Materials and Format

A painting, of course, is more than the sum of its physical parts. Yet even so subtly aesthetic and profoundly philosophical an art as Chinese painting must have some material point of departure. Refinement must be preceded by basics; as an ancient poem quoted by Confucius said, "The laying on of colors follows the preparation of the plain ground."[1] Chinese artists and connoisseurs have left a considerable literature on the "four treasures" of the painter—brushes, ink, inkstone, and paper—and these will be among the materials considered here.

Brush

Among the equipment most treasured by Chinese artists were their brushes, simple in appearance but subtle in design, extraordinarily flexible and most difficult to use. The Chinese brush consisted of a bundle of animal hairs stuffed into a bamboo tube. The bundle was not uniform but composed of three major sections (fig. 2a). Innermost was a long core, sometimes waxed to stiffen it. Surrounding this core, layers of shorter hair formed a mantle, thickening the bundle at the base and the middle, but not reaching to the tip of the core. One or more outer layers, tied around these sections, reached fully from base to tip, swelling around the mantle and curving back gradually to meet the tip of the core, thus creating an empty space where the mantle slackened off. This space acted as a reservoir where water-based ink or pigments naturally accumulated. The supply of fluid pigments allowed the artist to complete an extended linear movement or several shorter movements before having to dip the brush once again.

Individual brushes came in a great variety of sizes and shapes, and each left its own characteristic trace. A long, tapering, pointed bundle was ideal for swirling movements and for lines that ranged in width from points to swells (figs. 8, 27). A short and stumpy brush left a blunt impression, and some artists preferred a worn-out brush for its simple, understated effect (fig. 30). Whether a brush was stiff or soft depended in part on the type of hair used (wolf hair, for example, being quite springy compared to goat, and rabbit hair firmer still), and in part on whether the core had been treated with wax. A stiff and springy waxed-core brush contributed to the dynamic thickening and thinning of line (fig. 25), while a softer unwaxed brush produced a more even line, as in architectural renderings (fig. 23a). A thick, soft-haired brush was used to apply a broad, smoothly graded wash of ink or color (pl. 4, fig. 22a-d).

Ink and Pigments

Next to consider among the artists' materials are their pigments. Black ink, the staple of many Chinese artists, was historically regarded quite differently than colored pig-

ments. Chinese inks were obtained from pine resins or tung oil, burned beneath a hood to produce a residue known as lampblack. This lampblack was collected, mixed into a solution with glue, pressed into molds, and dried. The result was an ink cake or ink-stick, which had to be ground back into a watery solution immediately before painting, for ink sours after only a few hours time. The time spent grinding the ink was often one of mental preparation and intense concentration of the artist's creative energy. The ink cakes, more than simply being utilitarian, were often molded in decorative shapes or with elaborate pictorial designs.

Colored pigments, like ink, came in dried cake and stick forms. They were derived from a wide variety of vegetable and mineral sources. The most important of these pigments were blue, derived from indigo or mineral azurite, green from various vegetable substances and from malachite, lead white, and red produced from cinnabar and iron oxide. Chinese artists used these pigments in their natural hue rather then adjusting them to spectrally true reds or blues. Artists were free to produce yet other colors by mixing two or more pigments, but before the eighteenth century they rarely did this, and traditional Chinese paintings seldom display a spectrum of closely related colors (pls. 1-6). Still, the pigments themselves sometimes supplied the artist with a range of related hues, as did malachite green, which in watery solution naturally separates into three horizontal layers, ranging from a pale green above to a rich blue-green below. The three different colors juxtaposed in plate 4 (cf. fig. 22b-d) are the result of this phenomenon. Cinnabar (fig. 22e, f) and azurite, in solution, similarly settle into a range of related colors.

Black ink and colored pigments were all used with a water base, which allowed them to flow freely from the brush and made possible the extended brush movements and fluid linearity so pronounced in Chinese painting. A valuable part of the Chinese artist's equipment, perhaps the most dearly treasured, was the inkstone on which the cakes were ground into solution. It included a depressed reservoir for holding water and a raised flat area for grinding. Inkstones appeared in a wide variety of forms, ranging from a simple rectangle (fig. 38) to the ornate and sculpturesque.[2] A little pigment ground into water produced a transparent solution; with more pigment, the solution became more opaque. Generally, mineral pigments produced a richer, more opaque solution than ones derived from vegetable sources. Artists were especially skilled at adjusting the richness of their solutions, sometimes on the inkstone where they obtained a broad range of grays (figs. 27, 30), sometimes directly on the painting itself by first applying color and then fading it out with a wet, uncolored brush (pl. 4, fig. 22a). Often, artists prepared a very pale ink solution for a preliminary underdrawing, then subsequently disguised it by a more opaque solution laid on with seemingly more spontaneous brushwork. Frequently working in a transparent to semi-opaque range of solutions, artists tended to compose nearby objects first, background objects later.

An important factor in ink and pigments was their glue base. Incorporated into the cakes, this glue permanently fixed the pigments once they had dried. The technique of adding water to pigments directly on the silk (pl. 4, fig. 22a), just mentioned, had to be accomplished quickly or not at all, for a second layer added to an already-dry first layer in no way disturbed the first or caused it to bleed (fig. 27b). The belated development in the eighth century of layered painting techniques took advantage of this phenomenon and revolutionized Chinese painting style, introducing graded color and ink washes as a means of building up rounded, naturalistic forms (cf. figs. 27, 29). On the other hand, the strong glue fixative meant that a mistake, once made, was difficult to remedy. The

story of Ts'ao Pu-hsing, painting on command for a tyrannical ruler in the third century A.D., illustrates this fact. In the midst of his performance, he lost control of his brush and a stray drop of ink landed on the silk, impossible to hide and spoiling his design. Unable to remove it, Ts'ao quickly added a few strokes, turning the smudge into a fly so realistic that his patron tried to whisk it away. Lacking such ingenuity, most artists therefore prepared themselves before painting with extreme mental concentration.

Ground

Most studies of the various physical aspects of Chinese painting have paid little attention to the ground (base or surface) on which the ink and pigments were laid. For the past thousand years, the vast majority of Chinese paintings were set down on silk and paper; today, these two media constitute the bulk of surviving works of all periods. In earlier centuries, however, wall painting was part of the great tradition of Chinese painting (fig. 16); and lacquer painting, although regarded as a minor art or craft, attained great stylistic heights (fig. 36). Earlier still, during China's prehistoric period, a tradition of painted ceramics evolved that was unsurpassed in the world's other neolithic cultures (fig. 35).

Clay wall. Little is known about Chinese wall painting before the early Han period. But the earliest known traces of wall painting, while fragmentary, suggest that by the late Shang period walls and pillars were painted with the same stylized figures that everywhere adorned the ceremonial bronzes (fig. 9), carved wood, stone, jade, and bone of that age, and were set in red and black pigments upon clay walls prepared with a white lime finish.[3] Although the development of wall painting during the next thousand years remains obscure, by the late Chou–early Han period, the clay wall had become a prominent format for paintings presented in a public manner. To the painting of walls, in palaces and homes, temples and tombs, were drawn countless artisans, usually joined in a group effort.

Wall painting has taken several forms, ranging from small bricks painted individually and later assembled, to large walls first prepared with smooth plaster surface and then painted. The latter form became most common and was surely the most imposing, its unified surface inviting a grand display of design and color (fig. 16).[4] The basic construction method used in recently discovered royal tombs of the T'ang period, dated A.D. 706, was first to cover the brick walls with a thick layer of gritty clay that was well mixed with straw and vegetable fiber. Over this was applied a thinner layer of fine clay, which was rubbed to a smooth finish. Finally, the wall was covered with a thin layer of white paint mixed with a sealing adhesive. The painting surface was a dry clay, and there was none of the race with time that affected artists working in the European fresco tradition. Wall painting usually called for considerable planning, giving rise to numerous reduced-scale sketches painted on hemp or paper, which were subject to final approval or rejection. Final, full-scale designs were also produced on hemp or paper and then transferred to the wall by several related means, such as the pounce technique. In this method, powdered chalk was tamped through needle-sized perforations made along the major outlines of the design. Afterwards, the physical markings left on the wall were connected with pale brushlines, forming an underdrawing that was later dis-

guised by darker, firmer lines. At the Horyu-ji Buddhist temple in Japan, walls painted in the early eighth century bear traces of knife marks that cut directly through a preliminary drawing, a technique probably used in China as well.

The routinized, group production of wall paintings left little room for an individual artist to rise above the ranks of his fellow workmen, and few professional painters established a personal reputation or had their name passed down to posterity. Wu Tao-tzu of the eighth century, who followed only his immediate mental conception, was a rare exception. In a rapid manner, he laid out a bold design in black ink, using neither compass nor straightedge, and then retired from the scene, allowing his colorists to complete the work. Such masters drew crowds of onlookers, but none of their works have survived or been rediscovered by archaeologists. While one might expect this art form to have remained forever popular, the near-demise of the Buddhist church as a patron of the arts in the ninth century A.D., the rise of the hanging scroll format at about the same time, and the development of amateur painting from the tenth century onward all contributed to the considerably reduced stature of wall painting since the Sung Dynasty.

Silk. Silk is produced from the cocoon of the silkworm, a practice invented by China's first farmers in the neolithic period, as early as 5000 B.C. Until the first millenium A.D., silk production was practiced exclusively by the Chinese. The entire process involves raising silkworms domestically, feeding them mulberry leaves cultivated specifically for that purpose and adhering precisely to their delicate annual life cycle, then boiling down and unravelling the silken strands of their cocoons (each strand about a mile long), reeling these strands into thread, and weaving the threads into fabric.

The primary use of silk was for clothing. Not until the later Chou period are there indications of the first use of silk as a medium for writing, which had until then been practiced on thin vertical slips of bamboo tied together and rolled up for storage (fig. 37). Silk proved a much more flexible and compact medium, and by the end of the Han Dynasty silk handscrolls, together with paper scrolls, had replaced bamboo as the standard medium of the writer. The use of silk in painting is first known to us from the third and second centuries B.C., several of the earliest examples being banners that were carried in funeral processions. It was in the handscroll format (figs. 12, 15, 17) that silk was most popularly used in painting during the first millennium A.D., and in the late T'ang and Sung periods, with the rise of hanging scrolls as a lightweight and flexible alternative to wall paintings (figs. 21, 22), silk became the pre-eminent medium for painting.

Ink or pigments applied to raw silk soak into the fabric, diluting the strength of color and the firmness of line. Traditionally, to combat this problem, Chinese silks were prepared for painting with an alum sizing brushed over the upper surface, producing a slick and not particularly absorbent ground. Strong colors and ink tones could then be built up in several carefully applied layers (pls. 2, 4, figs. 21, 27). Because a dry or rapidly moving brush may have trouble leaving a clear track on such a surface, the process of painting on silk was usually carried out in a slow and cautious manner. These factors contributed to the formality of paintings done on silk. The golden-tan hue of well-aged silk (pls. 4, 5), in contrast to the fresh, white color of paper (pls. 3, 6), added an air of dark solemnity to the paintings. Artists indulging in informal "ink play," or seeking the unusual effects of spontaneous brushwork, generally turned from silk to paper for its greater absorbency, as well as for its lesser expense (figs. 29, 32). In

the Yüan period, with the ascendance of amateur painting in China and the preference for casual sketching in place of formal painting, paper finally surpassed silk in significance (figs. 30-32). However, even throughout the later dynasties, silk remained the choice over paper for the "significant," formal painting.

Paper. The traditional Chinese date for the invention of paper is A.D. 105 and its inventor was said to be Ts'ai Lun. Though modern archaeology has shown paper made from hemp existed by the first century B.C., Ts'ai might well have helped bring the development of paper-making techniques to completion.[5] In later times, paper was made from various materials, including hemp, mulberry bark, and bamboo. Undoubtedly developed as an inexpensive medium for writing, paper quickly took a place beside silk for use in less important government documents and in personal letters. When calligraphy first attained the status of an amateur art form, in the third to fourth centuries A.D. (figs. 5, 7), paper was frequently preferred to silk, which retained more functional and formal connotations. Later, in the T'ang Dynasty, when the Chinese developed woodblock printing as an inexpensive means of mass producing and widely distributing literature, paper became the medium of printing, and its first association with pictorial designs perhaps came at that time, in the context of printed Buddhist scriptures. But not until the eleventh century was paper first consciously championed as a medium for painting promoted by the Chinese gentry. The gentry were distinguished by their literacy and scholarly education, a hard-earned achievement in traditional times but essential to any social, political, or cultural distinction. Painting as leisured amateurs and looking down on professional artists as uneducated craftsmen, this scholar-elite began to develop a distinctive mode of the art and turned from silk, used by the professional artists, to paper which they associated with the practice of calligraphy. With the ascendance of this scholar-amateur mode of painting in the fourteenth century (figs. 30-34), paper became, and has since remained, the pre-eminent ground for the Chinese painter.

Chinese paper, because of its unusually long fiber, will not disintegrate in water, even if repeatedly washed over with water-based pigments. Much more absorbent than silk, raw paper will virtually suck the ink from the brush, producing a blurred and blotted effect that is most difficult to manage. In order to give the writer or painter greater control over the flow of ink, manufacturers usually sized their paper with a dilute glue solution or with alum, producing a smoother, slightly water-resistant surface (figs. 8, 26). Only the most daring artists cared for the challenge of unsized or lightly sized paper (fig. 34). Still, even moderately sized paper remained more absorbent than silk and allowed for a broader range of dynamic effects, both wet and dry, than could be obtained on silk (figs. 29, 32). It was the ideal medium for the freer, sketchy styles that dominated Chinese art after the thirteenth century.

Ceramics and lacquer. Two other important grounds for painting should be mentioned, although they have usually been associated with the decorative arts, outside the primary tradition of Chinese painting. The earliest of all Chinese paintings are found on ceramic wares, part of an artistic tradition that persisted throughout the neolithic period from the late fifth into the early second millennium B.C. (fig. 35). A variety of regional styles have become recognizable, many of them superlative in quality by the standards of neolithic art. While they primarily constitute a geometrically abstract tradition with little direct relation to the later traditions of pictorial representation, these ceramic wares display the earliest use of a soft-haired painting brush, and express the Chinese characteristic love of dynamic flowing lines. In later times, during much of the

present millennium, Chinese ceramic wares provided one of the few major outlets for painting as a popular folk art.

The superb Chinese tradition of lacquer painting flourished in the late Chou and Han periods (fig. 36). Lacquer is the sap of the lac tree, which grows primarily in southern and western China. It is a clear liquid, poisonous in the manner of poison ivy or poison oak, and is a naturally-occurring polymer, or plastic. Already in the Shang period, the process had begun of building up multiple layers of lacquer over a wafer-thin core of wood or cloth to produce a lightweight, water-resistant, yet extremely sturdy, ware.[6] Late Chou and Han painted lacquer wares took the form of boxes, bowls, food utensils, large ceremonial vessels, and even full-sized burial caskets. Painted designs were added to the uppermost layer of lacquer, using black and red lacquer- or oil-based pigments, sometimes adding green or yellow. Ancient texts and inscriptions distinguished between those craftsmen who produced the ware itself and the artists who painted the designs. The sticky lacquer sap used as a base for the artists' pigments encouraged slow, elongated movement of the brush and contributed to the attenuated, elegant character of many of the finest designs. Late Chou and Han painted lacquer designs contributed not only to the abstract decor of inlaid bronze vessels, but to the vocabulary of the infant art of landscape painting as well (figs. 36a, 10n). As our knowledge develops, we will become more able to integrate painted lacquer and ceramic wares into the study of the major painting traditions.[7]

Related media. Owing to the great rarity of pre-Sung paintings, art historians often pay close attention to more permanent art forms which drew their designs from painting. Bronze decor occasionally seems to qualify (fig. 9), as does some of the sculpture done within the rigorously codified canons of Buddhist art (fig. 16). More useful still are designs engraved in stone. Stone panels, not uncommon in Han and later tombs, displayed incised linear designs, or backgrounds carved away allowing the primary figures to stand out in raised relief, or both techniques combined (fig. 11). Since early times, the Chinese recorded important proclamations and conveyed permanence to valuable works of calligraphy and painting, originally created in other media, by copying them in stone (figs. 3-5, 7, 17). Chinese stone-cutters were masters of such copy work, reproducing effectively even the stray marks left by the hairs of the brush.

By the Sung period, multiple reproductions of these carved works were produced through a process known as "rubbing" or "ink-squeeze." Both wet and dry techniques existed for taking a rubbing, but the latter was more common. In this process, a sheet of paper was moistened with a solution of starch (agar-agar), then placed upon the surface to be reproduced. It was tapped with a soft mallet until it adhered tightly and until the paper had been worked slightly into the incised recesses of the stone surface. Then the surface of the paper was rubbed with an inked pad. Those areas of paper recessed into the engraved portions of the stone remained untouched by the pad; they alone remained white while all the surrounding paper was inked black. Many calligraphic specimens and some important painted designs have been preserved today only as a result of this method. The quality of such reproductions depends on the skill of the one taking the rubbing, on the quality of the stone carving, and on the condition of the stone, which degenerates with repeated rubbings. Not uncommonly, an important engraving deteriorated greatly through frequent rubbing. It was then copied onto a new stone, sometimes on more than one occasion (figs. 5, 7). In the process, the original style might subtly be altered by the historical preconceptions of the copyist, who also functioned as a restorer. In some cases, a historical series of rubbings survives to docu-

ment the progressive alteration of an original style, from cutting to cutting. Thus, while seemingly permanent in form, carved stone and ink rubbings need to be treated by the historian with the same caution required by all artistic copywork.[8]

Seals

The last materials to consider are the seals of painters and collectors, whose marks are apparent on most Chinese paintings (fig. 32a). The purpose of a seal, which consisted of an impression made with a carved stone and red sealing paste, was to certify authorship or ownership. Most seals gave the seal owner's personal or literary name, the name of his studio, or an identifying literary expression. Although seals first became popular with their application to documents in the late Chou and Ch'in periods, their earliest recorded appearance on paintings occurred much later, with two small inventory seals used to register works in the collection of the second T'ang emperor (ruled A.D. 627-50). And only in the Sung period, as the early anonymity of artisan painters increasingly gave way to a concern for artistic individuality, did painters begin to apply seals to their own works (fig. 21h).

Most often square or round, sometimes gourd-shaped (fig. 20), seal designs were cut into a soft stone, such as soapstone. The seal was applied with a waxy, oil-based ink, colored red with powdered cinnabar. If the characters were incised, they appear white in the impression; if carved in relief, they appear red. The style of script used for seals was that practiced during the late Chou and the Ch'in periods, when seals first became popular. Soon afterwards supplanted by another script style, but kept alive as an archaic style primarily for use in such seals, this calligraphic script came simply to be known as the "seal script." The majority of seals range from one-half inch to an inch-and-a-quarter in height, allowing one to roughly gauge the scale of a work seen only in photographic reproduction.

It might be argued that such seals are really external to the work of art and should be visually swept away by the viewer, especially since collectors continued to add seal impressions for many hundreds of years after the execution of the painting. But from the Chinese point of view, this continuous accretion lent honor to the work and kept it alive as an organic, growing form. The presence of the seals of past collectors, whose personalities and tastes often remained well-known in later times and some of whom were themselves important painters, was a matter of deep enjoyment for the present owner, who felt a relationship with them that crossed the barrier of time. The addition of seals helps modern scholars to determine the later history of a painting, to know who saw and owned it, and to judge which later artists might have been influenced directly by it. Art historians also use seals as an important tool to authenticate works of art, but it should be noted that, like paintings and signatures themselves, seals were sometimes copied or forged (such as those on figure 20), and the detection of this requires special expertise.[9]

Format

The physical format in which a painting was presented helped condition its artistic style, as well as contributing to its historical fate.

Wall paintings. Wall paintings presented a large, flat surface, usually meant to be viewed from afar in a public, rather than a private, setting. Most often, they called forth broad and readily apparent designs, painted with powerful brushwork and bright, highly visible colors. Great subtlety of brushwork, while possible, was not encouraged by this format, nor was privacy in execution or intimacy in viewing characteristic of it. When, in the mid-Sung period, cultivated tastes turned from heroic monumentality to lyricism or scholarly understatement, and the production and viewing of paintings became an increasingly personal or private affair, this format finally yielded its foremost position to others associated with painting on silk and paper. Although wall paintings were created in great numbers from Han times through the Sung, few ancient Chinese buildings have survived—aside from the numerous Buddhist paintings in the caves of Tun-huang (fig.16)—and an ancient wall painting is a great rarity. Only in the past two decades have excavated tombs, while offering a selective view, begun to show us wall paintings from the metropolitan centers of early Chinese culture.

Screens. Large, free-standing screens were an essential part of Chinese interior architecture. They were often decorated with paintings on silk, or else, as was probably more common in early times, the paintings were applied directly to wooden panels prepared with gesso. Screens commonly took the form of a single large panel raised above the ground on legs (fig. 23g), or of multiple vertical panels lashed together as a folding screen. As early as the Han Dynasty, in formal interior settings, screens were placed behind the host or his honored guests to denote their lofty status. In addition, screens served indoors as room dividers and outdoors as windbreaks. Also included in the category of painted screens were the single panels attached to the sides of couches (fig. 23c), beds, and palanquins. Treated as household fixtures, screen paintings were subject to rapid deterioration and frequent replacement. Like other furnishings, they were often discarded with changes in vogue rather than being preserved as antiques, as scroll paintings were. Thus, virtually the only early screen paintings handed down to the present time are a few that were remounted as hanging scrolls, none of them from before the tenth century; the only exceptions are ones excavated in recent years.[10]

Handscroll. The handscroll or horizontal scroll was a hand-held, intimate, easily stored and transported alternative to the more imposing wall and screen paintings of early times (figs. 18, 26). It seems to have developed naturally out of the form in which written documents were kept in the Chou period, on thin, vertical bamboo slips that were bound together in right-to-left sequence and rolled up for storage (fig. 37).[11] The continuous-narrative form taken by Buddhist illustrations transmitted from India may also have contributed. The earliest use of handscrolls was for writing, and painting in this format probably originated with illustrations to written texts. Early illustrated examples included those laid out with alternating passages of text and illustration, as well as others in which the text appeared below, the painting above, each without interruption.

Handscroll paintings ranged from less than three feet to more than thirty feet in length; the majority were between nine and fourteen inches high. Paintings were mounted on a stiff paper backing; those of greater length were often painted on several sections of silk or paper joined together (fig. 1a). At the left was attached a round wooden roller (fig. 1c), about which the scroll was wound when not in use and which was occasionally decorated with a knob of ivory or jade. At the right was a semi-circular wooden stave (fig. 1d) which kept the scroll properly stretched from top to bottom.

The painting was viewed from right to left, as one reads in Chinese, unrolling a bit at a time from the roller and transferring the excess to a loose roll temporarily maintained around the stretcher on the right. About one arm's length was exposed at a time for viewing. Usually, a title sheet was inserted at the beginning (fig. 1f), and a long roll of paper was placed at the end of the scroll (fig. 1h). The end roll kept the painting from having to be coiled so tightly around the roller, for better preservation, and inscriptions were written on it by the artist and by later owners and viewers. These calligraphic inscriptions consisted of appreciative and historical notes, often adding considerable interest and significance to the work as a whole.

The great distinction between the handscroll and all other formats is its considerable length and its sequential exposure of the painting, allowing the artist to control the pace of visual events and to manipulate the viewer's response with shifts in subject matter and treatment. In the depiction of landscape (fig. 26), the artist might speed the viewer over smooth or rugged passages, create a sudden halt, and alternate close-up, specific views with others far away and dimly seen. The handscroll format, among the greatest of Chinese contributions to the art of painting, comes as close as any pre-modern device to the effect of the motion picture, in which the sequential development and pacing of events are of the essence.

Hanging scroll. Hanging scrolls were suspended on walls and served as small-scale, changeable wall paintings (figs. 21, 22, 23b, 24, 25, 31, 32). Like the handscroll and in contrast to wall and screen paintings, they were light in weight and conveniently rolled up for storage, so that they survive today in large numbers. However, like wall paintings and unlike the handscroll, they display their entire composition at one time. The artist had to achieve both a clear and unified design, best appreciated from afar, as well as presenting subtle detail in line and texture to be inspected close at hand.

Not yet mentioned in sixth century texts but apparent by the ninth, the hanging scroll came into full prominence in the tenth century. Its origins are uncertain. Although scholars have long believed that the hanging scroll format was derived from the tall banners brought with Buddhism from Central Asia into China, the recent discovery of Chinese banner paintings from the second (fig. 10) and first centuries B.C., long before the advent of Buddhism, may suggest a less simple solution. The hanging scroll is not unlike an individual panel from a folding screen in proportions, so it might also be viewed as the marriage of that vertical layout with the principles of the handscroll, designed to permit variety in presentation and safety in storing the painting.

The mounting of a hanging scroll included a heavy paper backing plus a decorative surrounding fabric frame, often elaborated into several panels of differently colored, patterned silks (fig. 1b). At the top of the scroll was attached a semi-circular wooden stretcher (fig. 1d), to which was tied a loop of ribbon for hanging the scroll. At the bottom, a roller (fig. 1c) served as a weight for the painting when hung and when not in use was the core around which the painting was gathered. Generally, the height of hanging scroll paintings ranged from two to six feet, although some ten foot giants existed. This format tended naturally to stimulate designs that took advantage of its verticality, and the emergence of the hanging scroll at the same time as the monumental landscape style approached its peak of splendor perhaps indicates a mutual influence between style and format (fig. 21).

Album. The album first emerged as a format for painting during the Sung Dynasty. Its origins lay in bookbinding processes that developed with the woodblock printing of

texts, emerging in the T'ang and becoming widespread in the Sung. The form was primarily a matter of convenience: when literature was mounted in scroll form, material toward the end of a text could only be reached by unrolling the scroll from the beginning, which became a lengthy process in the case of a longer scroll. By taking the same continuous stretch of silk or paper and folding it together in accordion manner rather than rolling it up (fig. 1i, j), it was possible to open it immediately to any section of the text. The particular format that emerged was shaped by the way that Chinese printed pages were made—on single, large blocks of wood, rather than with individual, moveable characters—and by the size block that proved most convenient for cutting and handling, which became standard in the Sung period. This size block produced a horizontal sheet that was folded down the middle and mounted on heavy paper backing, accordion-style, as a double-paged album leaf (fig. 1i). In painting, single-paged facing leaves, often pairing calligraphy and painting, also became common (fig. 1j), sometimes mounted individually in a so-called "butterfly" binding (fig. 1k). Leaves were usually combined in groups of eight, ten, twelve, sixteen, twenty, or twenty-four. The album leaf had the further advantage of eliminating the continual wear imposed upon the silk or paper, ink and pigments, by the constant rolling and unrolling of a scroll.

The album leaf provided the artist with a small-scale format for the presentation of a single, unified scene, without the extensive demands of the hanging scroll and long handscroll. The album quickly became a popular format among artists of the Southern Sung period, as tastes turned from the monumental style of Northern Sung (fig. 21) to a more lyrical and intimate mode (fig. 27). The album also became popular among the scholar-amateurs, beginning in the late Northern Sung, who preferred small, casual study-sketches to the grand and highly polished professional styles, and for whom the album carried literary associations (figs. 33, 34).

Fan. Painted fans came in two major forms. The screen fan (fig. 1l) consisted of a single piece of silk, round or ovoid in shape, kept rigid by a circular outer frame attached to a bamboo or wooden handle. Fifth century inventories included calligraphically inscribed fans that were probably of this type, and painted fans must also have existed by then.[12] Large ceremonial versions of the screen fan, with long handles, were common through the T'ang period, as shown in paintings of the time. The greatest age of fan painting, employing the screen-type fan, began in the late Northern Sung and continued on through the Southern Sung period, twelfth to thirteenth centuries. Like the album leaf, this small-scale format provided an ideal vehicle for the refined and gentle taste of this period, sometimes expressed minimally with suggestive washes of ink, sometimes with exquisitely miniaturized detail (fig. 23).

A second type of fan was the curved folding fan (1m). This type was mounted on long thin ribs of bamboo, wood, or ivory, radiating from a point below the painting and joined so the fan could be closed in accordion manner. The folding fan was known to the Chinese by the tenth century, when it was brought from Japan, its place of origin, by Buddhist monks. But not until the fifteenth century, when it was re-introduced from Korea, did the folding fan become popular in China. The stiff fan was typically made of silk, the folding fan of paper. Quite common in both cases was the practice of combining a painted side with a backside of calligraphically inscribed poetry. Meant to chase away the summer's heat, fans were often painted with themes of boating or cool shade. Their predictable association with the more decorative styles of painting made them a somewhat less popular format among the amateur artists than among the professionals.

Altered formats. The present format of a work is not always its original one, and several types of change were most common: screen paintings were turned into hanging scrolls; handscrolls were cut up and remounted as hanging scrolls (figs. 20, 29) or as sequential albums; album leaves were remounted as handscrolls (fig. 33) or as hanging scrolls; and fan paintings had their frames removed and were gathered into albums (fig. 23).