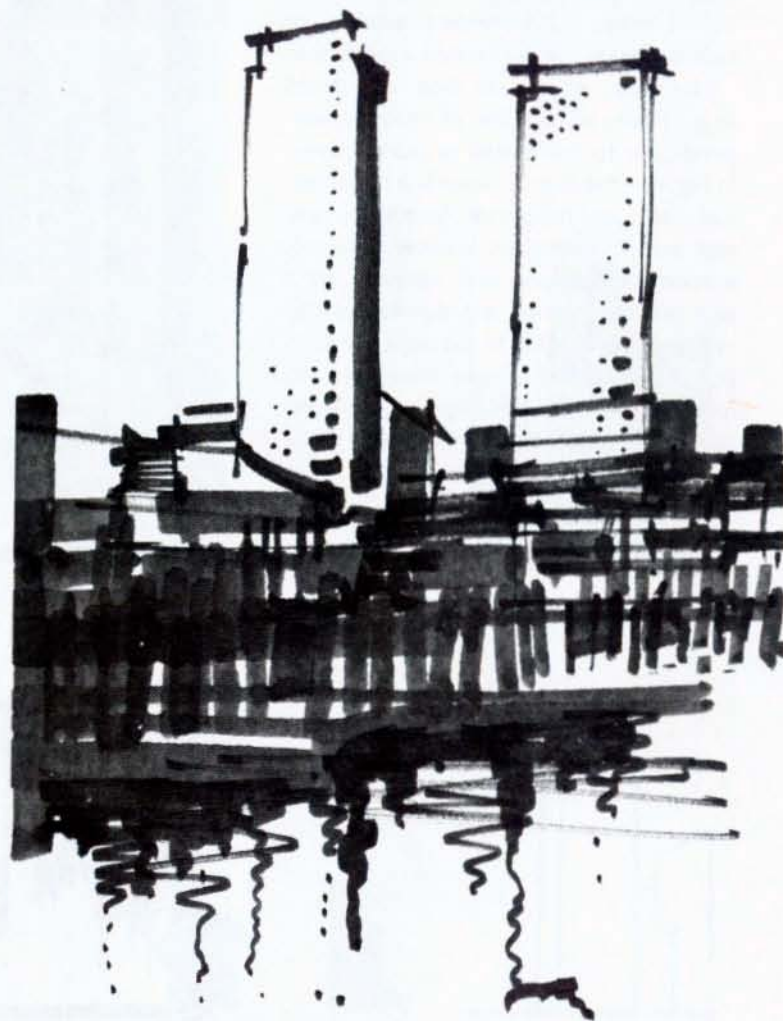


b

## Perceptual Interpretation

According to Erwin Panofsky (*Studies in Iconology, Humanistic Themes in the Art of the Renaissance*, Icon Editions, 1972), there are two major ways of interpreting perceptual experience: in terms of either formal or factual meaning.

Formal perception is a conglomerate of certain patterns of color, line, and volume that constitutes an image. It captures the silhouette of the image and carries no specific meaning or message. This *experience* takes place during the first instant of an entire perceptual sequence. It is followed immediately by factual perception, during which the viewer begins to understand the experience. Factual perception involves identifying certain visible objects known from previous experience, as well as relationships between these objects and cues within the image. Its meaning is often unique to a given culture.

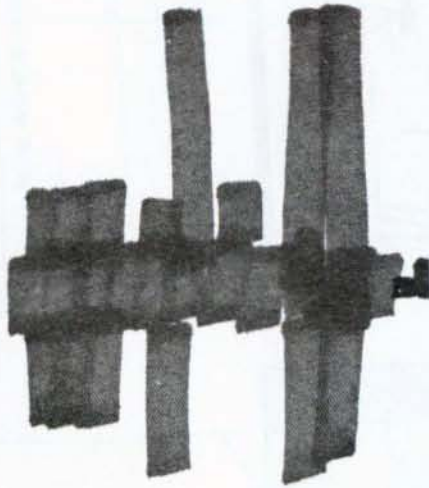




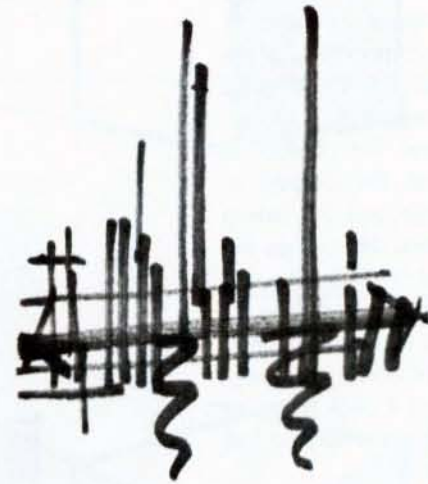
Formal perception can be subdivided into four parts: mass, line, shape, and tone. Mass refers to the figure/ground relationship. It separates the object (mass) from the space (ground). It categorically groups objects that share similar features without differentiating materials, details, and intervening spatial edges (Figure b). Line concerns the predominant orientation(s) of the major structures (Figure c). Shape expresses the character of each object within the picture frame (Figure d), while tone identifies the logical light source and creates the sensation of depth (Figure e).



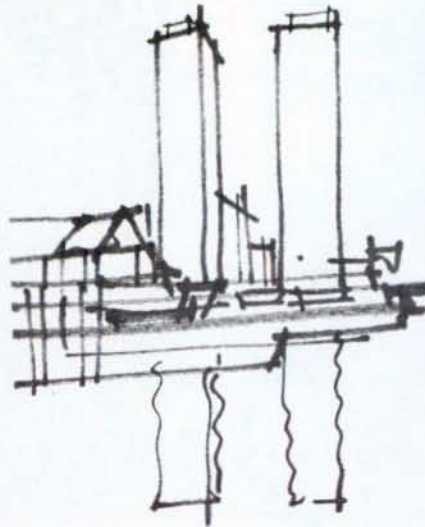
a



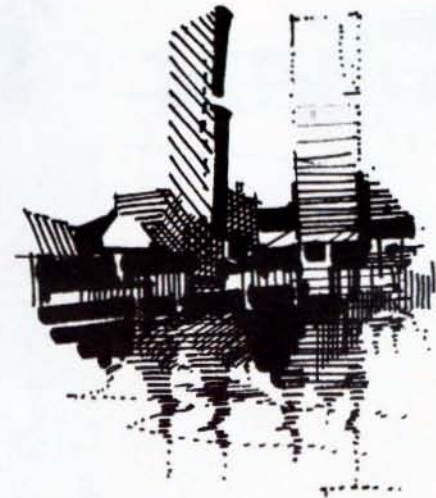
b



c



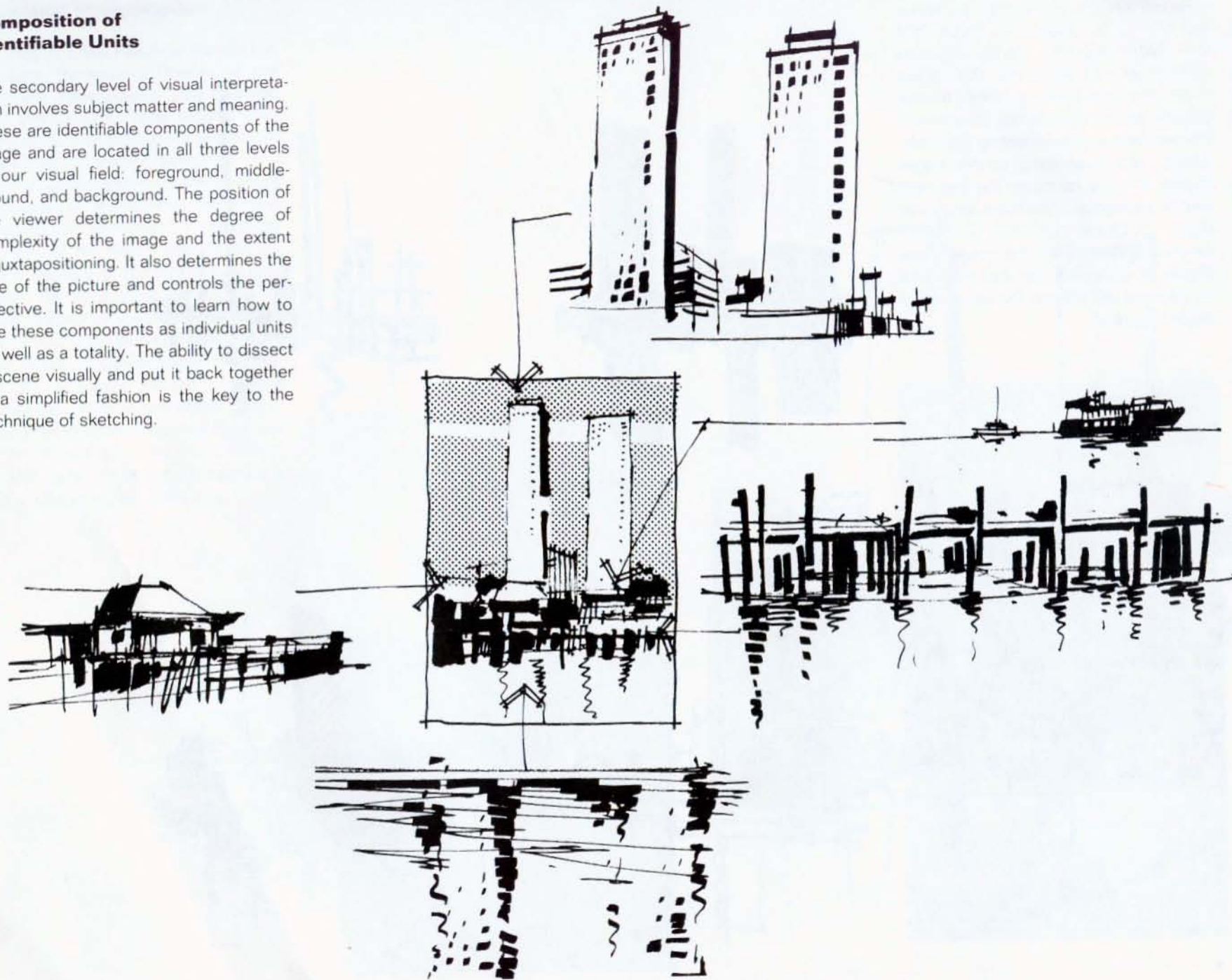
d



e

## Composition of Identifiable Units

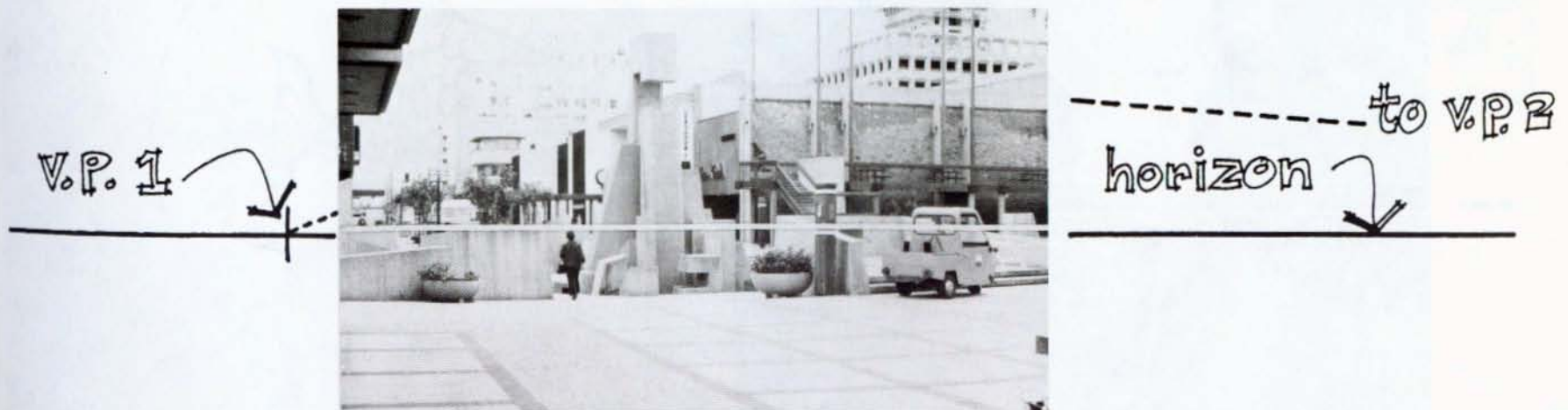
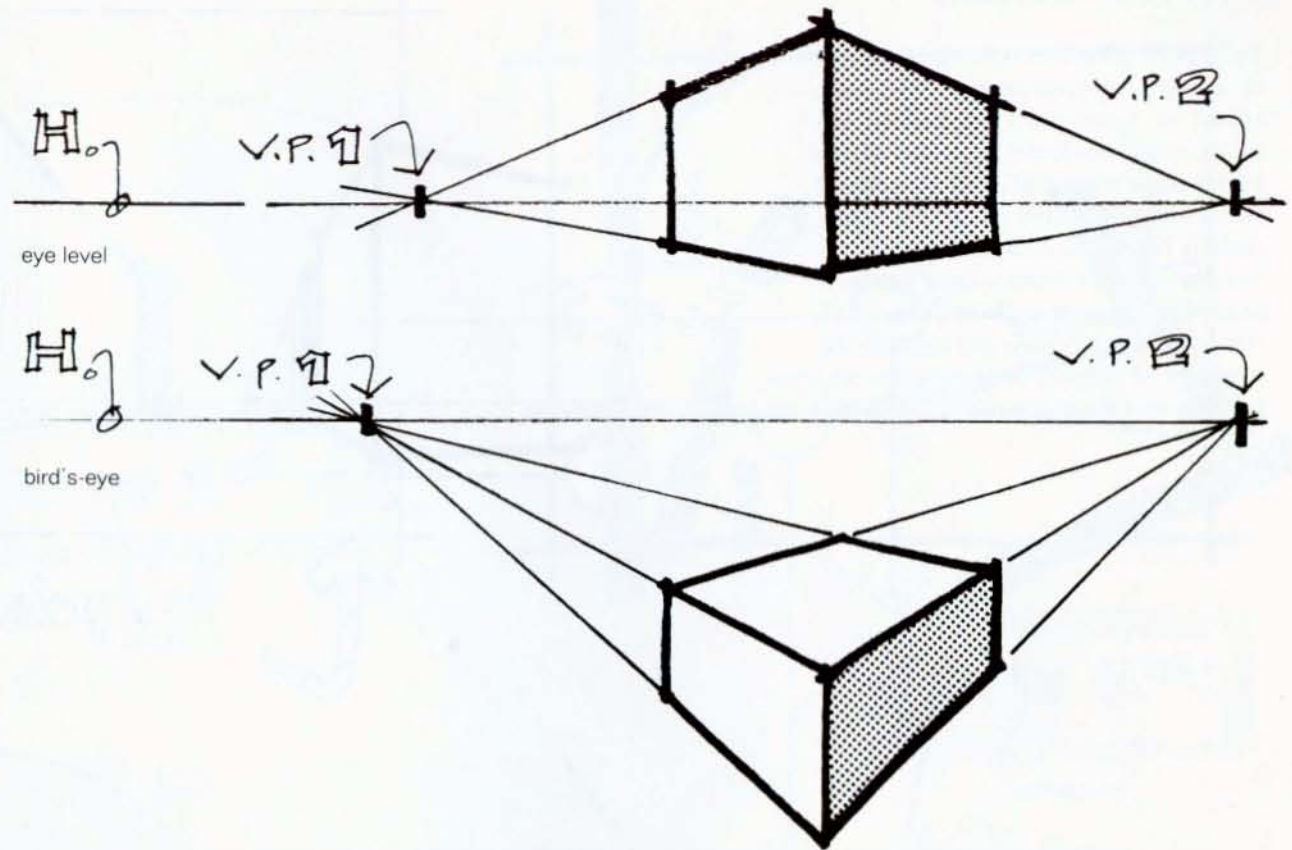
The secondary level of visual interpretation involves subject matter and meaning. These are identifiable components of the image and are located in all three levels of our visual field: foreground, middle-ground, and background. The position of the viewer determines the degree of complexity of the image and the extent of juxtapositioning. It also determines the size of the picture and controls the perspective. It is important to learn how to see these components as individual units as well as a totality. The ability to dissect a scene visually and put it back together in a simplified fashion is the key to the technique of sketching.





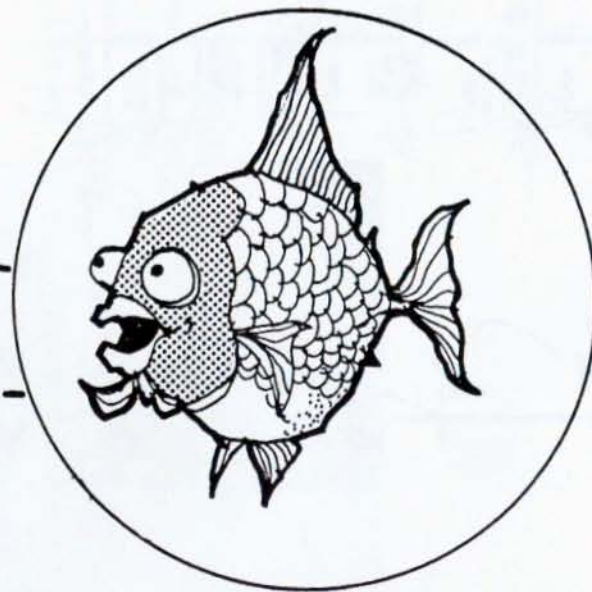
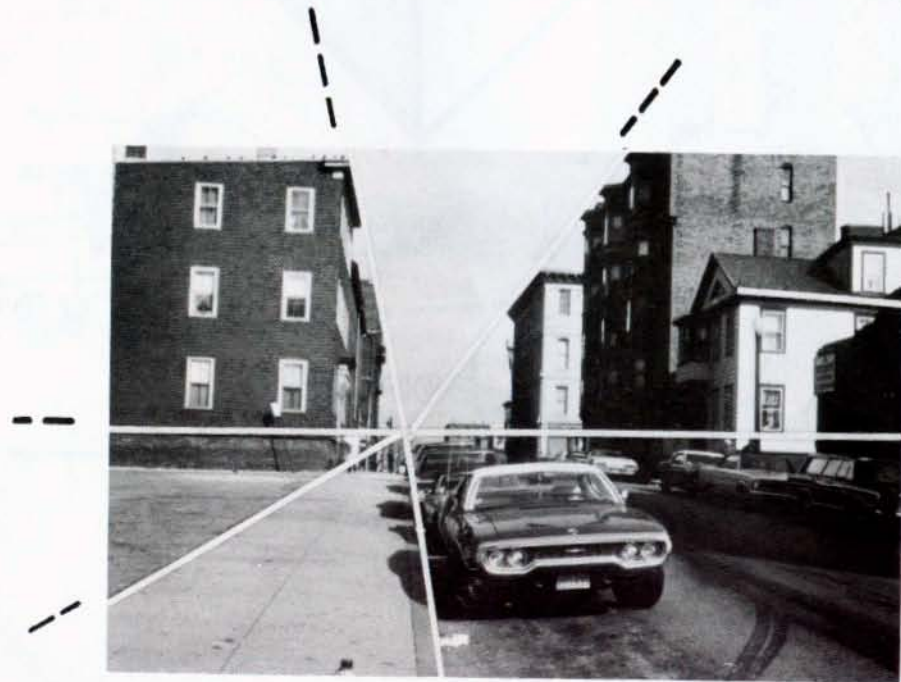
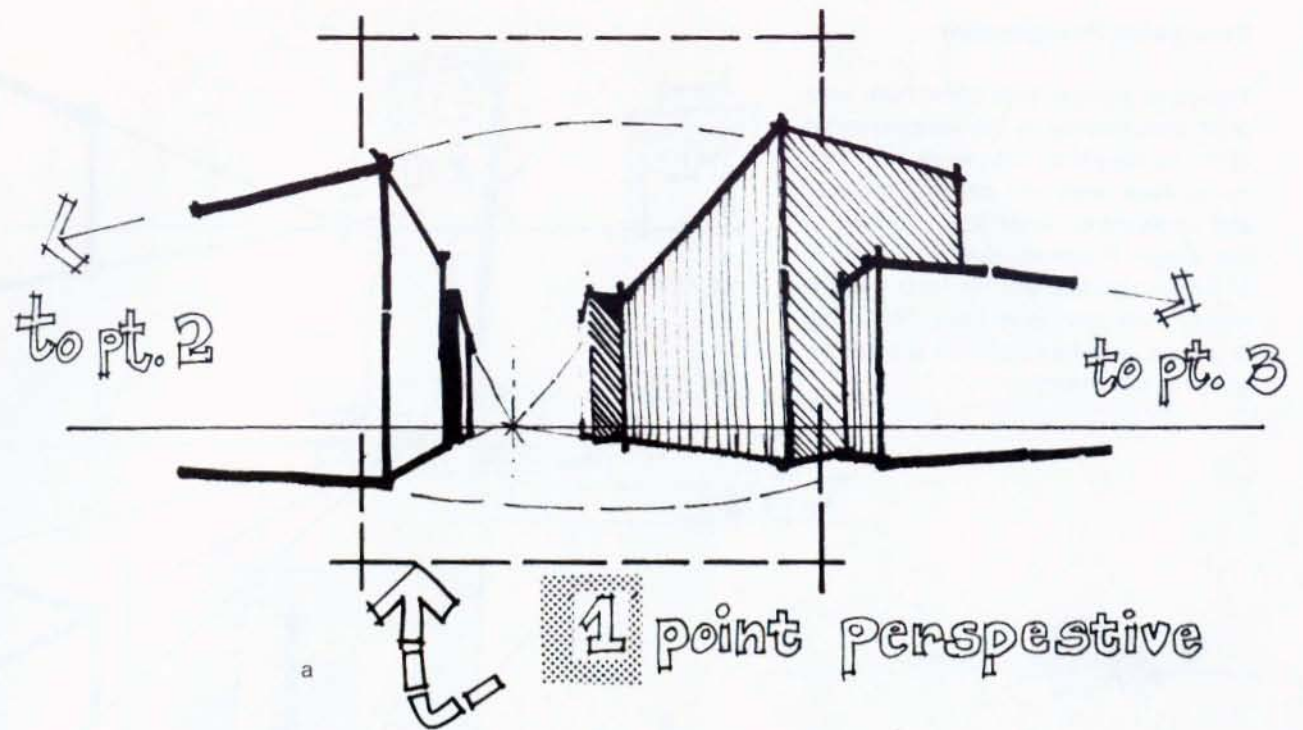
## Two-point Perspective

Two-point perspectives differ from one-point perspectives in the disappearance of the frontal plane. The viewer has a better vantage point and can see more of and understand better the structure of the image. However, due to the setup of the perspective and the facts that the rate of scale change and size diminishing is greater, the drawing has a greater potential of distortion.



### Three-point Perspective

Three-point perspective is a combination of one- and two-point perspectives. It is a spinoff of a one-point perspective because of the horizontal extension of the frontal plane (Figure a). The drawing will be extremely distorted unless the frontal plane is bent. This creates a curved picture plane (frontal plane), which functions as a fisheye or wide-angle lens (Figure b). The purpose is to widen and broaden the coverage, enhancing our normal perceptual experience and minimizing distortion



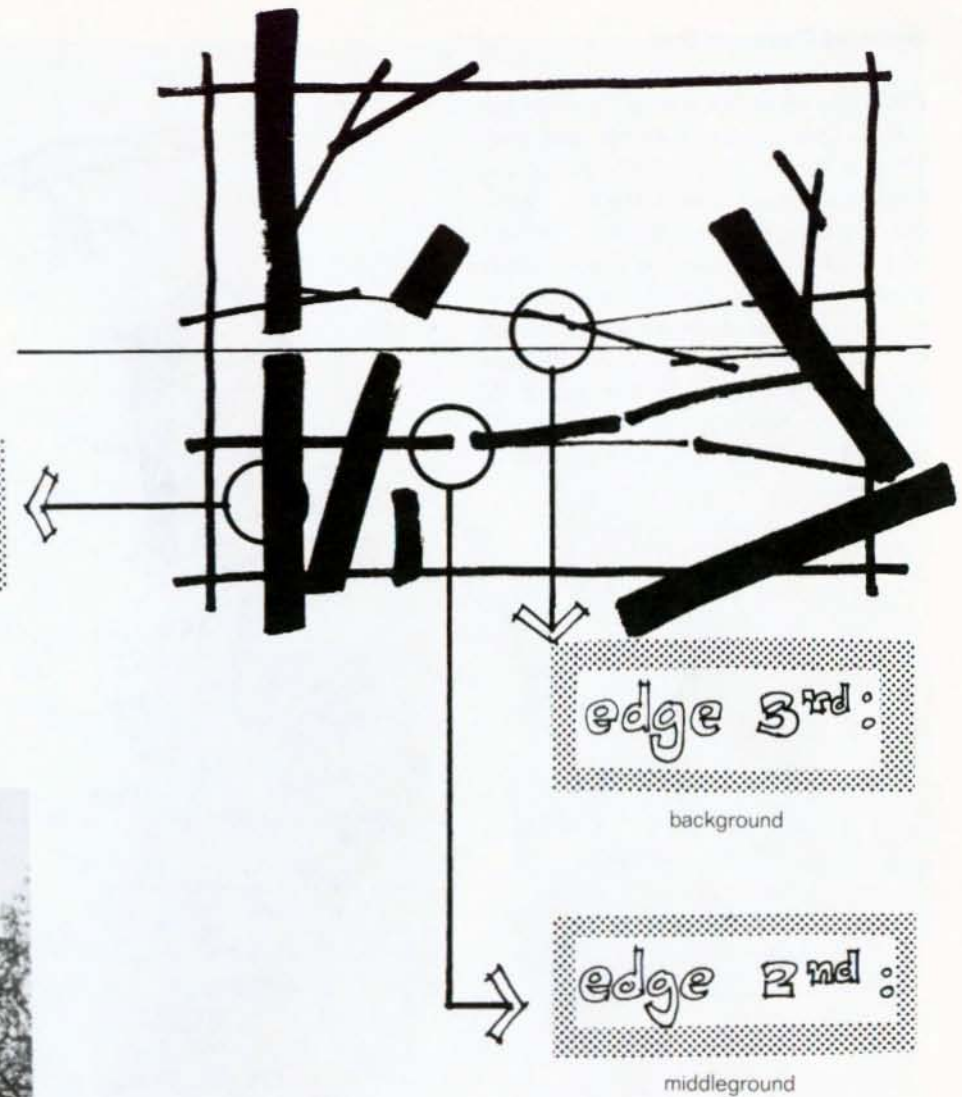


## Natural Scenery

When drawing natural scenery, the frontal plane is often nonexistent, because identifiable reference planes established by built elements are not present. Under such circumstances, one should not rely on the reference planes to establish the benchmark for measurement and scale. The best way to sketch in this situation is to outline the edges of the three major visual fields (i.e., those between foreground, middleground, and background). These edges should be bold and heavy, emphasizing only the major profile and outline of the mass and never the detailed serration of individual elements.

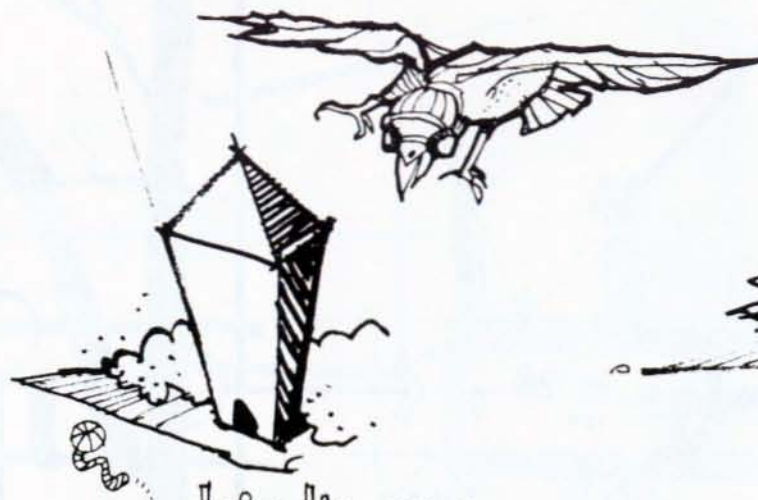
edge 1<sup>st</sup> :

foreground



## Special Perspective

Bird's-eye views are among the most frequently used perspectives for special effects in sketching. The behavior of the horizontal parallel lines is the same as in ordinary perspectives. However, the vertical parallel lines can be drawn either parallel or converging to a point below (Figure a) or above (Figure b) the horizon line. This shift of parallelism exaggerates the scale and extends the sense of height. This technique is often used to sketch tall objects such as highrises or monuments.



a

bird's eye



b

worm's eye







**Title:** studio demonstration

**Original size:** 11 x 17 inches

**Medium:** color markers on watercolor paper

**Technique:** outlining of spatial edges with black pentel after the masses were rendered and filled on broad color





**Title:** Hotel

**Original size:** 12 x 20 inches

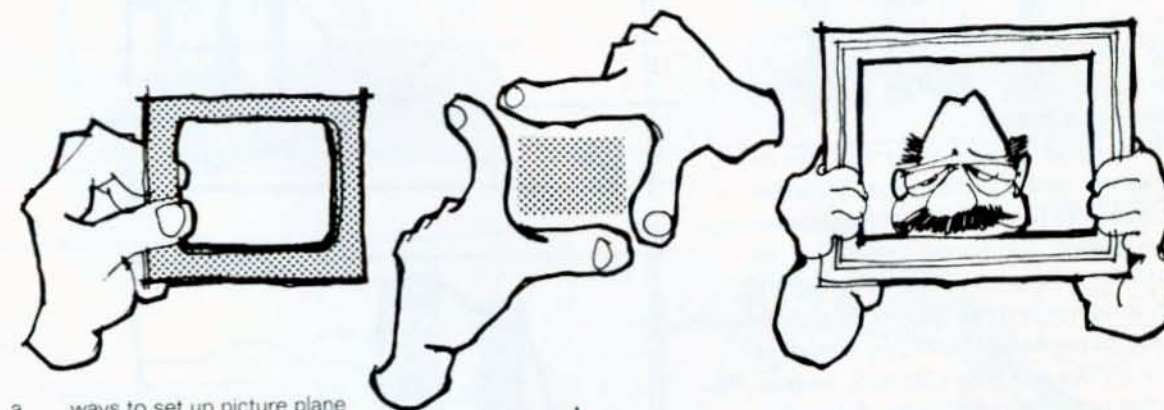
**Medium:** markers and color pencil on  
yellow tracing paper

**Technique:** line drawing

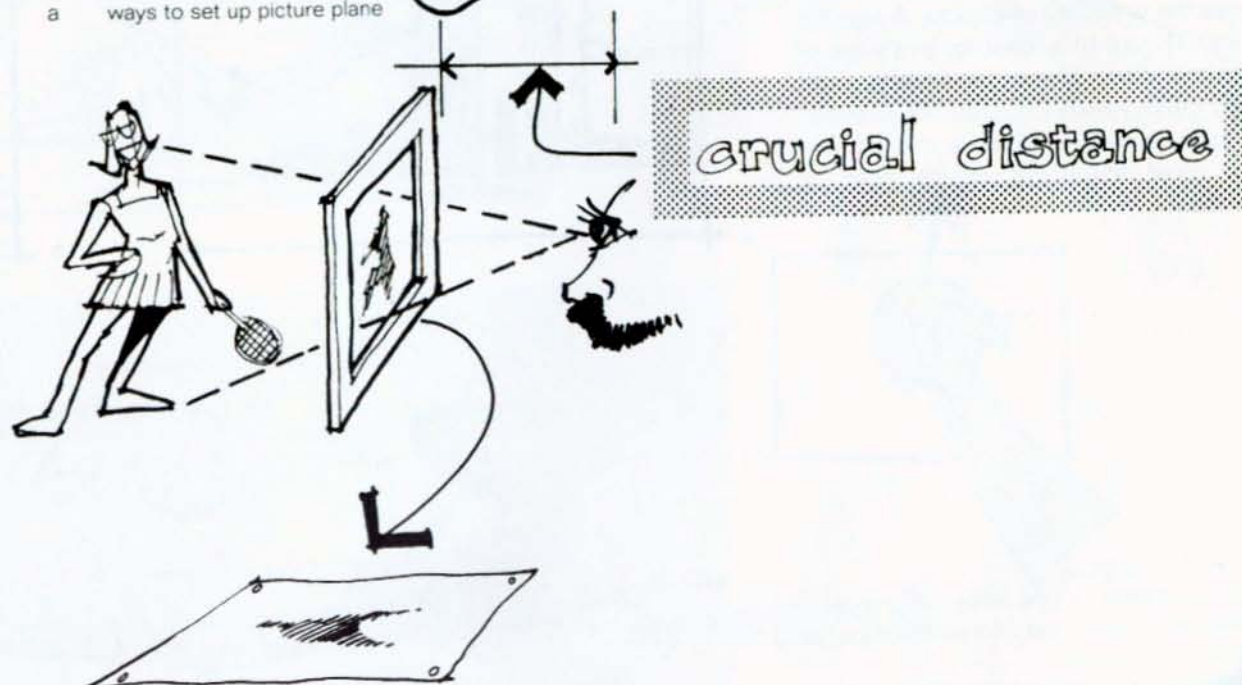


## Picture Plane

Sketching records a three-dimensional scene onto a two-dimensional surface. Before the image is drawn, it must be temporarily captured on a hypothetical plane called the picture frame. This function is very similar to that of the camera, in which the image is recorded on film in less than a second. The picture frame is used to determine the size of the sketch and the amount of the coverage. It frames those objects that you want to sketch and blocks out the undesirable ones (Figure a). The opening of the picture frame should be proportional to the paper used. Empty slide mounts are very convenient tools for framing purposes. Simply hold the mount in front of you and move it back and forth to determine how much you want to sketch. If the frame is closer to the object, the amount of coverage is reduced and the size of the object is increased. On the other hand, if the frame is closer to you, the amount of coverage increases and the size of objects becomes smaller (Figure b). Most experienced artists bypass this step, not because they think it unnecessary, but because their eyes can automatically do the cropping within the picture frame.



a ways to set up picture plane



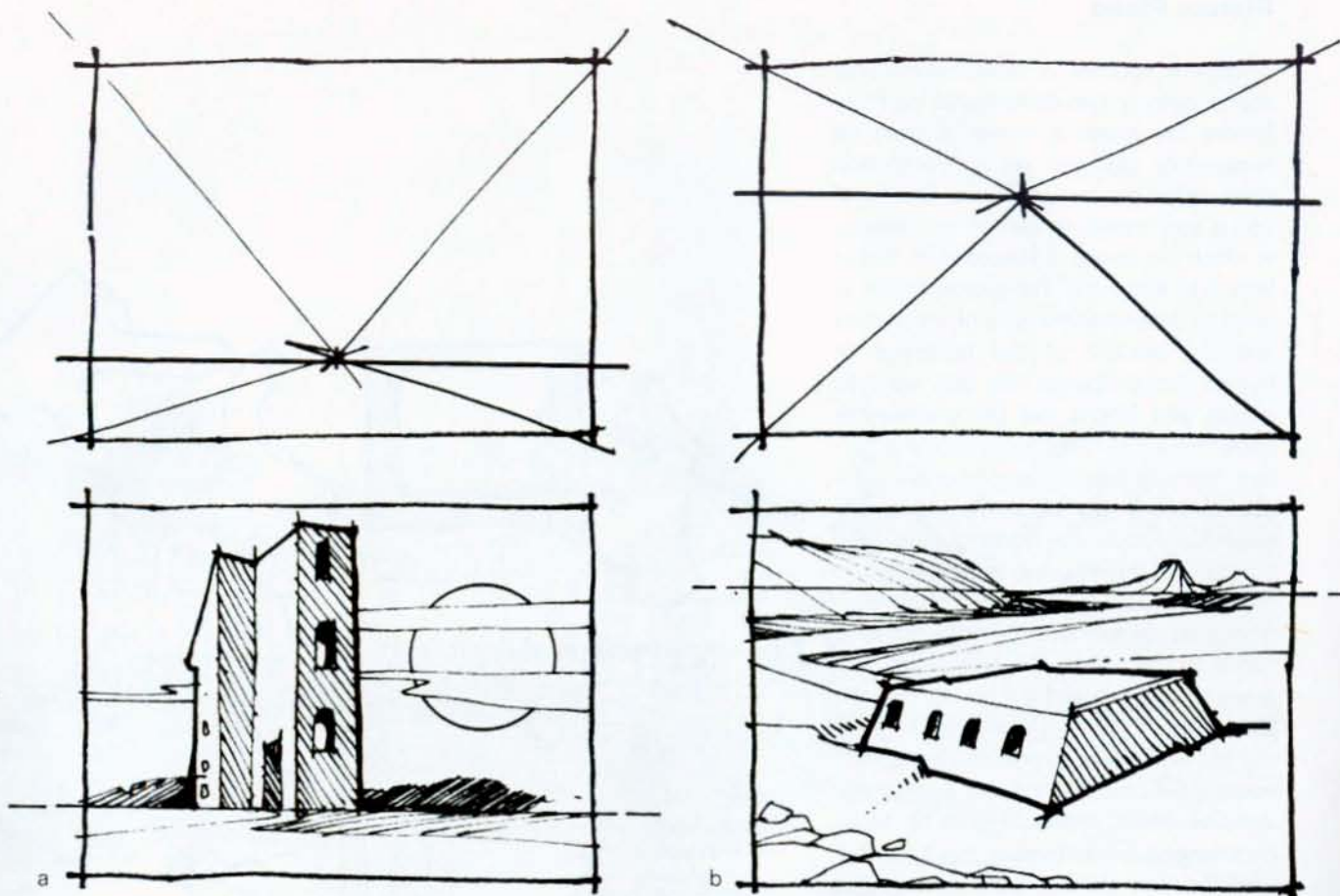
b position of the picture plane and viewing distance

## COMPOSITION

### Location of the Horizon

The horizon is the eye level of the artist (viewer). The location of the horizon on the sheet will ultimately determine the location of the principal elements. It will also divide the sheet into two horizontal bands that may or may not complement each other. This horizontal division of the sheet is extremely important in the composition of a sketch.

One should avoid placing the horizon across the center of the page. It divides the sheet into two equal portions and produces a static and boring image. For the most effective composition, place the horizon at either a three-quarter or a one-quarter position. A low horizon (Figure a) has more sky space and tends to emphasize the verticality of objects. A high horizon (Figure b) is ideal for bird's-eye or oblique views. Due to the viewing angle, the depth dimension does not foreshorten as quickly as does a low horizon, so most foreground details must be included.

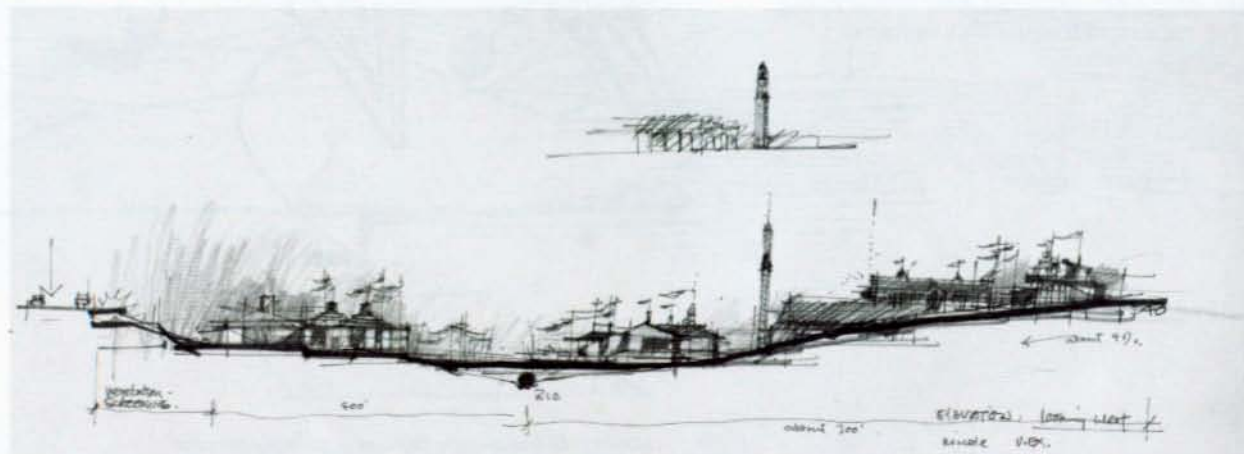


**Title:** Design Study

**Original size:** 11 x 24 inches

**Medium:** markers and color pencil on yellow tracing paper

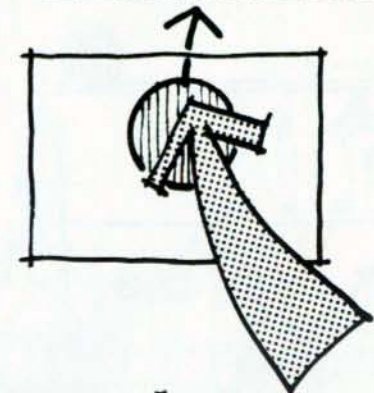
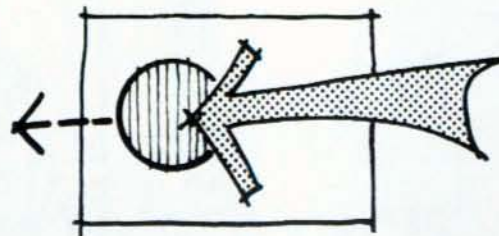
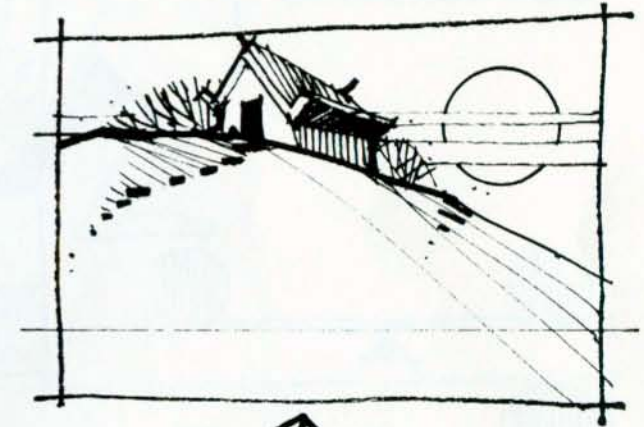
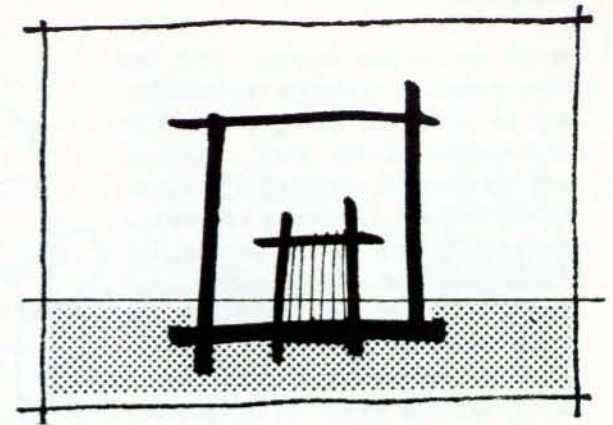
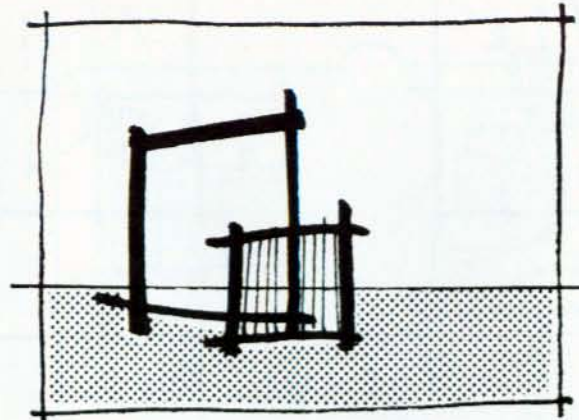
**Technique:** section sketch, color pencils over felt-tip sketch





## Positioning of the Mass

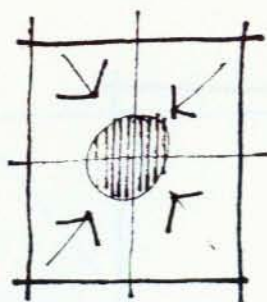
Arrange the elements in such a manner as to lead the viewer into the picture. Always position the dominant mass away from the center of the page in order to create a sense of false instability. This tends to control the eye movement of the viewer and gives the feeling that the subject is lively and not bound by the edges of the picture. The frame should be looked upon as a temporal mechanism used reluctantly to capture and suspend a moving scene for a split second. The most successful sketch is one that, although bound by the sheet, looks as if it is going to break loose.



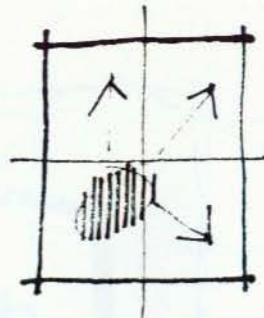
eye-movement

## Balance

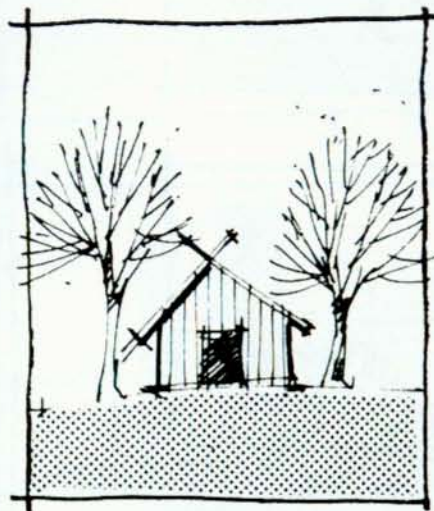
Avoid symmetrical balance. Shift the viewing position or change the sheet format to create the feeling of occult or asymmetrical balance, which is dynamic and interesting. It employs the juxtapositioning of mass and space to create a perceived but not obvious balance. The mass/space relationship is often contradictory in texture, color, and shape, but the areas should be kept relatively similar. Occult balance has a built-in system and tension and should not be misunderstood as random positioning.



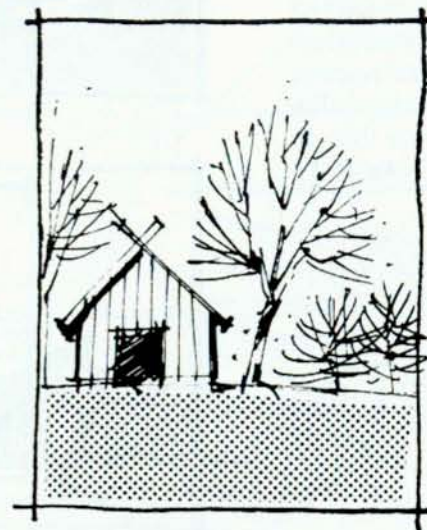
axial balance



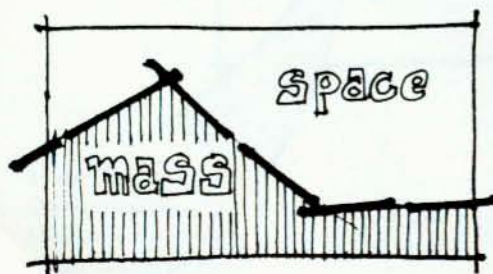
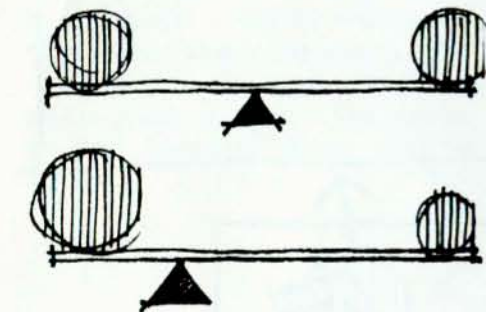
occult balance



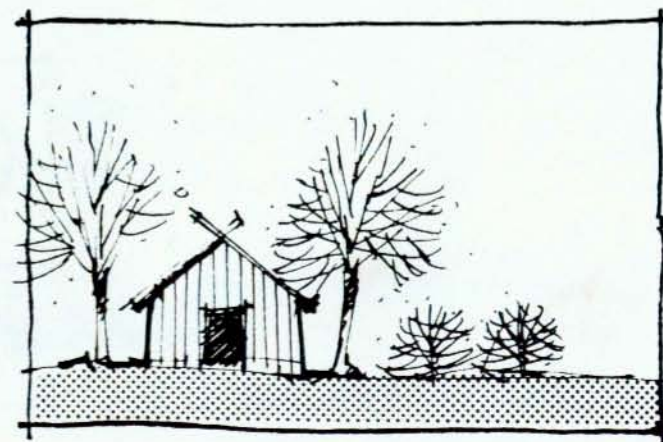
symmetrical layout



asymmetrical layout



balance between mass and space



horizontal format



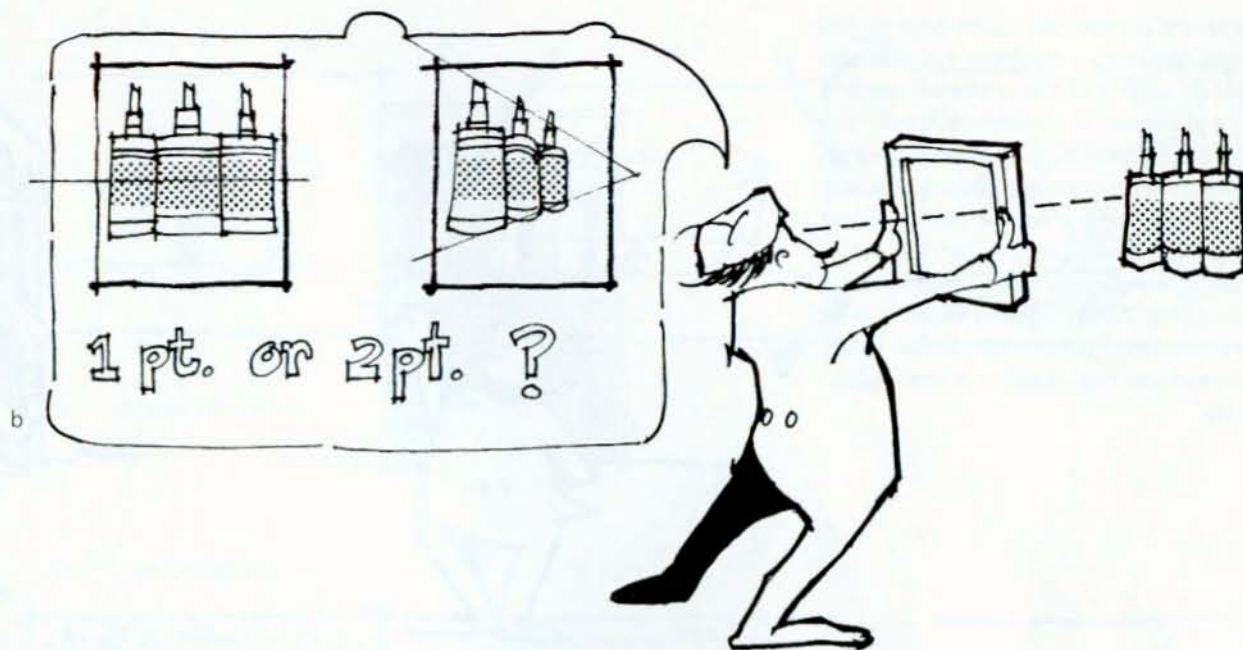
## SELECTION OF PERSPECTIVE

### One-point Perspective

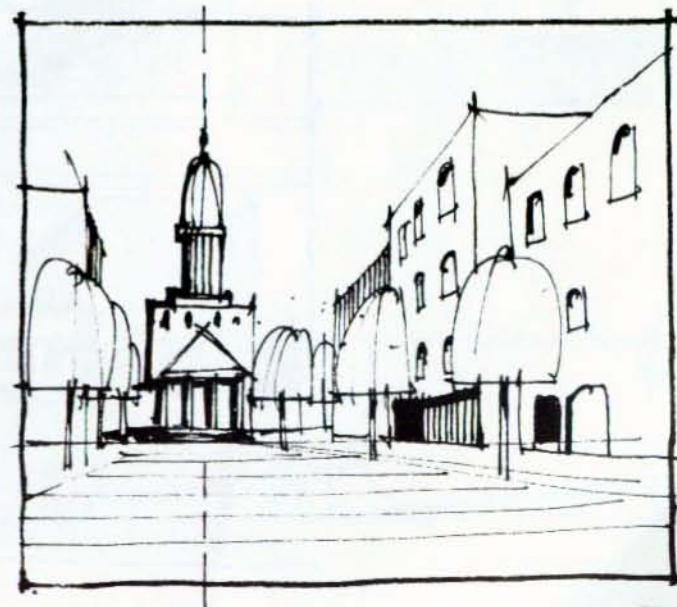
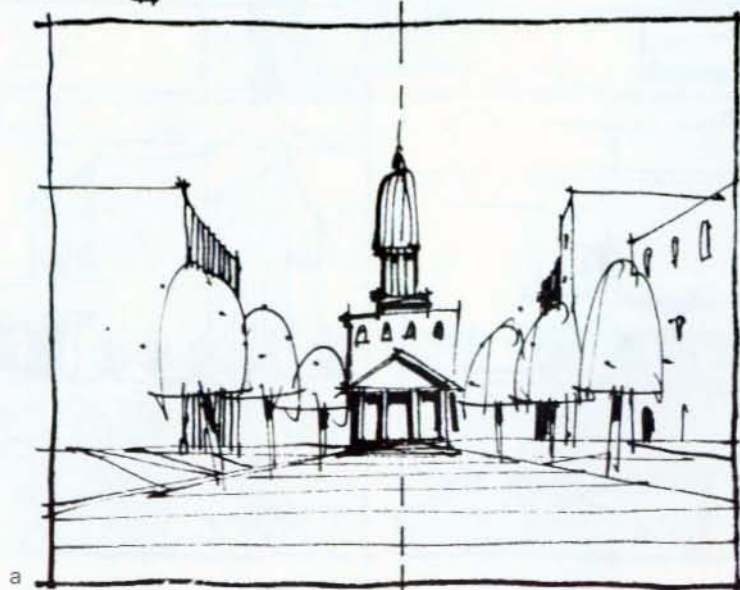
One-point perspective gives equal exposure to both sides of the lateral dimension (Figure a). Shifting the center of vision creates an uneven exposure (Figure b). This is often done to avoid a symmetrical composition for subjects to which symmetry would not be appropriate. For example, one side of a street may be more important than the other.

One-point perspective is straightforward, and is simple and easy to understand. Such a composition encourages the use of line (streets, trees, etc.) to lead into the subject. It has a strong sense of direction, and it provides an excellent setting for the expression of repetition and rhythm.

One-point perspective is ideal for sketching street scenes and interiors.



1 point :

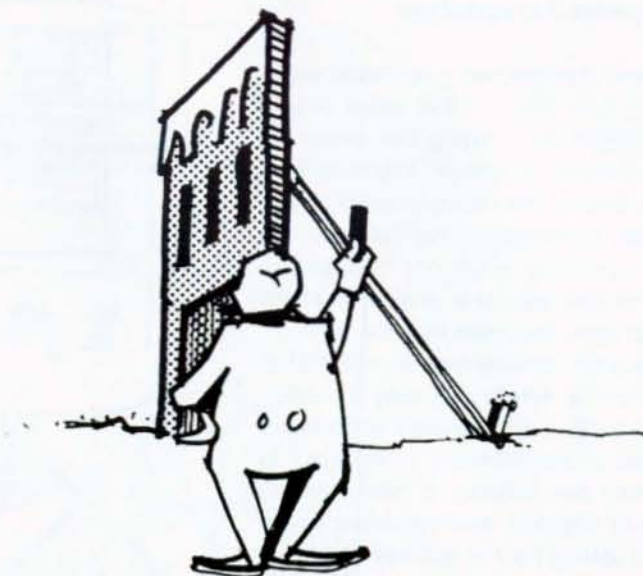


## Two-point Perspective

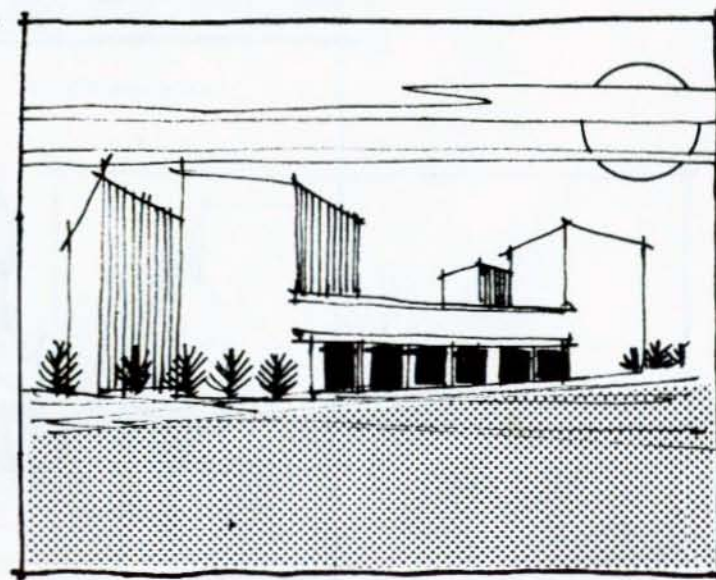
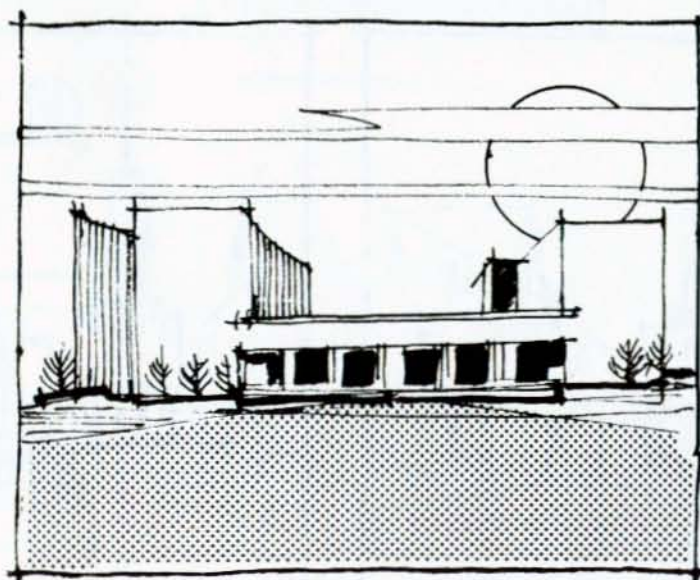
Two-point perspective goes beyond the frontal dimension, involving the side and back as well. It is the preferred method for expressing a complex subject. The fact that the sketch is nonfrontal creates a sharper tonal contrast between planes. It is an ideal setting for the generation of tension between subjects and thus stimulates eye movement and enlivens static statements. Avoid closeup views in two-point perspective, as they can be highly distorted and may result in a lack of continuity.



frontal



nonfrontal

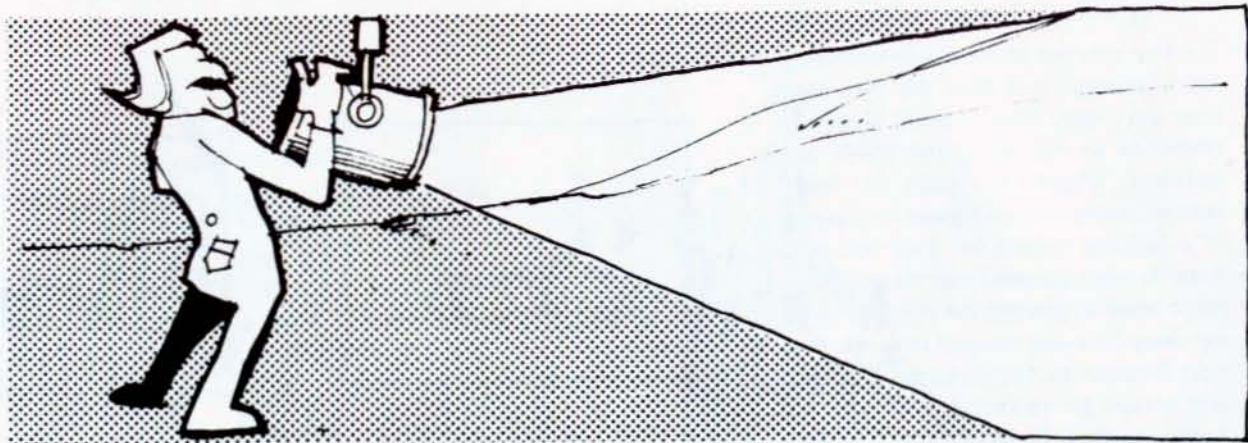




## LIGHT EFFECTS

Light effects bring out the tonal contrast between planes and thus intensify the feeling of depth. They are also used to separate and classify the different layers of visual fields. For example, a house with a white roof will look sharper if it is placed in front of a dark background. Light effects are also used to define corners and spatial edges and to set a mood.

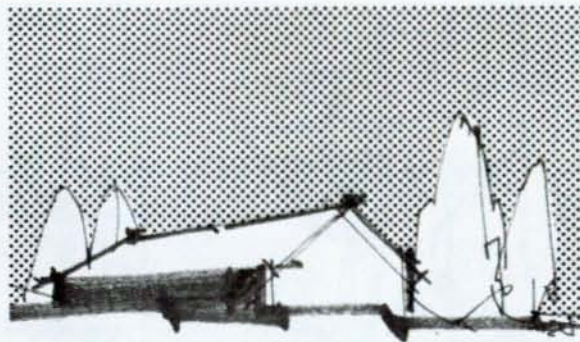
There are two kinds of realistic light sources, both with a definite direction. Natural light originates from one single source—the sun—and the light beams are parallel. Artificial light has a radiating pattern and can emanate from more than one source. In sketching, a *chiaroscuro* style can also be used. This is a pictorial representation of light, rather than a realistic interpretation of the source and its behavior. It is used to achieve a certain mood and atmosphere and yields an effective and abstract expression of light if done correctly.



use of texture to differentiate the planes



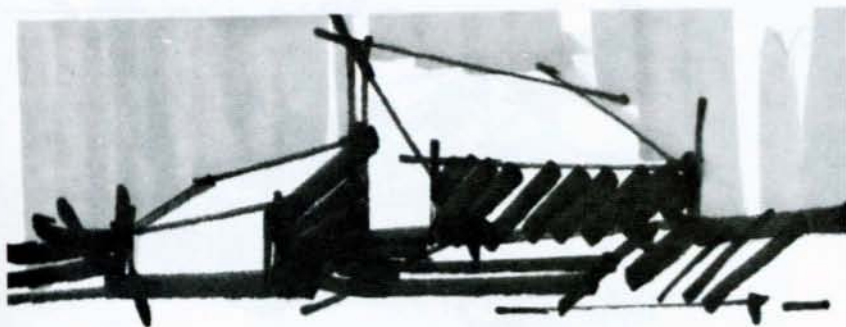
trees in background help define the shape of the roof



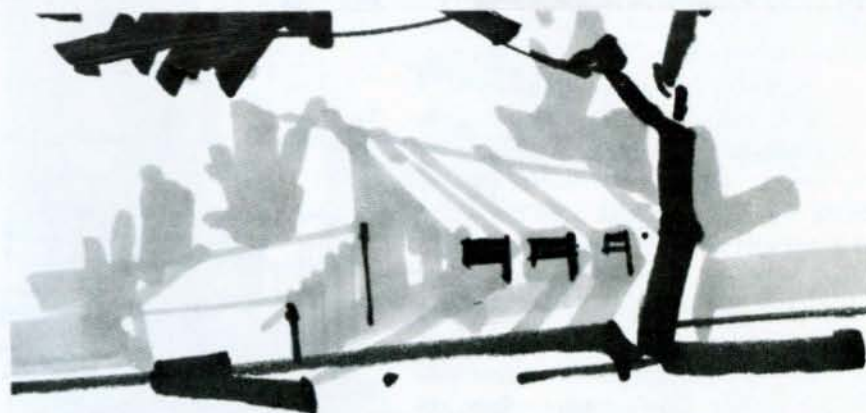
use of zip-a-tone as background tone



use of gray as background to bring out the contrast



light source from left, gray background,  
shaded side of building black, emphasis on  
the building



foreground tree black, house and background  
light, exaggerated distance in between



background black, roof white, strong  
contrast, striking and strong mood



light source not consistent, emphasis on the  
sculptural effect of the building creates  
special effect



## Light Intensity

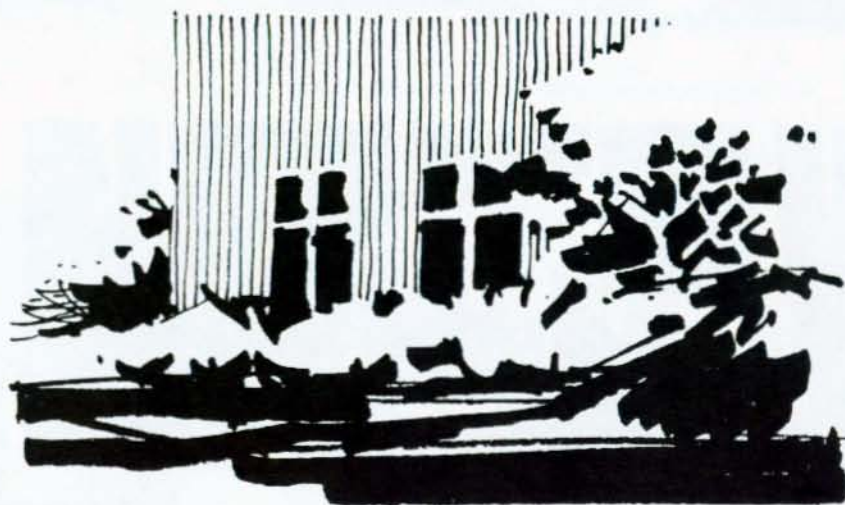
Light intensity is graphically represented by different colors or different values of one color. Its quality varies on all surfaces and sometimes even on the same surface, depending upon the position and angle of the viewer. The spot with maximum reflection usually appears to be lighter and brighter. A long, continuous surface can exhibit a variety of intensities, due to interference from other objects and the texture of the surface from which the light is reflected. Three-dimensional forms should be obvious from the ways in which light and shadow fall upon them. Shadow should be used to direct eye movement. The path of light and shadow should be carried from border to border. Use strong basic shapes to define the shadow pattern. Don't attempt to capture a realistic pattern—this is the job of a camera. A sketch is not a photograph!



dark tree canopy and shrubs in the foreground create a perfect setting for viewers to look into



strong contrast of foliage suggests the roundness of the tree canopy

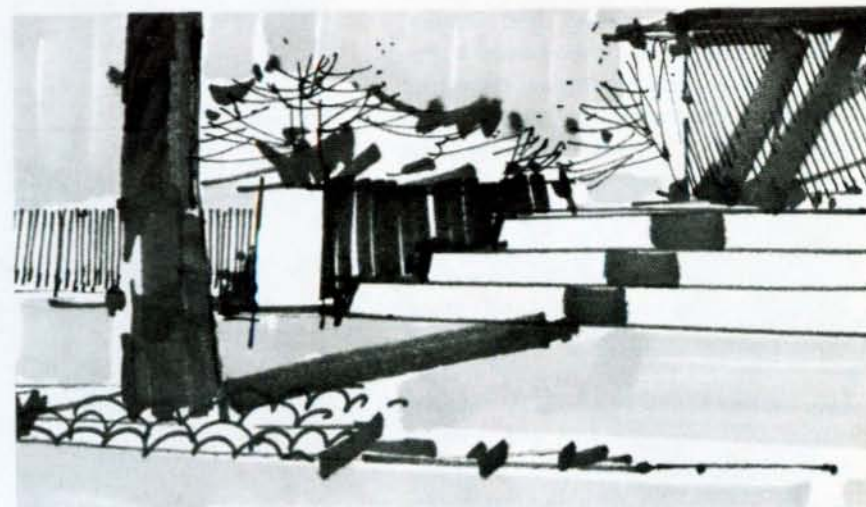


bold and dark horizontal lines in the foreground tend to lead the eye movement, creating contrasting patterns with the vertical texture on the wall

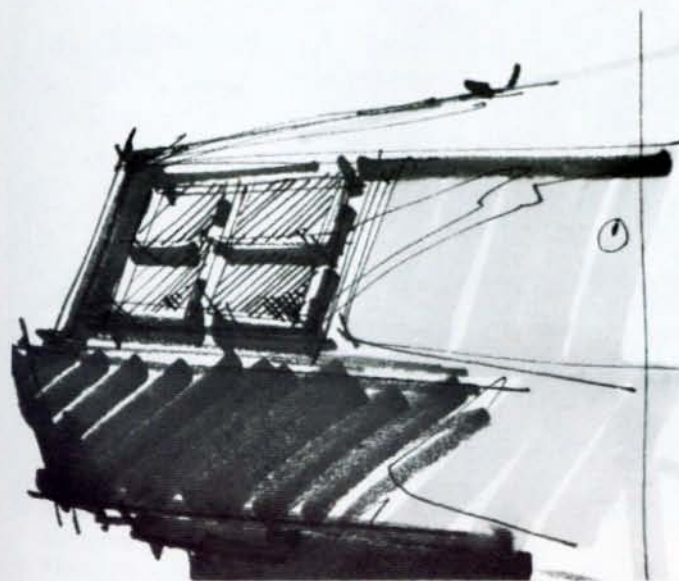
## Expression of Light Effect



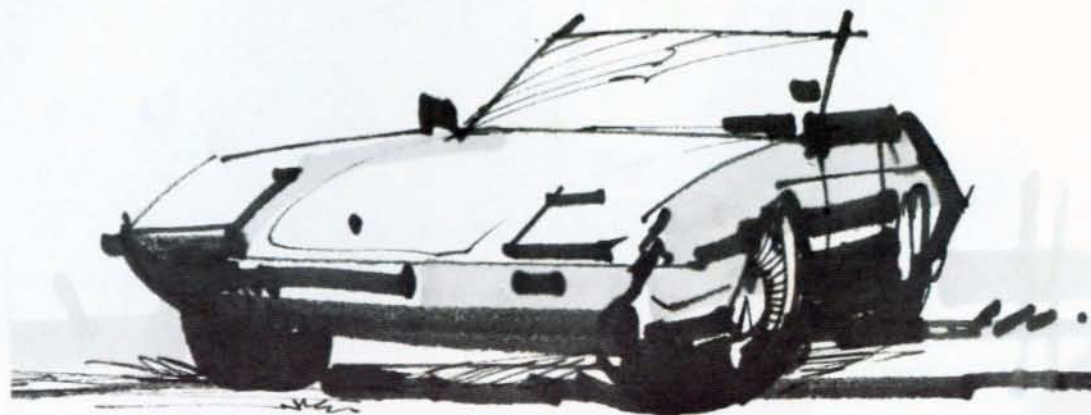
contrast in tone emphasizes the connection between the house and the roof



shadow of tree promotes diagonal eye movement across the page and leads viewers to the theme (house)



renders details and the reflection of light



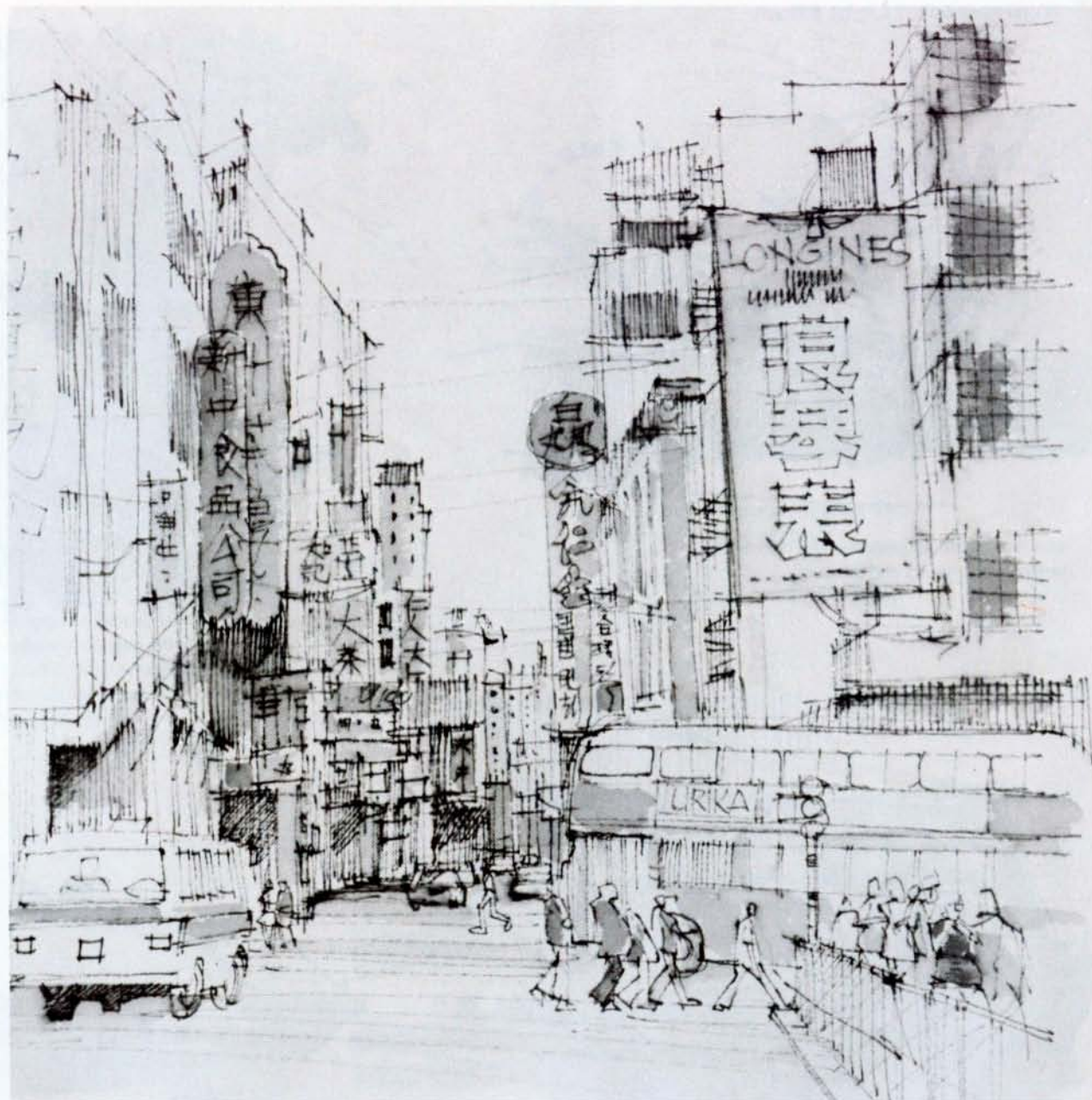
brings out the sculptural effect of the product



## A SUCCESSFUL SKETCH

A good sketch is like a breath of fresh air. Looking at it should be an enlightening experience. The subject matter should be interesting, the composition should be appropriate and pleasing, and viewers must be able to see themselves in the picture rather than functioning merely as onlookers. The line should be forceful and should flow in a meaningful way. The strokes of the marker and the colors you use should evoke a sense of relaxation and freedom.

Sketch beyond the four borders of the sheet. Allow the lines to flow and extend beyond the page. The most unconstructive habit in sketching is to confine yourself within a fixed border. Marker movement should be fast and precise. Avoid hesitation, which can cause bleeding and uneven line width. Let the marker rotate freely at your fingertip. Acquire a good sense of scale, proportion, and perspective, and other skills will come automatically with practice.



**Title:** Kowloon, Hong Kong

**Original size:** 8½ x 11 inches

**Medium:** Pilot fine-line and watercolor marker on watercolor paper

**Technique:** line drawing and wash



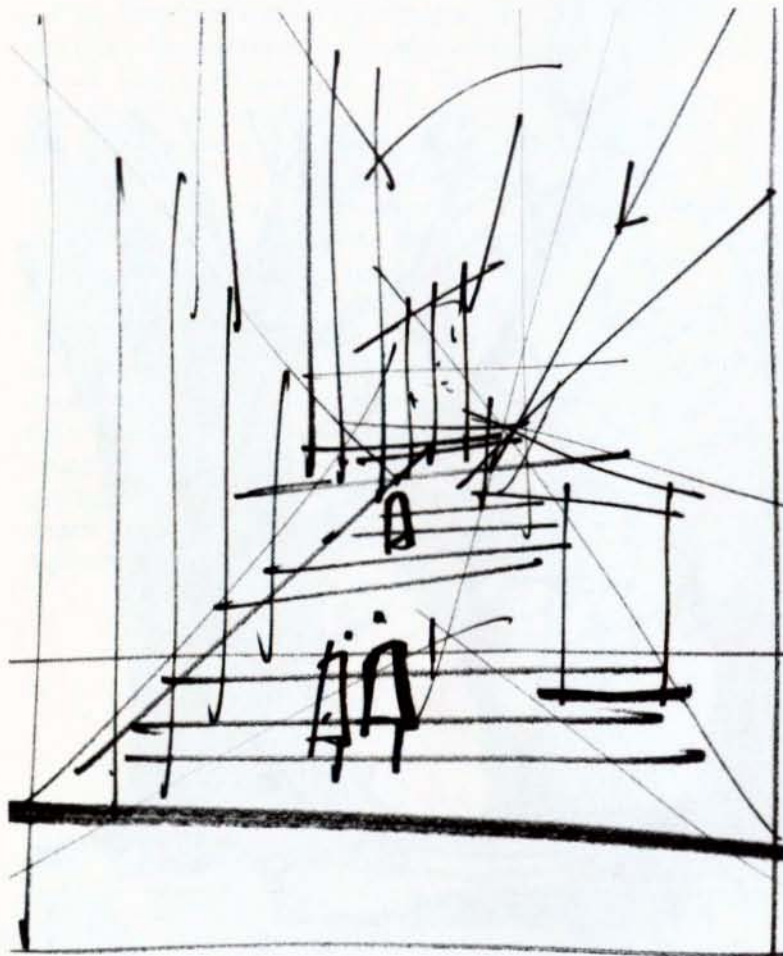


**Title:** Toronto Island Park  
**Original size:** 8½ x 11 inches  
**Medium:** color marker on bristol board  
**Technique:** fine branches were outlined  
with brown ultra-fine nib

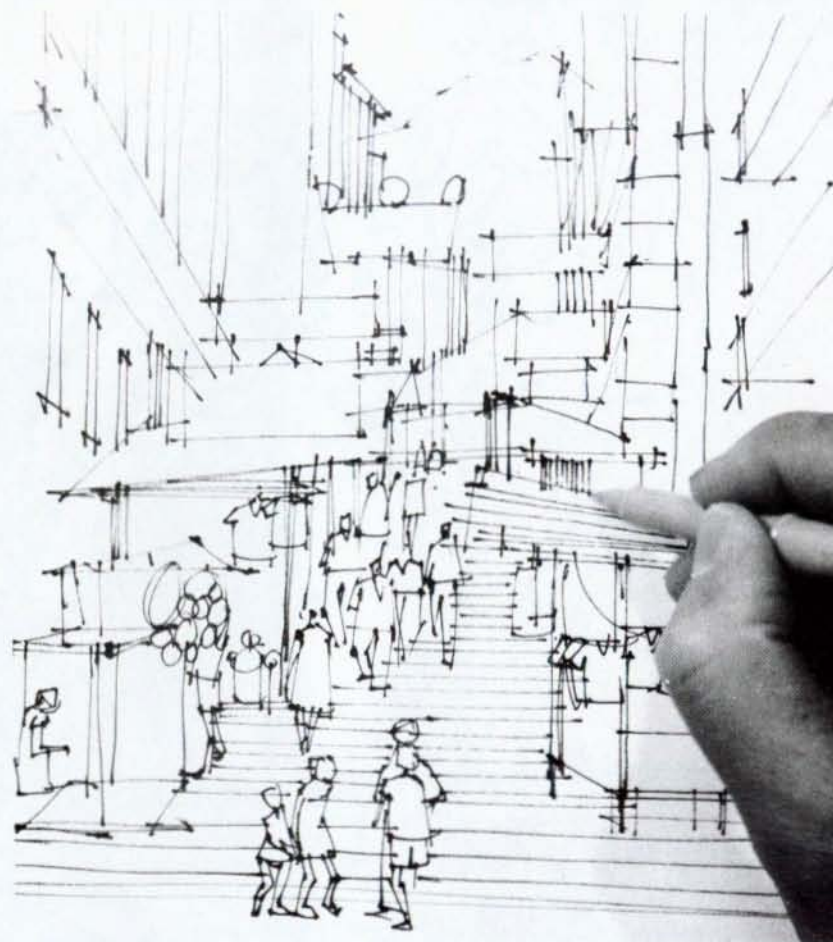


### DEMONSTRATION III

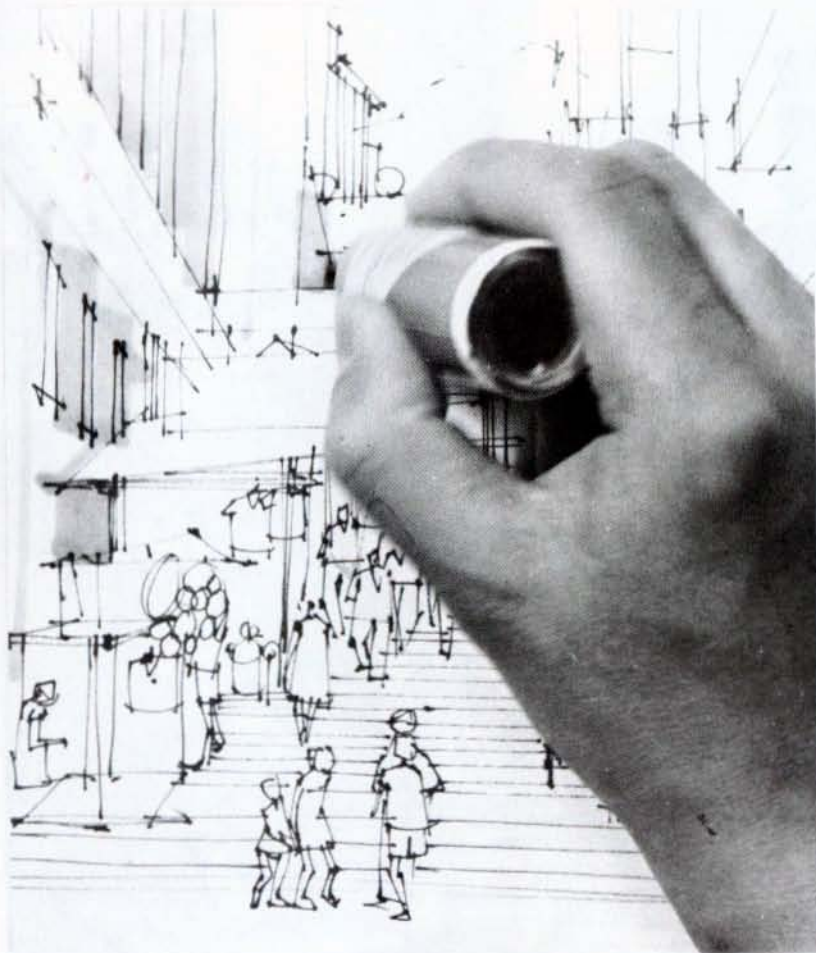
color marker on Aquabec felt-tip marker paper



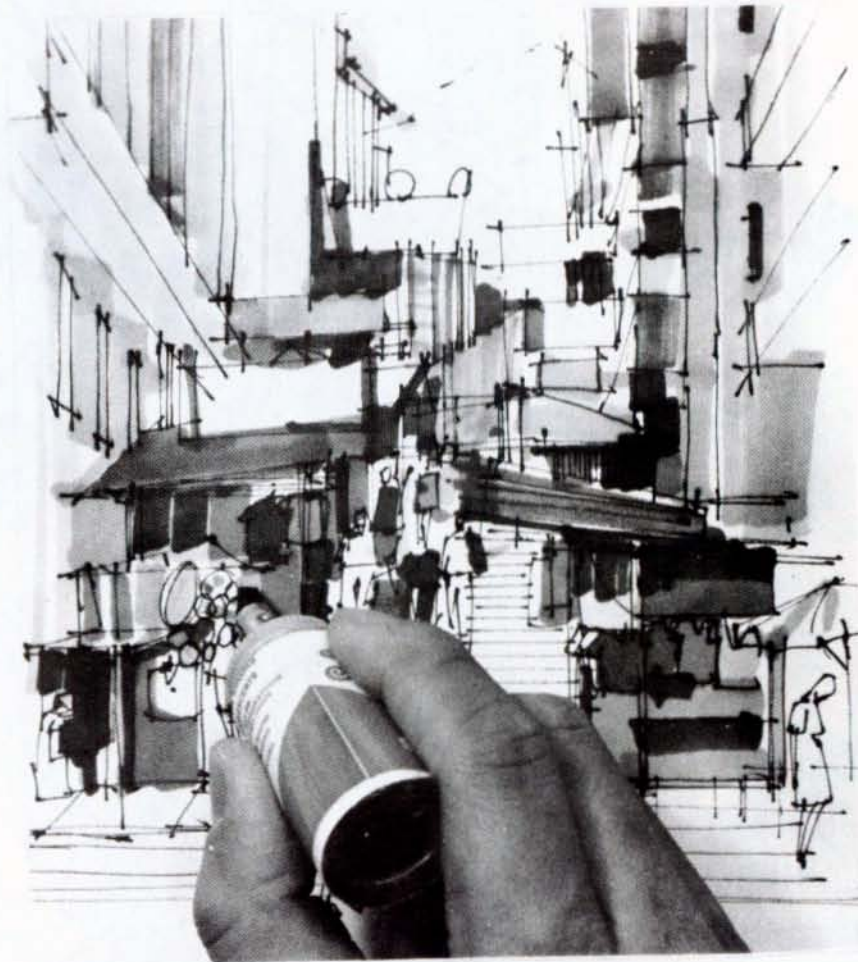
a study the perspective; identify the horizon and all the reference planes; pay attention to the change in elevation and the shift of vanishing point from the horizon to the top of the steps; lay out with pencil and a thin marker



b sketch the general outline with a Pilot razor-point marker; capture the major elements first; no details



c     apply the first coat of color; use lighter colors for base, apply with broad strokes; move quickly over the paper; and don't worry about going over the predrawn edges

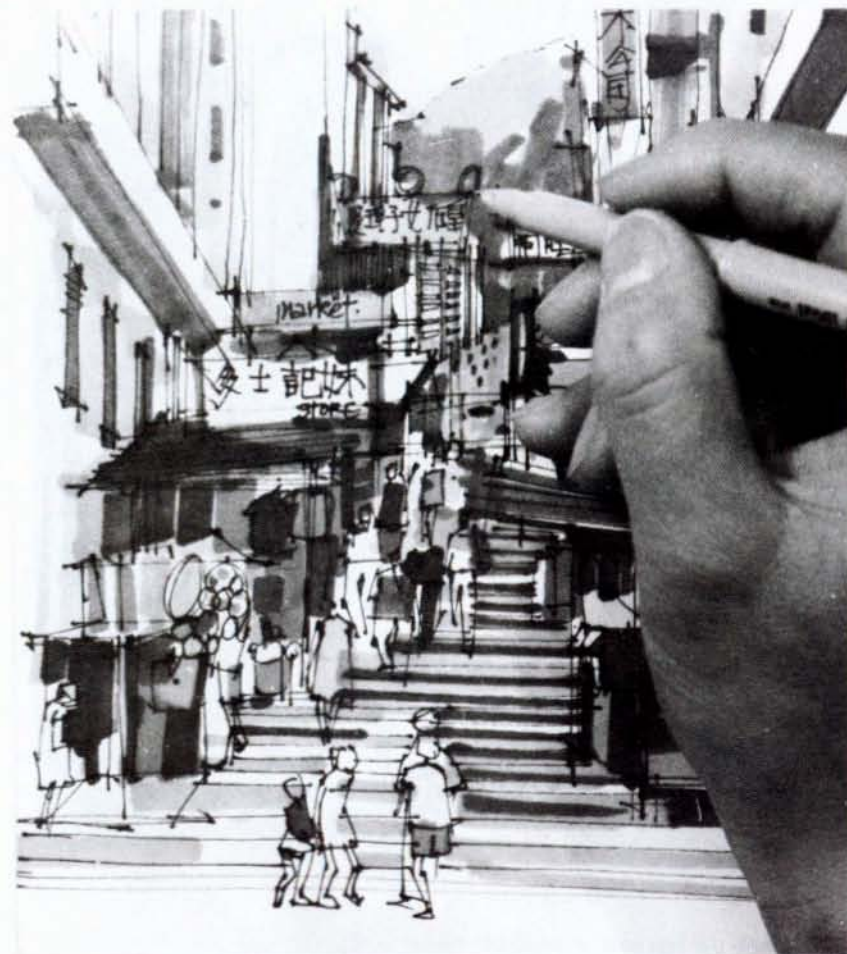


d     build up the three-dimensional quality by applying darker values and grays



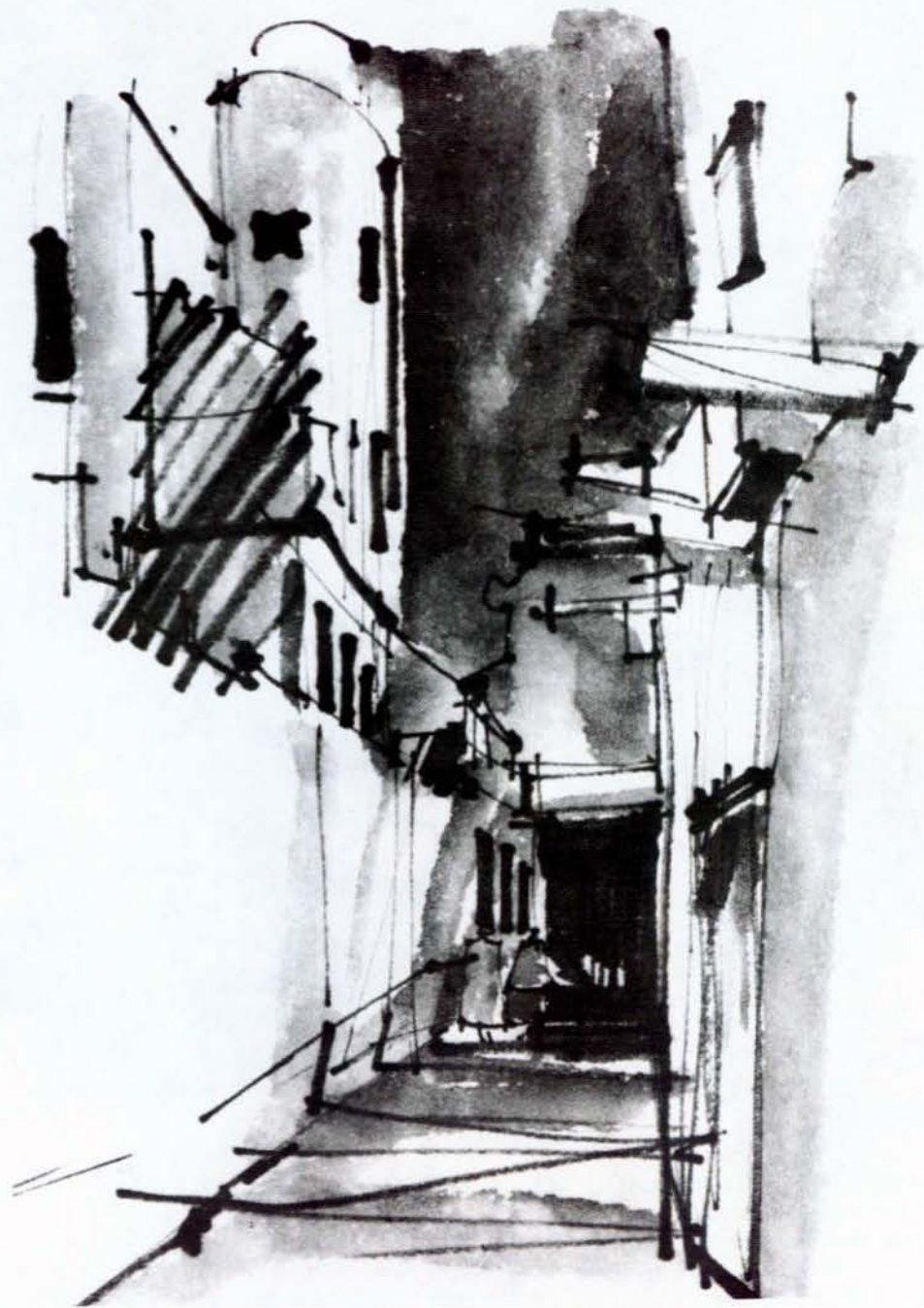


e add accent colors to people, signs, and decorative ornaments; add grays and black to the shaded sides; add shadows



f sharpen the spatial edges and details with a fine-point marker; redefining edges may be necessary due to marker bleeding

**Title:** Old Cairo, Egypt  
**Original size:** 14 x 17 inches  
**Medium:** Eberhard Faber markers on  
rice paper, watercolor  
**Technique:** use black marker to outline  
the sketch; wash with black and gray; high-  
light the figure with bright color







**Title:** Egyptian Farm House, Cairo

**Original size:** 11 x 17 inches

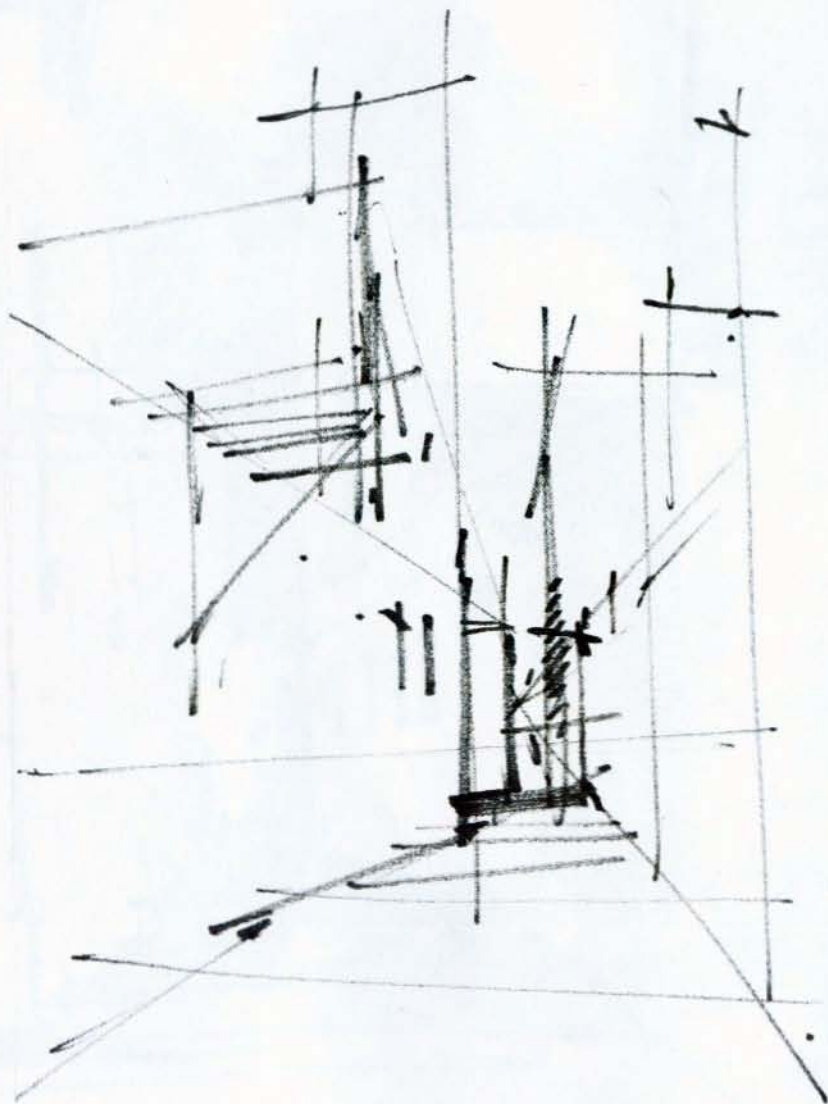
**Medium:** Eberhard Faber on rice paper,  
blacks and olive green watercolor

**Technique:** sketch with markers; use broad  
brush strokes to fill in the spaces; highlight  
the trees with light olive green

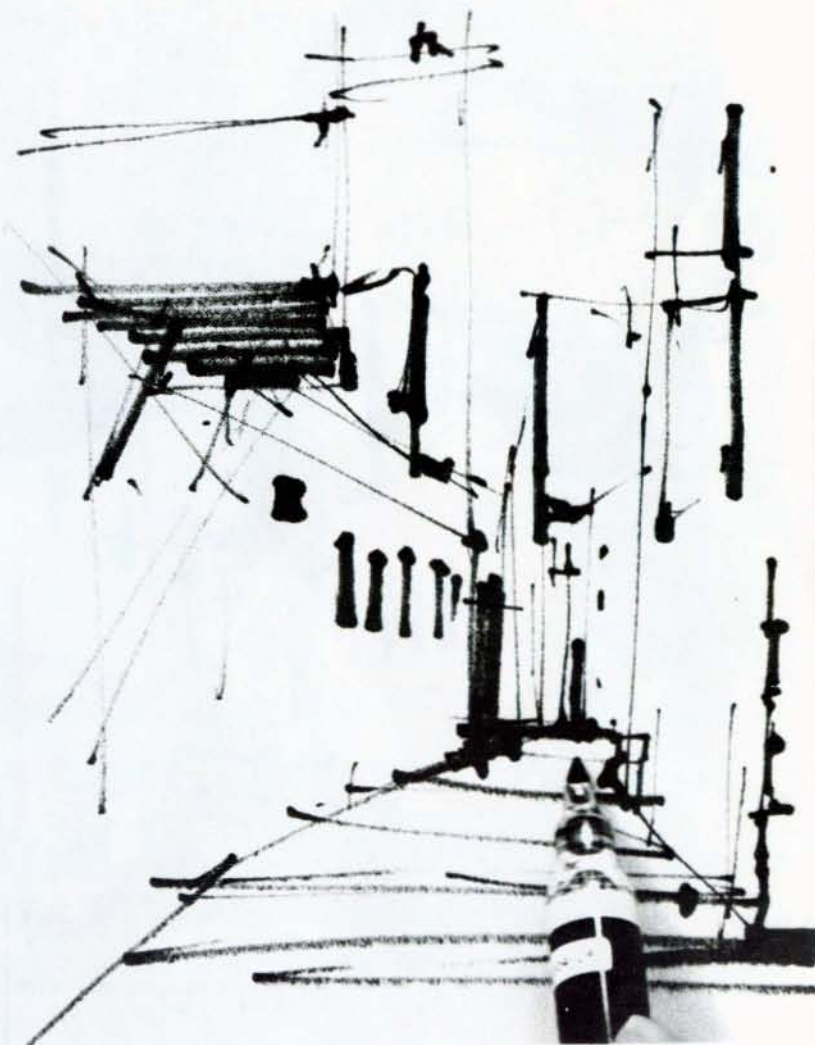


## DEMONSTRATION IV

Eberhard pointed-nib on rice paper

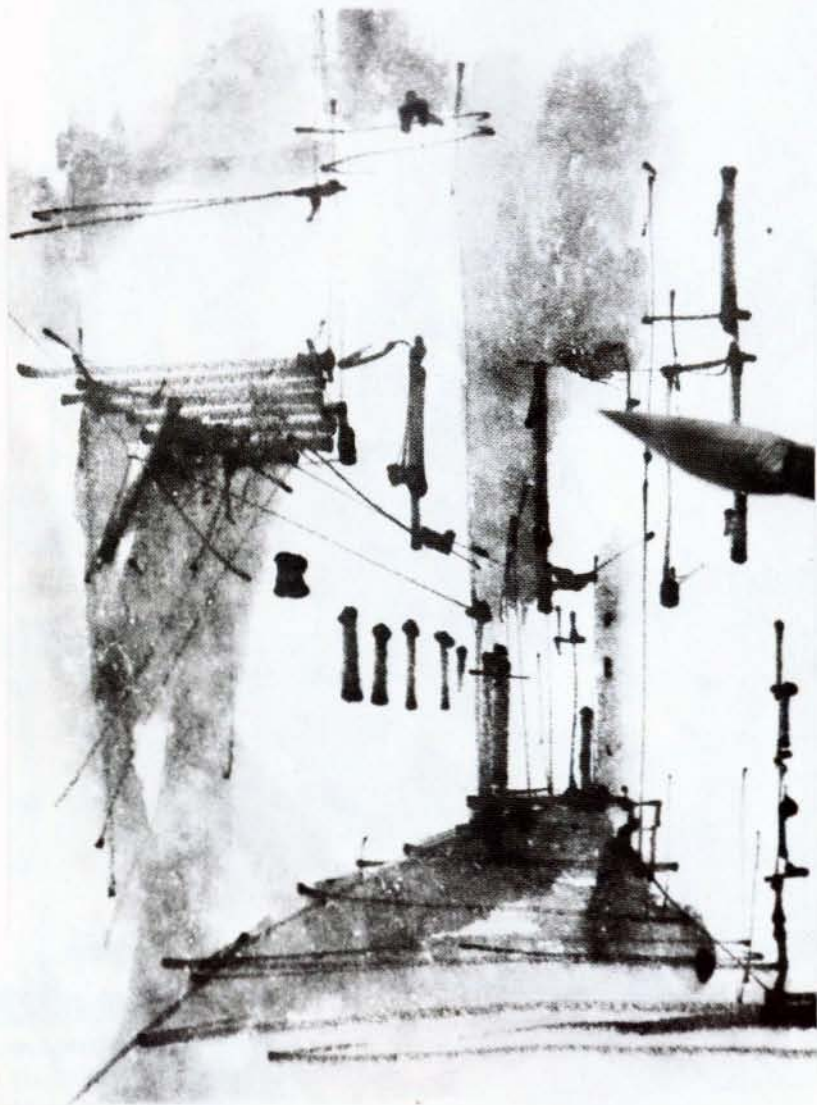


a outline the scene with quick strokes;  
know exactly the locations of reference  
planes

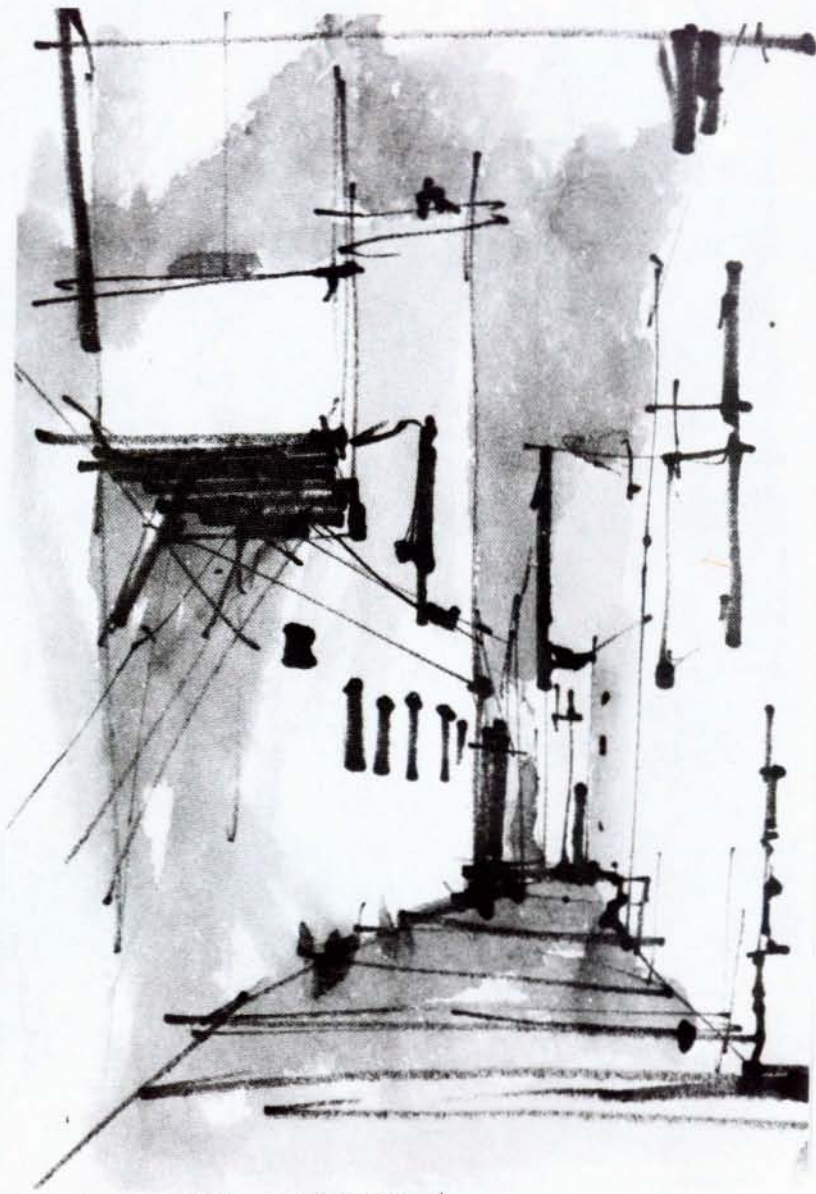


b hold the marker broadside to obtain  
thicker line width; lift the marker off the paper  
immediately after every stroke





c wash the sky and shaded areas with light gray ink; leave planes facing the sun white; let dry

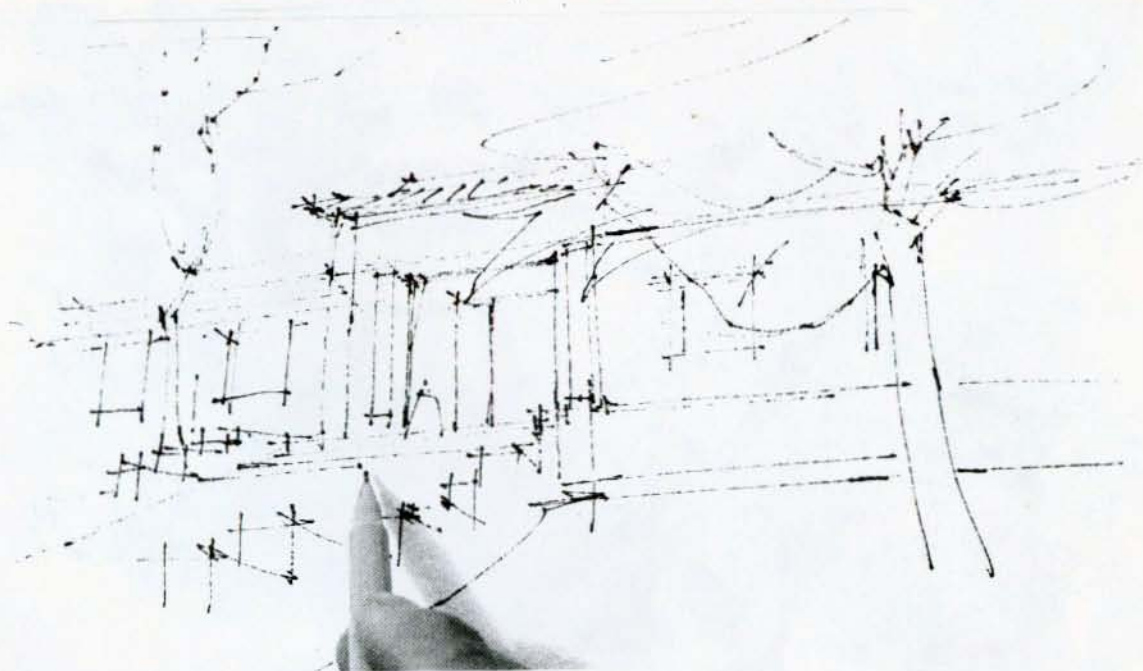


d sharpen spatial edges with the pointed-nib marker; then it's done: hands off; don't overdo it

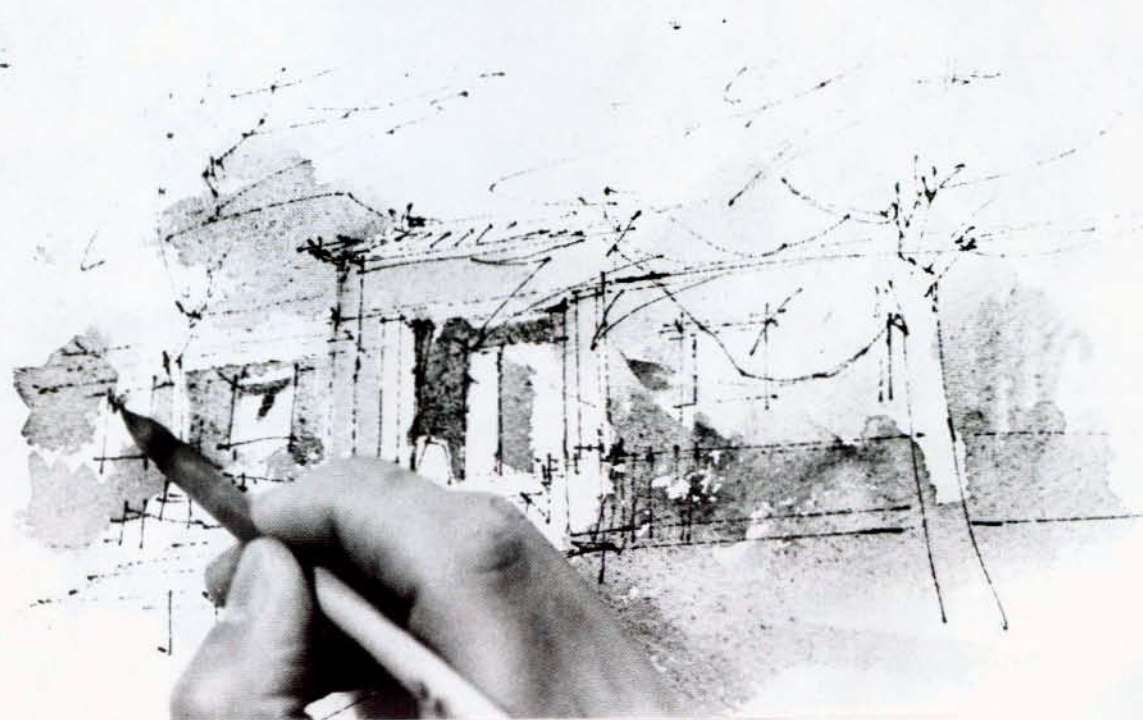
## DEMONSTRATION V

fine-line marker, watercolor on watercolor paper

a outline the scene with a Pilot razor-point marker; avoid details



b apply watercolor; lighter colors always go first; gradually apply darker values after preceding coat is dried; be patient







c apply darker tones to bring out the shadows and depth



d sharpen details with a fine-point marker; add accent color (marker) for highlighting



**Title:** Tai Po Harbor, New Territories,  
Hong Kong

**Original size:** 11 x 9 inches

**Medium:** Pilot fine-line marker, watercolor  
on watercolor paper

**Technique:** watercolor wash on line  
drawing





**Title:** studio demonstration  
**Original size:** 11 x 17 inches  
**Medium:** color marker on watercolor paper  
**Technique:** Eberhard Faber pointed-nib  
marker used to outline important spatial  
edges





**Title:** Tai Po Village, New Territories,  
Hong Kong

**Original size:** 9 x 11 inches

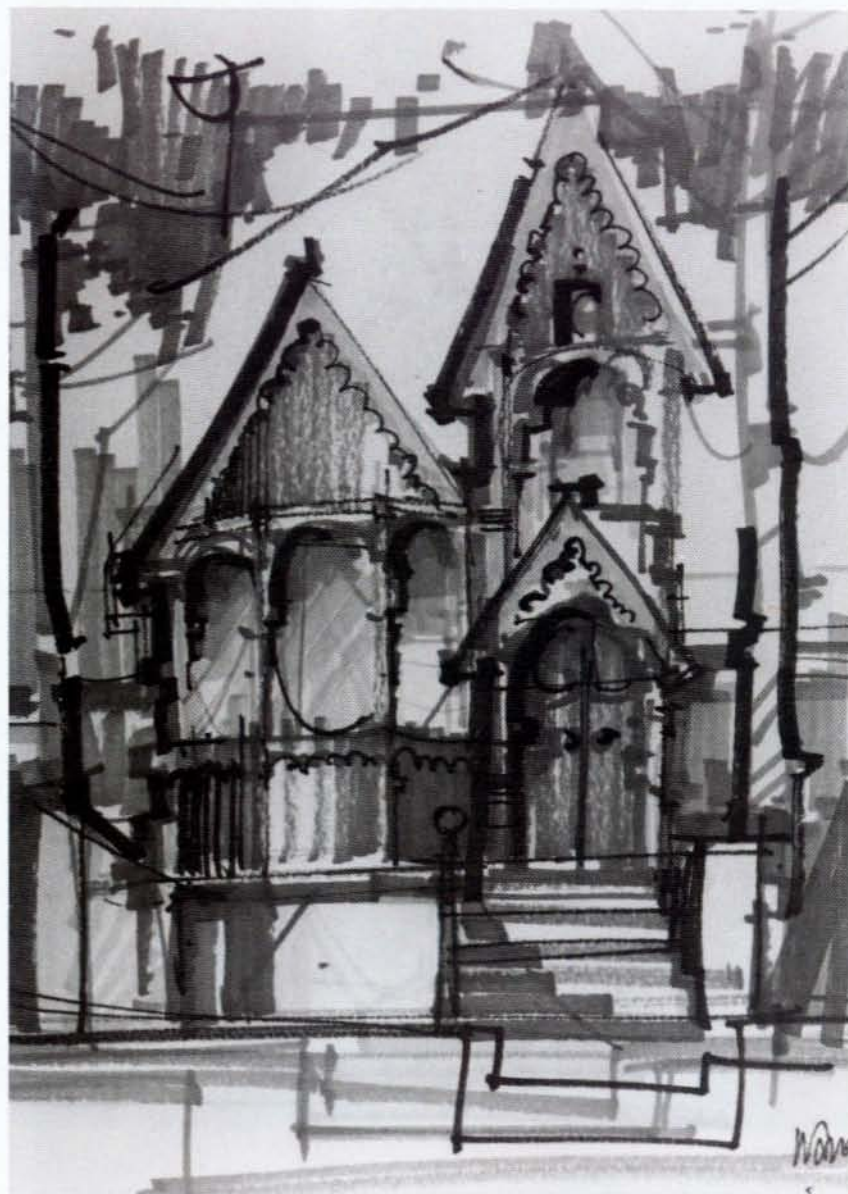
**Medium:** Pilot fine-line marker and  
watercolor on watercolor paper

**Technique:** watercolor wash on line  
drawing, heavy black line drawn with  
fine-line marker





**Title:** Downtown  
**Original size:** 11 x 9 inches  
**Medium:** color marker on watercolor paper  
**Technique:** broad marker strokes



**Title:** House in Sausalito  
**Original size:** 11 x 14 inches  
**Medium:** color marker on watercolor paper  
**Technique:** broad marker strokes





**Title:** Queechee Lake, Vermont  
**Original size:** 9 x 11 inches  
**Medium:** black and gray marker on  
bristol board  
**Technique:** broad strokes





**Title:** Church in Galina, Illinois  
**Original size:** 11 x 14 inches  
**Medium:** color marker on Aquabee  
felt-tip-marker paper  
**Technique:** broad strokes



**Title:** Church in Madison, Wisconsin  
**Original size:** 11 x 14 inches  
**Medium:** color marker on Aquabee  
felt-tip-marker paper  
**Technique:** broad strokes





**Title:** Railroad Station, Easton,  
Massachusetts

**Original size:** 11 x 14 inches

**Medium:** color marker on Aquabee  
felt-tip-marker paper

**Technique:** broad strokes