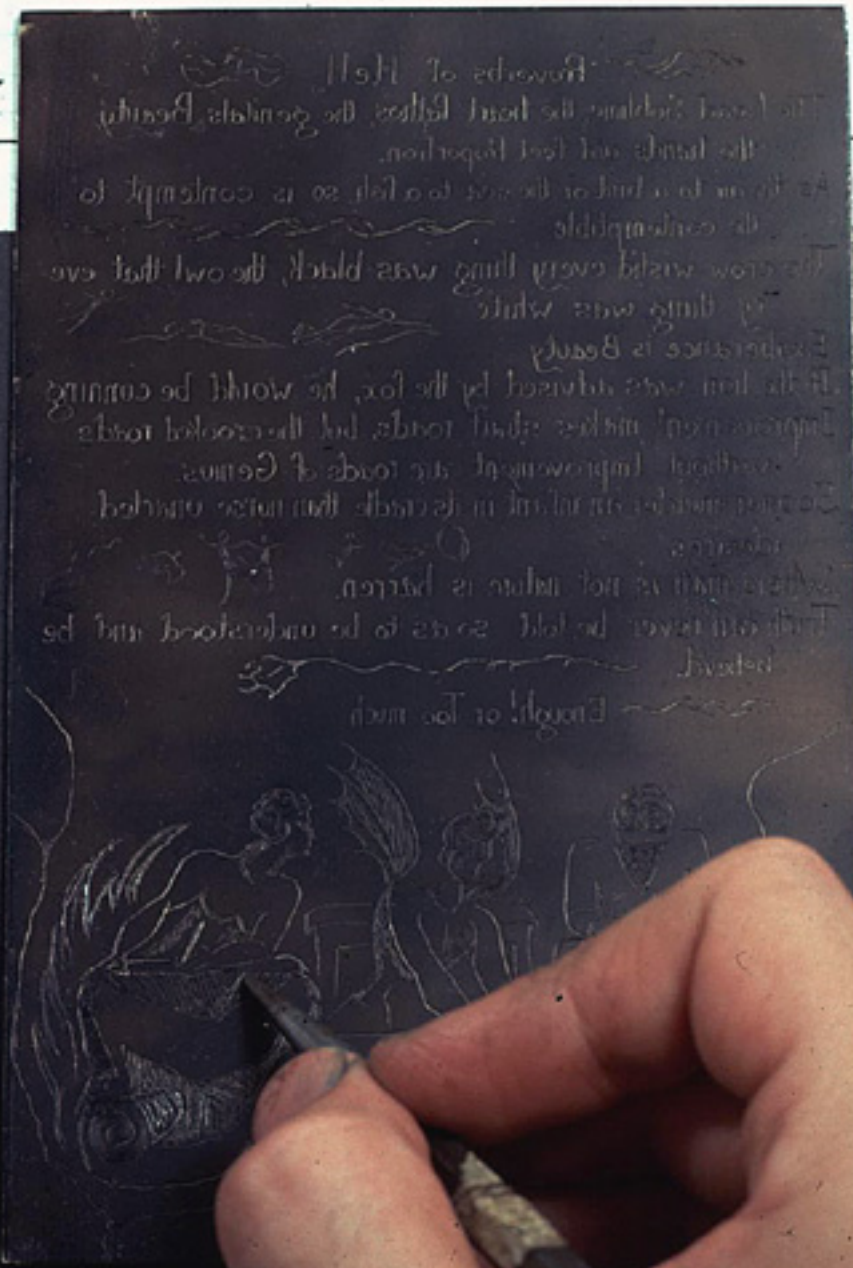


Gravure en Taille-douce

1. Methods of holding and using the burin (Figs. 4-5); the type of lines and hatching used to delineate and model forms (Figs. 6-11); cross-section of a plate showing types and depths of lines and burrs (Figs. 12-13). *Encyclopédie*, 1767.



2. Facsimile of *The Marriage of Heaven and Hell* plate 10, executed as an etching, 15.3 x 10.1 cm; the design cut through the ground with a needle.



Gravure ou Taille Douce.

3. Tools and materials of etching: etching ground and dabber, taper for smoking plates, plate with melted ground, charcoal brazier, various tipped needles, stop-out varnish, brush, and shells. *Encyclopédie*, 1767.

William Blake's Illuminated Printing

Joseph Viscomi *

If a method of Printing which combines the Painter and the Poet is a phenomenon worthy of public attention, provided that it exceeds in elegance all former methods, the Author is sure of his reward.

—Blake, Prospectus, October 1793

On 12 April 1827, shortly before he died, Blake wrote to George Cumberland thanking him for trying to sell copies of Blake's illuminated books and his recently published engraved illustrations to the Book of Job. Blake had first executed the Job illustrations as watercolor drawings for Thomas Butts around 1805, followed by a duplicate set for John Linnell, who commissioned him to engrave the series in 1823.

Three years later, Blake had 22 line engravings that looked very different from the tonal prints then popular. Indeed, they even looked different from engravings, his own included, for they were not executed in the standard “mixed method” technique, in which designs were first etched and then finished as engravings. In this technique, which Blake mastered as an apprentice, the design's outline was traced with a needle through an acid-resistant “ground” covering the copper plate and then etched with acid. The engraver went over these slightly incised lines

with burins (metal tools with square or lozenge-shaped tips used to cut lines into the plate) and engraved the plate's entire surface, uniting all parts in a web of crosshatched lines. These advances in technique (Fig. 1) enabled “modern” engravers to represent mass and tone more convincingly than the more linear style of such “ancient” engravers as Blake’s heroes, Durer and Raimondi, whose works were often dismissed as “Hard Stiff & Dry Unfinishd Works of Art” (anno. Reynolds, E 639). The Job engravings were executed entirely with burins and without preliminary etching, with tone subordinate to line and texture and with lines amassed in parallel strokes rather than in the conventional “dot and lozenge” pattern (dots incised in the interstices of crosshatched lines, the linear system characteristic of bank-note engraving). Blake's emulation of the ancient engravers produced a modern result: original artistic expression in a graphic medium whose materiality and natural language were fully exploited. It was the masterpiece of his lifetime as an engraver, but it would be a tough sell, as Blake and Linnell, who had 315 sets printed in early 1826, must both have realized. [\[1\]](#) Works that Blake had in stock were not selling well. Even if the illuminated books might do better, as Cumberland supposed, the prospect of printing new copies did not excite their maker:

... having none remaining of all that I had Printed I cannot Print
more Except at a great loss for at the time I printed those things I

had a whole House to range in now I am shut up in a Corner therefore am forced to ask a Price for them that I scarce expect to get from a Stranger. I am now Printing a Set of the Songs of Innocence & Experience for a Friend at Ten Guineas which I cannot do under Six Months consistent with my other Work, so that I have little hope of doing any more of such things. the Last Work I produced is a Poem Entitled Jerusalem the Emanation of the Giant Albion, but find that to Print it will Cost my Time the amount of Twenty Guineas One I have Finishd It contains 100 Plates but it is not likely that I shall get a Customer for it (letter of 12 April 1827, E 783-84)

Though dubious about their prospects, Blake listed six books he was willing to reprint—at about twenty times the prices advertised in his 1793 Prospectus (E 693).

Producing new copies of any illuminated book had become far more labor intensive, with each illuminated page now printed on one side of the leaf and elaborately colored, framed with lines, and often touched with gold leaf.

Impressions now looked more like miniature paintings, a far cry from those produced in the 1790s, when plates were usually printed on both sides of the paper and lightly colored to look more like pages than prints or paintings. But six

months?

Blake's "Corner" was two fair-sized rooms in the Strand—much less space than the "eight or ten rooms" (*BR* 560) in Lambeth, where from 1790 to 1800 he had written, designed, etched, printed, and colored *The Marriage of Heaven and Hell* (1790), *Visions of the Daughters of Albion*, *America a Prophecy*, *For Children: The Gates of Paradise* (all 1793), *Europe a Prophecy*, *Songs of Experience*, the combined *Songs of Innocence and of Experience*, *The First Book of Urizen* (all 1794), *The Book of Los*, *The Song of Los*, and *The Book of Ahania* (all 1795), and where he also reprinted copies of his earlier works, *All Religions are One* and *There is No Natural Religion* (1788), *Songs of Innocence* (1789), and *The Book of Thel* (1789-90). By 1795, Blake had produced over 125 copies of the 168 surviving copies of illuminated books. [\[2\]](#)

Clearly, six months was a lot of time to devote to an illuminated book. Of the 111 engravings that Blake had produced between 1789 and 1795, he had executed 80 between 1790 and 1793, which suggests that he concentrated on illuminated printing during 1789-90 and 1793-95, intervals that correspond exactly with the books' dates, and that he underwrote the cost of his original productions with his commercial work. From one medium-sized engraving, Blake could earn £15-30 (*E* 703) or as much as £80 (*BR* 569). Had he sold his entire stock of illuminated books at their initial prices, he would have made less than £50, barely enough to

pay for the copper and paper, let alone his labor. [3] By 1795, with a stock of illuminated books, he began to redirect his considerable energies toward other projects. These included 12 large color-print drawings, 537 watercolor illustrations to Edward Young's *Night Thoughts*, 43 of which he engraved, 117 illustrations to Gray's *Poems*, the *Four Zoas* manuscript, and a series of tempera paintings for Butts. The 1790s were his most successful period financially, not from the sale of illuminated books but from the steady employment by the book and print publishers and his patron. After the intense early periods of illuminated printing, the books never again commanded center stage in his life; even the 150 plates of the major prophecies *Milton* (c. 1811) and *Jerusalem* (c. 1820) were written and etched over many years consistent with his "other Work."

In 1800 the Blakes left London to spend three years in Felpham. On their return they took a first-floor apartment in South Molton Street. Their living quarters became smaller with each move, more suitable for engraving and painting than printing. At Felpham, Blake may have printed a few separate copies of *Innocence* and *Experience*; at South Molton Street, he wrote and printed *Milton* and *Jerusalem*, probably revised *For Children*, and reprinted nine other illuminated books—about 29 copies altogether. These were the years of Blake's 1809 exhibition, illustrations to Blair's *Grave*, illustrations to *Milton*, most of the Bible illustrations, and the *Canterbury Pilgrims* engraving. By contrast, when

Cumberland wrote him at Fountain Court, he had etched only three illuminated plates, for *On Homers Poetry* (c. 1822) and *The Ghost of Abel* (1822), and had printed only four copies of *Songs* (copies W and Y in 1825, Z and AA in 1826). But, as implied in his letter to Cumberland, he remained as busy as ever.

Blake had been illustrating Dante's *Divine Comedy* for over two years. When he wrote Cumberland, he had 102 designs and was engraving 7 of them. As he told Linnell, "I am too much attachd to Dante to think much of any thing else—I have Proved the Six Plates & reduced the Fighting Devils ready for the Copper I count myself sufficiently Paid If I live as I now do" (letter of 25 April 1827, E 784).

The other work was a copy of *Marriage* (I) and one of *Songs* (X), the "Set of the Songs" he was "now Printing." Both were highly finished in gold, watercolors, and pen and ink. His very last book, though, was uncolored copy F of *Jerusalem*, a commission secured by Linnell a few weeks after he wrote Cumberland. Its "100 Plates" did not, however, sell for "Twenty Guineas"; Blake completed it on his deathbed, and its £5 5 shillings sale price helped to pay for his burial. [4]

Three books in six months. Printing illuminated books was still possible, but more difficult than before because they demanded greater artistic attention, disrupted other work, and required more space. The place they occupied in Blake's life had changed. How different things had been with "a whole House to range in," where he could spread out and move through the stages of illuminated

printing, from preparing plates and designing pages, to etching and printing designs, to coloring and collating impressions, as though moving through the six days of creation—or the six "chambers" of the "Printing house in Hell" (*MHH* 15, E 40).

*In the first chamber was a Dragon-Man, clearing away the rubbish from a caves mouth;
within, a number of Dragons were hollowing the cave.*

Fifteen of Blake's 19 illuminated works were executed in a relief-etching technique he had invented in 1788. In his prospectus of 1793 he called it "Illuminated Printing" and announced that he had "invented a method of Printing both Letter-press and Engraving in a style more ornamental, uniform, and grand, than any before discovered, while it produces works at less than one fourth of the expense"; he defined it as "a method of Printing which combines the Painter and the Poet" (Prospectus, E 692-93). Though he never explained the technique, he did describe his "infernal method" as "melting apparent surfaces away, and displaying the infinite which was hid" (*MHH* 14, E 39). In "a Printing house in Hell," he "saw the method in which knowledge is transmitted from generation to generation," and allegorized its major stages as fantastic acts in six "chambers," where a "cave," symbolizing the copper plate, was made "infinite" and "cast" into

the “expanse” (*MHH* 15, E 40).

In practice, Blake wrote texts and drew illustrations with pens and brushes on copper plates in acid-resistant ink and, with nitric acid, etched away the unprotected metal to bring the composite design into printable relief. He printed the plates in colored inks on a rolling press and tinted most impressions in watercolors. While the combination of word and image is a prominent feature of illuminated printing, it appears not to have been the impetus for the invention. He credited the method to a vision of his recently deceased brother Robert, and first used it for *The Approach of Doom*, [\[5\]](#) a print in imitation of Robert's wash drawing. The first works to incorporate text were *All Religions are One* and *No Natural Religion*, small philosophical tractates on perception and the “Poetic Genius.” The following year he used the technique to publish poetry, beginning with *Innocence* and *Thel*.

Illuminated printing was not mysterious, complex, or difficult. The pens, brushes, and liquid medium enabled Blake to design directly on copper plates as though he were drawing on paper, which in turn encouraged him to integrate text and illustration on the same page. Technically, such integration was possible in conventional (intaglio) etching (as in *Ahania*), but the economics of publishing had long defined etching as image reproduction and letterpress as text reproduction, so that the conventional illustrated book was the product of much

divided labor, with illustrations produced and printed in one medium and shop and separately inserted into leaves printed elsewhere in letterpress on a different kind of press. Even when words and images were brought together on the same leaf, divisions in production were maintained.

Whether Blake used relief or intaglio, as author illustrating and printing himself, he would have united the various stages of book production, obtaining control over the production of his illustrated text the same way he did as a graphic artist over his own images. The tools of drawing and sketching, though, freed him to think in new ways, to unite invention and execution in ways defeated by conventional printmaking. Moreover, the idea that an artist's first and spontaneous thoughts are most valuable because they are closest to the original creative spark, often obliterated by high finishing, had become very popular in the late eighteenth century, creating a taste for drawings and sketches and motivating printmakers to invent techniques to reproduce them in facsimile and to simulate their various textures (e.g., chalk, crayon, pen and wash). Such prints, however, were carefully executed with needles, roulettes (a textured wheel used to roughen the plate's surface to produce tonalities), and other metal tools, their spontaneity a crafted illusion. Blake, on the other hand, by actually using the tools and techniques of writing and drawing, had solved the technical problem of reproducing pen and brush marks in metal. He created a multi-media site where

poetry, painting, and printmaking came together in ways both original and characteristic of Romanticism's fascination with spontaneity and the idea of the sketch. [6]

No printmaker before Blake had incorporated the tools and techniques of writing, drawing, and painting in a graphic medium, though the materials and tools were commonplace. The varnishes, acid, inks, dabbers, brushes, quills, oils, colors, and paper were in every engraver's workshop—along with the main ingredient, the copper plate. Plates were purchased from coppersmiths, usually cut to size.

Because intaglio etchings and engravings had to be printed with pressure great enough to force paper into the incised lines, which resulted in a "platemark" or embossment that revealed the plate's shape, engravers neatly squared the plate and bevelled the sides to prevent them from cutting the paper. For relief etching,

Blake cut small plates out of larger sheets himself, cutting them roughly equal size but not uniformly, using either a hammer and chisel or scoring the sheet deeply with a burin and snapping it between boards. Because he printed from

raised surfaces rather than incised lines, he used less pressure and avoided pronounced platemarks, and consequently he dispensed with squaring and

beveling. Equally unorthodox, he etched both sides of plates (for example,

Experience, *Europe*, and *Urizen* were etched on the backs of *Innocence*, *America*, and *Marriage* plates). Cutting the cost of copper, his most expensive material,

the “verso” books were the only ones to turn a profit at the time. [7]

Blake prepared plates for relief etching as he did for intaglio etching. He planed plates on an anvil with a hammer (the tools of Los in Blake’s mythology), and then, with water, oil, and various grinding stones, polished the surface to a mirror-like finish. Polishing made plates easier to cut with burins or needles and easier to wipe clean of ink, but it deposited a greasy film that had to be removed, otherwise either the etching ground or Blake's "ink" would have adhered to the film rather than metal and could have flaked from the plate in the acid bath. Because relief etchings required a long bite in strong acid, thorough and correct “degreasing” with chalk or breadcrumbs—“clearing away the rubbish—was of the utmost importance.

*In the second chamber was a Viper folding round the rock & the cave,
and others adorning it with gold, silver and precious stones*

In intaglio etching, Blake melted a ball of ground consisting of wax and resins and spread it over a warm degreased plate. He smoked the ground to darken and harden it, transferred the design onto it, and cut through the design with a needle (Fig. 2). The metal thus exposed was bitten below the surface with acid. In relief etching, though, he drew the design directly on a clean copper plate with pens and brushes using a liquid medium. Like the etching ground, this medium had to be

acid-resistant but it also had to flow easily, adhere when dry, not spread or blot on the plate, and be usable with pens and brushes. In short, it had to behave like writing ink. Linnell identified Blake's "impervious liquid" (*BR* 460n.1) as being the usual "stop-out" varnish that etchers used to paint over lines sufficiently etched to "stop" the acid from biting them deeper (Fig. 3). By stopping out lines and biting plates in successive stages, etchers varied the depth and width of lines—much as engravers did by cutting them deeper with their diamond-shaped burins. Varying the amount of ink that lines held altered their tone, making possible the modeling of forms and the illusion of aerial perspective.

Blake did not invent his writing medium; he merely adapted one of the brown asphaltum-based stop-out varnishes. With plate, acid-resistant "ink," pens, and brushes, he entered the second chamber and, like "a Viper folding round the rock & the cave," he rewrote his text, first drafted on paper, and illustrated it in a sinuous, calligraphic hand. By cutting into broad areas painted in stop-out, he created fine white and black parallel lines (Fig. 4); by cutting the nib of his quill, he varied the strokes of his letters.

Because the printed image mirrors the plate image, Blake rewrote his text backwards, an "art" his friends acknowledged he "excel[led] in" (*BR* 212n.1)—and which he pictures himself doing in *Jerusalem* plate 37. He usually started with text and illustrated around it, visually composing the page design

while executing it (Fig. 5). How different this was from the way he worked as an etcher and engraver—from all etchers and engravers—even when executing original designs. Their methods and objectives prevented designing directly in the metal; the image they reproduced was first worked up on paper and then transferred to the plate as a guide for the needle. Likewise, the engraver needed the lightly etched outline because the burin cuts rather than draws lines, translating them into three-dimensional lines of varying depth and width. But the methods used by engravers to transfer designs did not work in relief etching, and there was no technical need for Blake to transfer the page design or any of its parts, since he was engaged neither in cutting it into the plate nor in translating it into different kinds of lines. The tools and Blake's twenty years of drawing experience enabled him to design his pages as he rewrote his texts on the plates, as though creating an illuminated manuscript.

No illuminated designs that might have been transferred or even redrawn are extant, nor are there any mockups of designs except for two roughly composed, textless pencil sketches for *TheL* plates 6 and 7, and both differ considerably from the printed designs. Blake realized very early that his new medium's autographic nature made the poem the only prerequisite for executing plates, that rewriting texts was also an act of visual invention, and thus that the medium could be used for production rather than reproduction. With no designs to transfer or reproduce,

the placement and extent of text, letter size, line spacing, as well as placement and extent of illustration, were invented only during execution. [8] This method of designing meant that Blake did not know which lines or stanzas would go on which plate, or how many plates a poem/book would need. Working without models allowed each illuminated print and book to evolve through its production in ways impossible in conventional book-making. Blake could begin working on a book before it was completely written. [9]

While writing backwards was not difficult, mastering the “ink” and giving small letters the proper slant were, at least initially. Blake could dip brushes directly in the ink, but probably loaded the quill pens used for text with a small brush, a method illuminators used to keep quills from clogging. And like illuminators of manuscripts, he may have slanted his plates to keep his quill as horizontal as possible. Blake could write texts in roman or italic lettering—he used both in *No Natural Religion*—but he quickly favored the latter, which was easier to write and, with fewer letter ends to coordinate, to keep straight and uniform. Italic script also facilitated the next stage: with fewer letter ends exposed to acid, words were better protected against problems caused by the acid pitting and lifting the ground. Tight designs also exemplified Blake’s thinking in terms of his medium: to be printable, they do not need to be bitten as deeply as designs with open spaces, and thus require less time in acid. Their dense line systems also

facilitated inking by keeping the ink dabber on the surface and clear of the "shallows," the areas bitten below the surface meant to print white.

In the third chamber was an Eagle with wings and feathers of air, he caused the inside of the cave to be infinite, around were numbers of Eagle like men, who built palaces in the immense cliffs.

Blake had to etch accurately to retain the autographic quality of his designs. The acid—or “aquafortis”—commonly employed in his day was diluted nitric. Acid is unpredictable, affected by age, temperature, humidity, and the metal’s purity—especially in relief etching, because the large amount of exposed metal heats it and makes it bite more viciously. Such “corrosives” may be “salutary and medicinal . . . in Hell” (*MHH* 14, E 39), but on earth they emit noxious orange fumes and require good ventilation. Blake embedded the plate’s edges in strips of wax to create a self-contained tray and poured the acid about a quarter inch deep. He watched it turn blue and gas bubbles form along the design—more bubbles than he had ever seen before, signs of trouble. He passed a feather—the conventional tool to agitate the acid—over the design (Fig. 6), doing so every few minutes as bubbles began to reform, to keep the acid from undercutting or lifting the design: “an Eagle with wings and feathers of air . . . caused the inside of the cave to be infinite.” Looking down on the flat, dark-brown design on reddish

copper in its cloudy blue-tinted bath, he was like Rintrah, shaking “his fires in the burdend air,” watching “hungry clouds swag on the deep” (*MHH* 2, E 33).

Indeed, he was the Spirit of God that "was upon the face of the deep . . . divid[ing] the light from the darkness" (Gen. 1:1-4).

Hours, not days, later, unetched surfaces were divided from shallows and a relief plate was created. Like a god brooding over creation—pictured on *Marriage* plate 14—Blake was “Melting apparent surfaces away, and displaying the infinite which was hid” (E 39). Displayed, of course, was the composite design now visible in relief, metaphorically materialized as “immense cliffs” large enough to house “palaces” built by “Eagle like men,” assistants in the "image" and "likeness" of the Eagle, as signs of their “dominion” (Gen. 1:26). The cliffs and valleys of this small copper plate were indeed a minute particular manifesting Creation itself.

Under the watchful eyes of Blake or his trusted “devil,” or printer’s assistant, his wife Catherine, etching could take much of the day; no doubt a few plates were etched at the same time—but not in one long continuous bite of the acid. In intaglio etching, Blake stopped out selected areas and etched the plate in successive stages to vary line depth and tone. But relief lines are all on the same level and thus receive equal amounts of ink; like woodcuts, they are essentially two-dimensional, boldly contrasting black and white forms incapable of

producing tonal gradation. Nevertheless, Blake stopped out his plates at least once. (A two-stage etch is indicated by steps around the relief plateaus of Blake's only surviving relief-etched copperplate, a fragment from a rejected *America* plate.) After 45 to 90 minutes of etching, his design was in slight relief. He poured off the acid, dried the plate, and then carefully painted over words with stop out to protect details from lifting during a longer second bite, which was necessary to deepen the areas around words and lines. Only if the "ink" started to lift would there be additional stopping out.

A long day, but at the end, a printable image was created many times more quickly than by engraving, where a square inch of close cross-hatching could take a full day or more.

In the fourth chamber were Lions of flaming fire raging around & melting the metals into living fluids.

After etching the design into printable relief, pouring off the acid, and removing the wax walls, Blake erased the "ink" with turpentine and polished the plate. He was now ready to make printing ink.

Ink for relief and intaglio printing was made by grinding powdered pigment with different grades of burnt walnut or linseed oil. Intaglio ink is tackier and stiffer than relief because it must stay in incised lines when the plate's surface is wiped

clean and requires more pressure to transfer evenly. Nevertheless, Blake used it to print relief plates, as is evinced by the slightly reticulated surfaces of his prints, especially noticeable in solid areas. He inked plates on the intaglio printer's conventional charcoal brazier, whose low heat made stiff ink thinner and more fluid and thus easier to manipulate and spread (Fig. 7). Like a "Lion[] of flaming fire raging around & melting the metals into living fluids," he spread glistening, warm ink with a linen dabber, moving its slightly convex bottom across the plate's surface and off the shallows. Plates with wide shallows he inked locally with small dabbers or brushes. Even so, inking relief plates was quicker than intaglio plates, which required a two-step process of rubbing ink into the lines and wiping the surface clean with rags and the palm of the hand.

Blake wiped the ink from any relief surfaces he did not wish to print. He routinely wiped the thin line bordering the plate created by the wax dike used to hold the acid (Fig. 8). The borders formed part of the plate's relief line system and acted as runners for the dabber. Wiping them was similar to wiping the bevelled edges of intaglio plates to prevent them from blemishing the platemark. The result, however, was very different. Platemarks, clean or not, always reveal a plate's shape and hence the image's origin and medium. Because relief etchings produce no pronounced platemark, wiping the borders erased overt signs of the graphic medium. The unframed text and image looked written and drawn rather than

printed, a unique rather than a repeatable image, an illusion further enhanced by colored inks and watercolor finishing.

The books were "Printed in Colours" (Prospectus, E 693). The first printing of *Thel*, for example, yielded thirteen (surviving) copies in five different colors. Changing inks during a print run diversified stock but also required more time, but it was not as labor intensive as color printing, in which a few thick opaque colors were applied to the plate's surfaces and shallows, sometimes heavily, sometimes lightly, and printed with the inked design. Blake had adapted the *à la poupée* technique English printers used for color printing, and used it for nearly everything he printed in 1794-95. [\[10\]](#) In effect, he painted plates with small dabbers (*poupées*) to produce opaque colors and textures resembling oil sketches, which he enriched and finished in watercolors and pen and ink. In 1795, he brilliantly extended color printing more fully into painting, executing "12 Large Prints . . . Printed in Colours . . . unaccompanied by any writing." He rarely used the technique for books after that, though in 1796 he created the Large and Small Books of Designs for, appropriately enough, a miniaturist painter, by color printing a "selection" of plates "from the different Books of such as could be Printed without the Writing" (letter of 9 June 1818, E 771).

In the fifth chamber were Unnam'd forms, which cast the metals into the

expanse.

From the inking station, Blake went to the press, where he again met Mrs. Blake, his printing “devil.” Simultaneously the dirtiest and cleanest of arts, involving oily inks and pristine paper, printing was best performed by two people. Printers, though, went unnamed in inscriptions on reproductive prints, which recorded date, title, artist, publisher, and engraver. Blake signed most illuminated works “Author & Printer W. Blake” or “Printed by W. Blake,” taking pride in his manual as well as mental labor. The fifth chamber’s unpictureable image also puns on “form,” which is typeset into pages in a metal frame for printing. “Cast,” another printing pun, refers to a stereotype (a solid body of type), as well as to the mold in which molten metals are poured; here, the mold shaping the “living . . . metals” is the “expanse” of blank sheets of paper, which now embody the relief plate’s immense cliffs, valleys, and palaces.

Blake printed on “the most beautiful wove paper that could be procured” (Prospectus, E 693)—the kind used by engravers. And he prepared it as a printmaker rather than a book printer, tearing large sheets of paper into quarters, eights, or twelves, instead of printing the sheet and then folding it into pages. Depending on the size of the sheet and how he cut it, the resulting leaves were basically big, medium, and small, or, according to Blake, “folio,” “quarto,” and “octavo,” because they roughly corresponded with those standard book sizes (he

advertised *Songs*, for example, as “octavo”). Like all intaglio and relief printers of the day, he dampened the paper for printing.

Blake had taught his wife how to print, draw, and color, and was especially proud of her printing abilities. She proofed and printed both his relief and intaglio plates (*BR* 459). For relief plates, they decreased the pressure on their rolling press (a machine with two large cylinders between which a board passes when the top cylinder is turned) by slightly raising the roller and probably removing one of three felt blankets placed between plate and roller. Blake laid the inked plate on the bed of the press, face up. Mrs. Blake held top and bottom of a damp sheet of paper and lowered it onto the plate, being careful not to let it sag in the middle and touch the ink, or to move it once it touched the plate, otherwise some lines would print double or slightly out of focus. She covered the leaf registered to the plate with a backing sheet and blankets and turned the press’s handle to pull the bed smoothly between two heavy rollers (see Fig. 7). After the “marriage” of inked plate and paper, she removed the printed impression to dry and brought another leaf to the press as Blake brought another plate, returning the printed plate to the brazier to be reinked.

Printing impressions without pronounced platemarks meant Blake could print on both sides of leaves to create facing pages. This conventional book format used less paper, which was Blake’s largest expense other than metal, but could present

difficulties. Mrs. Blake registered the clean side of the paper just printed onto the newly inked plate, and covered the printed side with a stiff backing sheet or thin metal plate (which she could wipe of offset ink and reuse). Offset was minimal, as in letterpress printing, because the ink was slightly pressed into the paper, and thus below the surface. Alternatively, Blake could print a stack of leaves and then print the versos (kept damp) once the ink was dry to the touch. In 1794, Blake began routinely printing on only one side of the paper, which, though easier, changed the dynamic between book and reader: with no competing image, the solo design dominated the page spread, demanding full attention and, in this format, came to demand more of Blake as it became increasingly more painterly. By alternating plates, the Blakes kept the press in action and could efficiently print a dozen impressions in an hour. Printing eleven copies of an eleven-plate book like *Visions* (121 impressions) would take less than two full days. Normally, they printed one plate at a time, but for small plates, such as *Songs*, they could print two, each onto a separate leaf, halving their printing time. Registration of paper to plate was sometimes off, resulting in designs hanging low or high, slanted left or right. Blake did not mind; he appears to have rarely discarded impressions, since the quality of inking, printing, and registration varies within copies of books. Creating pages with uniform margins was impossible with plates only roughly equal in size, and given how they were cut, it is not likely that Blake

was very exacting about registration. He did not abhor accidents, but saw them as part of the creative process, as revealing the maker's hand and production process.

Hell's "Printing house" has no chamber explicitly designated for coloring impressions. The infernal printmakers, however, incorporated ornamentation and color into the second and fourth chambers: the brushes illustrating text were also "adorning it with gold, silver, and precious stones," and the "living fluids" of colored inks were inherently illuminating. Blake's 1793 prospectus does not explicitly state that impressions were hand colored, only that they were "Printed in Colours." But "illuminated" implies coloring, specifically of manuscripts, and "a method of Printing which combines the Painter and the Poet" implies the same. As with quills, inks, and varnishes, Blake made his own watercolors. He ground many of the same pigments used to make ink in water and gum arabic instead of oil, and, to make the thicker, more opaque colors, in a thin carpenter's glue, diluting the paste with water to vary the paint layer's consistency. In the early days, when he printed in earth tones (yellow ochre and raw sienna mostly), he applied broad, delicate washes in only a few colors, and usually left texts unwashed. He printed late works in red and orange inks, bright colors that invited a more extensive palette and elaborate coloring. He applied colors in thin washes and translucent layers with detailed brushwork, adding blues, pinks, or yellows

behind text and often outlining texts and illustrations in pen and ink (Fig. 9). The result was a beautiful, strongly linear miniature, with legibility sometimes compromised.

He and his wife shared the task of illuminating the prints, at least in the first productions, perhaps adapting the method print publishers used when coloring prints, with each colorist using one or two colors and then passing the impression to the next colorist to add another color or two. For some books, Blake may have finished an impression from each stack of pages as a model, but neither he nor Mrs. Blake copied the other exactly. Making each impression exactly repeatable (as one would expect of books and prints) was not really possible when working by hand with an assistant. While each copy produced was a unique work of art, most impressions printed and colored at the same time do not differ very much; they share printing style, colors, coloring style, and even placement of colors. Making each impression *very* different would have required more labor and time, and, given the objective of producing multiple copies of books "at less than one fourth of the expense," would have been inefficient. Books printed in different periods, though, were also printed and colored in different styles and are visually very different. Overt differences among copies, in other words, usually reveal different periods and styles of production and not revision of the particular work.

There they were reciev'd by Men who occupied the sixth chamber, and took the forms of books & were arranged in libraries.

The sixth chamber conflates two actions, collating leaves to form copies of books and distributing them. It also implicitly questions the reception—and perception—of the book.

Like other book publishers of the day, the Blakes knew purchasers would have their books professionally bound. They merely fastened the leaves between two sheets of laid paper by tying string through three or more stab holes. (They varied the plate order for many of the early books, most notably for *Songs* and *Urizen*.)

And like the publishers, they warehoused or “arranged” their copies in the printing house. But the “sixth chamber” is also *outside* the printing house, in “the expanse” into which the metals were “cast.” The “expanse” is, ironically, the private space defined by the blank paper in the studio, but it is also the public space occupied by that paper as it moves from production to reception. After its gloriously sublime journey, touched by “Dragons,” “Vipers,” “Eagles,” “Lions,” “Unnamd forms,” and now “Men,” the illuminated print shelved in a library seems anticlimactic. But is it? As a “cast” of the original plate, it extends Hell's Printing house to the place of reading. Do the “fires of hell . . . look like torment and insanity” or “an immense world of delight”? Is the reader an “Angel . . . whose works are only Analytics,” or an “Angel, who is now become a Devil,”

reading in the “infernal or diabolical sense” (*MHH* 6, 7, 20, 24, E 35, 42, 44)?

Does the reader participate in or resist the creative process embodied in the book?

In 1795, Blake produced a deluxe set of the books on large paper, possibly to display at the shop of his friend and sometimes employer, the publisher Joseph Johnson. Blake had by this time printed and colored with Mrs. Blake about 125 copies of his illuminated books in small editions very much on his own terms:

"No Subscriptions for the numerous great works now in hand are asked, for none are wanted; but the Author will produce his works, and offer them to sale at a fair price" (Prospectus, E 693). Except for *Songs*, most copies of illuminated books executed by 1795 were also printed by 1795: fourteen of the sixteen extant copies of *Thel*; seven of the nine copies of *Marriage*; fourteen of seventeen copies of *Visions*, twelve of fourteen copies of *America*; eight of the nine copies of *Europe*; seven of the eight copies of *Urizen*; unique copies of *The Book of Los* and *Ahania*, and the six copies of *The Song of Los*.

For years he relied on stock, which, for *Songs*, his most popular work, lasted till around 1802, when he reprinted a few copies of *Innocence* and *Experience*, adding a few more in 1804 or 1805. One from the latter printing (Q) he sold to the Rev. Joseph Thomas, who paid “ten guineas” (£10 10 shillings)—the price Blake feared in 1827 he could “scarce expect to get from a Stranger”—as a way of giving this proud artist a monetary gift. This was far more than Blake had ever

received for an illuminated book, and “for such a sum” he “could hardly do enough, finishing the plates like miniatures.” [11] Indeed, Blake’s “fair price” for the *Songs* was originally 6 shillings, 6 pence (Prospectus, E 693). Initially, all his books were sold in shillings, not pounds, priced as poetry rather than as colored prints or small paintings. The following year, in 1806, when Butts requested a copy, Blake's stock of *Songs* was again depleted, so he created copy E by salvaging poorly printed impressions from various 1789, 1794, and 1795 printings of *Innocence* and *Experience* still in the studio, recoloring them and strengthening text and designs in pen and ink. A lot of work but easier than making ink and colors, preparing paper and press, inking plates and printing, which were not worth doing for just one copy of one book—or, at that time, even for a complete set of books.

In December 1808, Cumberland wrote on behalf of a friend who “was so charmed” with Blake’s “incomparable etchings . . . that he requested . . . a compleat Set of all you have published in the way of *Books* coloured as mine are.” If none were “to be had,” he was “willing to wait your own time in order to have them as those of mine are” (BR 211). Blake refused this generous offer, fearing to disrupt his “present course” of “Designing & Painting”:

I am very much obliged by your kind ardour in my cause & should immediately Engage in reviving my former pursuits of printing if I

had not now so long been turned out of the old channel into a new one that it is impossible for me to return to it without destroying my present course New Vanities or rather new pleasures occupy my thoughts New profits seem to arise before me so tempting that I have already involved myself in engagements that preclude all possibility of promising any thing . . . my time . . . in future must alone be devoted to Designing & Painting. (letter of 19 December 1808, E 769-70)

Blake was working on his 1809 exhibition, which netted a scurrilous review but no profits. For the next decade, with his stock of books depleted, Blake continued to work primarily as a painter and engraver, executing temperas (what he called “fresco”), illustrating Milton’s major poems, and engraving designs after Flaxman. He finished his *Milton*, printing three copies about 1811, and he continued to etch plates for *Jerusalem*— though, according to Cumberland, he had already etched “60 Plates of a new Prophecy” by summer 1807 (*BR* 187). Only fourteen copies of four books (*Innocence*, *Experience*, *America*, and *Milton*) were produced between c. 1796 and 1818, which means that most illuminated books lay untouched for over twenty years. Blake did not replenish his stock until around 1818, motivated possibly by Linnell, whom he met that summer, and/or an inquiry about the books from Dawson Turner. He sent Turner a list of eight

books (*Innocence* and *Experience* were still listed separately) and "12 Large Prints" that he was willing to reprint and their prices, telling him "that any Person wishing to have any or all of them should send me their Order to Print them on the above terms & I will take care that they shall be done at least as well as any I have yet Produced" (letter of 9 June 1818, E 771). For the first time since 1795, he printed copies of *Thel* (N, O), *Marriage* (G), *Visions* (N, O, P), and *Urizen* (G), along with *Milton* (D) and *Songs* (U, T), all in the same orange-red ink, paper, and coloring style. Of these, only *Marriage*, which he did not include in the list for Turner, and *Songs* would he print again. [\[12\]](#) Nor did he list *Jerusalem*, which was still in progress and not printed till c. 1820, in three copies in black ink, one of which Linnell purchased. He did list *America* and *Europe*, but did not print them till 1821, when he produced matching copies (O and K, respectively) for Linnell and began printing and coloring *Jerusalem* copy E in the same style.

The books he offered to Cumberland in 1827 were the same as those he had offered Turner (minus *Milton* and with *Innocence* and *Experience* combined), and the prices were £1-2 higher. Though nothing on the list was printed, he was—"consistent with [his] other Work"—printing copies of *Songs* and *Marriage* (again, conspicuously missing from his list), and ended his days printing a copy of *Jerusalem*. When he said he had "none remaining of all that [he] had Printed,"

he meant it. He had even sold his personal copies: *Songs* copy R (the model for the plate order of the last seven copies), printed c. 1795, to Linnell in 1819, for £1 19sh. 6d. (more than £4 less than he asked Turner for *Songs*) and *Marriage* copy H, printed in 1790, to Linnell in 1821, for £2 2sh. (less than half the then price of *Urizen*—which was etched on its versos). As with *Songs* copy E, he reworked both books before selling them. For *Songs* copy R, he added wide frames around each image and strengthened the coloring. For *Marriage* copy H, initially uncolored but printed in various red, olive, and green inks on both sides of the leaves, Blake elaborately colored the pages, adding gold leaf and, most unusually, going over the texts in various colored inks, word by word.

When he died, Blake had the only complete colored copy of *Jerusalem* (E), which he feared would not find "a Customer," and *Songs* copy W. His wife inherited both but could sell only the *Songs*. All of Blake's illuminated plates, prints, drawings, and manuscripts ended up in the hands of Frederick Tatham, one of the young artists who gathered around Blake in the last years of his life. In the 1830s, Tatham printed uncolored copies of *Songs*, *America*, *Europe*, and *Jerusalem* from Blake's plates. The plates disappeared while in Tatham's possession, reputedly sold for scrap metal (*BR* 417n.3).

From the perspective of book publishing, Blake's illuminated books were produced as fine "limited editions." They were not invented to secure financial

independence, and they didn't. And though Blake stated that his method cut production costs (primarily by his not paying for labor, manuscript, or design), it was a labor intensive, and not cost effective, means of production, mostly underwritten by his commercial work. Printing relief-etched plates was not difficult, but it was slow compared to printing books in the standard way. Considering how few copies Blake could produce during the "run," we can see why he felt that he was "never . . . able to produce a Sufficient number for a general Sale by means of a regular Publisher," and why the books proved "unprofitable enough to [him] tho Expensive to the Buyer." But from the perspective of an artist accustomed to producing unique works, illuminated books provided with wider audiences and greater opportunities to make his reputation, as he admitted to Turner: "The Few I have Printed & Sold are sufficient to have gained me great reputation as an Artist which was the chief thing Intended." He also insisted, though, referring to the Large and Small Books of Designs, that printing illuminated plates "without the Writing" was at "the Loss of some of the best things For they when Printed perfect accompany Poetical Personifications & Acts without which Poems they never could have been Executed" (letter of 9 June 1818, E 771).

Looking back from the last year of his life, Blake could see the great contrast between his early and late illuminated books. The first six years of production

progressed through a series of three formats: leaves printed on both sides and lightly washed (1789-93), color printing (1794-95), and single-sided printing with borders and richer coloring (c. 1795). After 1795, the format remained the same, though the coloring style continued to become more elaborate. Late practice differed from early in that far fewer copies per book were produced, various titles were produced in the same session, and printing sessions appear to have been motivated by at least one commission, which made printing other titles viable. Late copies cost far more than early ones. The dramatic increase in price reflects a change in Blake's idea of the book—from books of poems to series of hand-colored prints, from prints as pages to prints as paintings. The latter demanded more from him and the reader, but, early or late, his books always had the power to illuminate, to open eyes and convert “angels” into “devils.” The apocalyptic role of his “infernal method” was always clear: “The whole creation will be consumed, and appear infinite. and holy . . . by an improvement of sensual enjoyment” (*MHH* 14, E 39)—and with that, “the Author is sure of his reward” (*Prospectus*, E 692).

FURTHER READING

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NOTES

[*] *Cambridge Companion to William Blake*. Ed. Morris Eaves. Cambridge University Press, 2002. 37-62.

[1] Of these, 215 "proof" sets were printed on special papers for connoisseurs and sold at £6 6 shillings, and 100 sets were printed on regular paper, at £3 3 shillings. For Blake's apprenticeship and lifelong development as a graphic artist, see Essick, *William Blake, Printmaker* (Princeton: Princeton University Press, 1983).

[2] This total omits the works of one plate, *On Homers Poetry* and *Laocoön*, and two plates, *The Ghost of Abel*.

[3] See G. E. Bentley, Jr. "What is the Price of Experience: William Blake and the Economics of Illuminated Painting," *University of Toronto Quarterly* 68 (1999), pp. 628-29.

[4] Blake died of liver failure; for a possible connection between that and chronic copper intoxication, see Viscomi and Robson, "Blake's Death," *Blake/An Illustrated Quarterly* 30 (1996), pp. 36-49.

[5] Robert N. Essick, *The Separate Plates of William Blake: A Catalogue* (Princeton: Princeton University Press, 1983), III.

[6] For the origins of illuminated printing, see Viscomi, *Blake and the Idea of the Book* (Princeton: Princeton University Press, 1993), chps. 4 and 18.

[7] Bentley, "Price of Experience," p. 635.

[8] After 1800, Blake invented two variations on relief etching (E 694). These required outlines to be transferred on etching grounds and the "whites" scraped or scratched through with oval and pointed needles to create images loosely resembling woodcuts or wood engravings (e.g., *J* 14 and 33). Accompanying text was still written backwards and the page designed when executed.

[9] See Viscomi, "The Evolution of William Blake's *The Marriage of Heaven and Hell*," (*Huntington Library Quarterly* 58.3&4 (1997), pp.281-344.

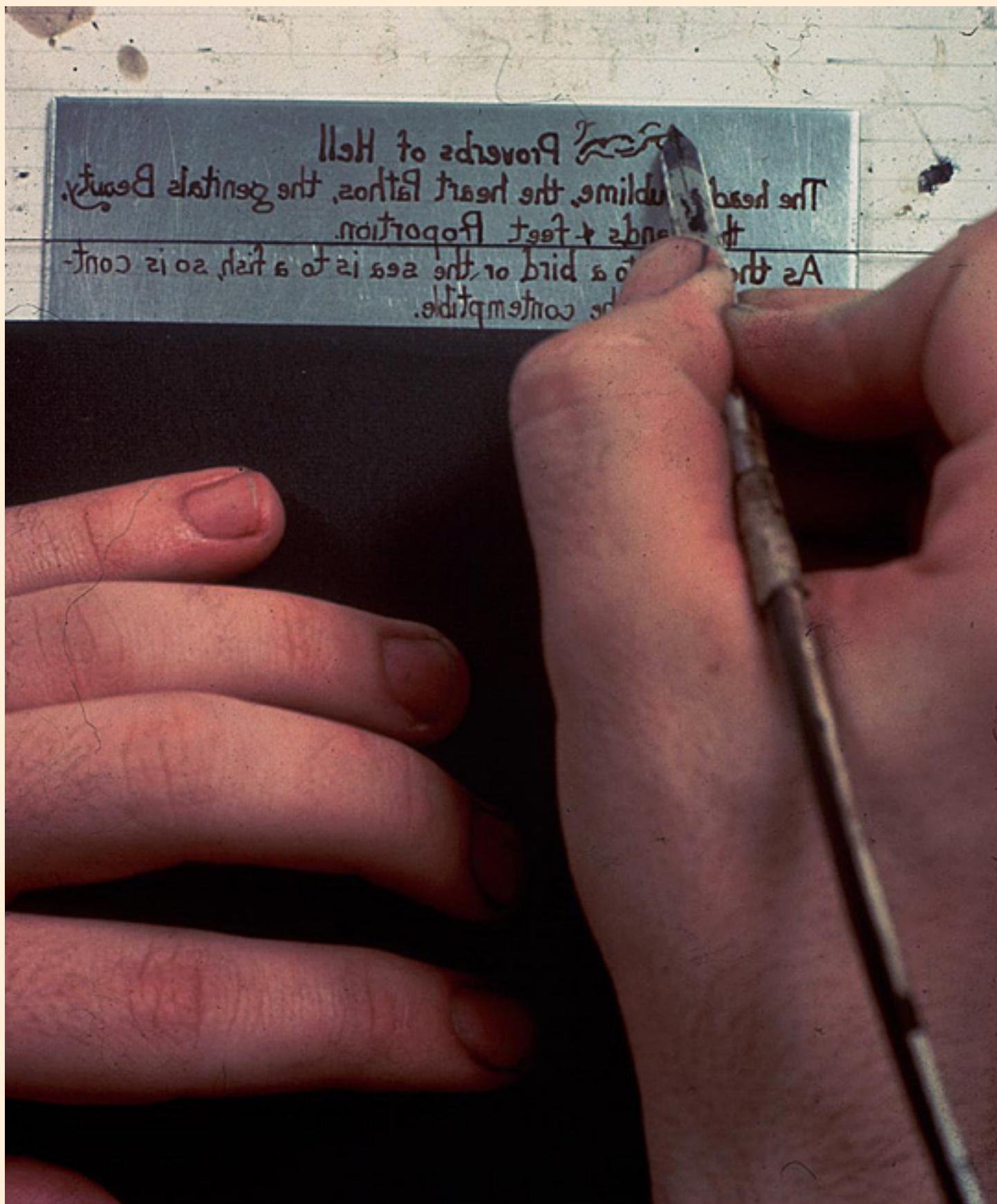
[10] French printers favored the multi-plate mode of color printing: a key plate prints the outline and separate plates, registered exactly onto the key plate, carry one or more colors. For a detailed examination of Blake's color printing method and others of his day, see Essick and Viscomi, "Inquiry into Blake's Method of Color Printing," *Blake/An Illustrated Quarterly* 35 (Winter 2001), pp. 73-102.

[11] Alexander Gilchrist, *Life of William Blake*, vol. 1 (London: Macmillan), p. 124.

[12] There are no surviving post-1795 copies of *All Religions, No Natural Religion*, *Book of Los*, *Ahania*, or *Song of Los*.



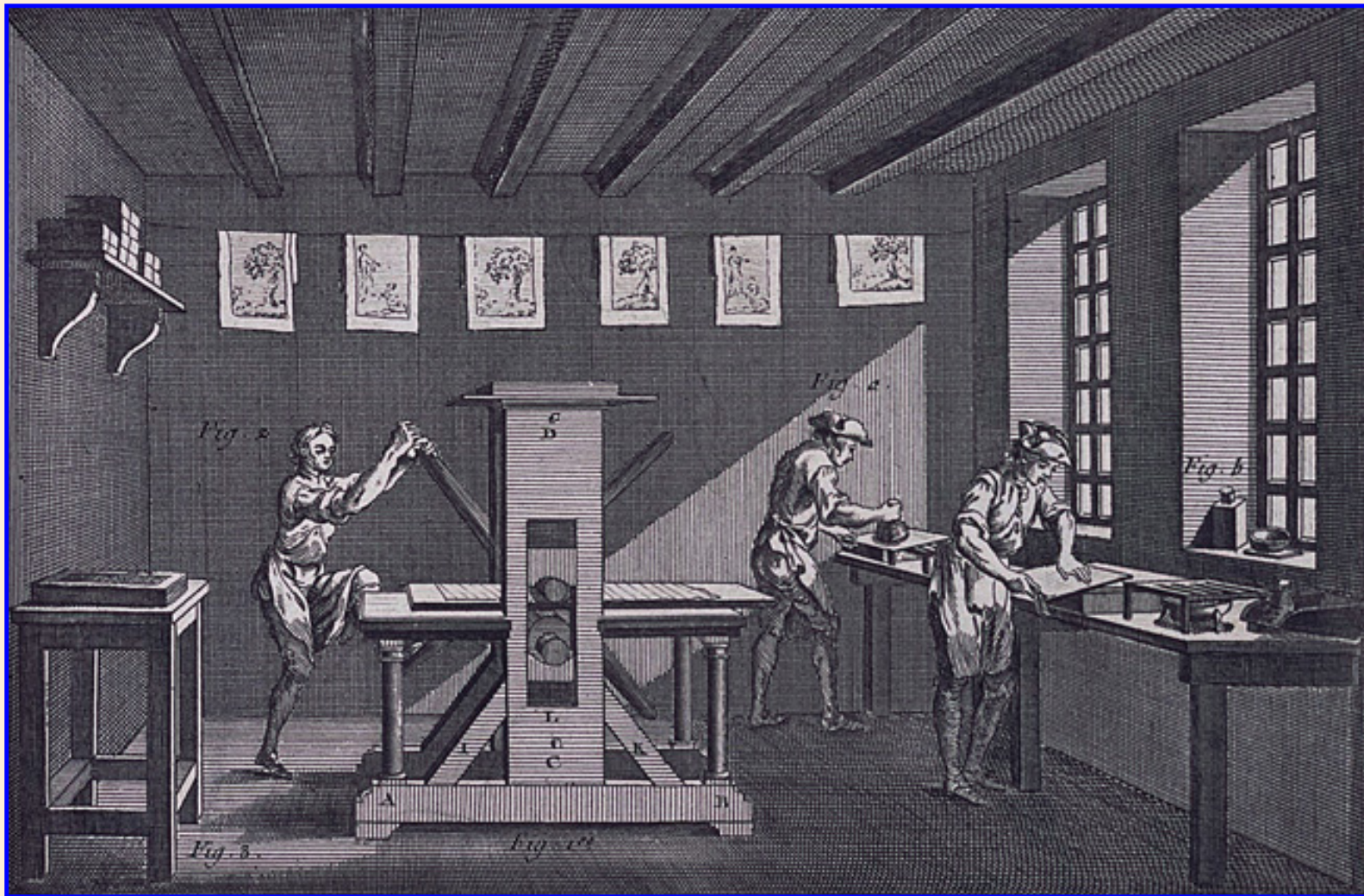
4. "The Divine Image," *Songs of Innocence*, 1789. Manchester Etching Workshop facsimile, line block, printed with out borders. 1983. Detail, showing white lines cut into broad brush marks.



5. Facsimile of *The Marriage of Heaven and Hell* plate 10, executed as a relief etching. 15.2 x 10.1 cm; writing text backwards with a quill with a string as line guide.



6. Facsimile of *Marriage* plate 10 as relief etching: biting the plate in nitric acid and feathering the gas bubbles away from the design.



7. Inking an intaglio plate over a brazier with a dabber (Fig. A), and wiping ink off the plate's surface with the palm of the hand (Fig. B); pulling the intaglio plate and paper through the rolling press. *Encyclopédie*, 1767.



8. Facsimile of *Marriage* plate 10 as relief etching: wiping the borders of ink.

Proverbs of Hell

The head Sublime, the heart Pathos, the genitals Beauty,
the hands & feet Proportion.

As the air to a bird or the sea to a fish, so is contempt
to the contemptible.

The crow wish'd every thing was black, the owl, that eve-
-ry thing was white.

Exuberance is Beauty.

If the lion was advised by the fox, he would be cunning.
Improvement makes strait roads, but the crooked roads
without Improvement, are roads of Genius.

Sooner murder an infant in its cradle than nurse unact-
-ed desires

Where man is not nature is barren.

Truth can never be told so as to be understood, and
not be believd.

Enough! or Too much



9. The Marriage of Heaven and Hell copy I, plate 10. Relief etching, 1790. 14.9 x 10.2 cm.

Reading, Drawing, Seeing Illuminated Books

Joseph Viscomi *

As a man is, So he Sees. As the Eye is formed, such are its Powers.

(Letter to Trusler; E 677)

Perception, according to cognitive psychology, depends on the “skill and experience of the perceiver” (Neisser 13). If so, what is true of cognition is also true of the study of art: one can see only what one knows how to look for. Consequently, our “anticipatory schemata (together with the information actually available) . . . determine what will be perceived” (Neisser 20). Or, as Blake put it: “As the Eye is formed, such are its Powers.” Reflecting on the formation of his own eyes—or schemata—Blake could say that “the only School to the Language of Art” was “Copying Correctly” the drawings and prints of the masters (E 628; Bentley, *Records* 423). By copying Blake meant drawing, which is a most effective way to become visually literate, technically proficient, and historically informed. More than a grounding for painting and engraving, drawing could transform looking into seeing; as Kandinsky points out, it was “a training towards perception, exact observation and exact presentation not of the outward appearances of an object, but of its constructive elements, its lawful forces . . .”

(Lambert 75). Blake seems intensely aware of this complementary relation between hand and eye, between making and seeing, as exemplified by Los but negated by Urizen, who writes his book on the laws of unity with his eyes closed. Concern for my students' powers of observation has led me to develop an exercise in which students make drawings of illuminated prints. They use a method analogous to illuminated printing, which entails drawing, and thus learn about Blake's composing and printing processes as well as about his prints. They learn to see his particular use of line and gesture, mass and negative space, composition and color. In this light, their reading of Blake's illuminated books becomes literally a "hands-on" experience, analogous to the complementary relation between hand and eyes, making and seeing, embodied in Blake's Los and enacted in Blake's graphic-verbal art.

In 1788, Blake began to experiment with relief etching, the innovative printmaking process he used to create *Songs of Innocence* (1789) and *Songs of Experience* (1794) and most of his other beautiful illuminated books. In *The Marriage of Heaven and Hell* (ca. 1790), he referred to it as the "infernal method" and described it as "melting apparent surfaces away" to display "the infinite which was hid" (E 38). In practical terms, the method involves four basic stages: drawing a design on a copper plate with an acid-resistant varnish, etching away the unprotected metal in acid to bring the design in relief, printing the plates on an

etching press, and coloring the impressions by hand in watercolors.

It is inviting to think of Blake, the visionary artist, as having cunningly contrived all manner of innovative techniques instead of intelligently adapting the current printmaking technology to his own needs. But the truth is that the four stages of illuminated printing are not difficult and the tools and materials of each stage commonplace. The difficulty is making illuminated prints that look like Blake's. The purpose of any class exercise, however, is not to make printmakers or facsimilists out of students but to demonstrate how technique gives rise to different kinds of images, how the materiality of Blake's execution affected what he said and saw, and, perhaps most important, to enable the student to gain access to a way of thinking and seeing like Blake's.

Some scholars have suggested that Blake used illuminated printing because it enabled him either to combine text and illustration on one plate or to escape the division of labor inherent in reproductive engraving. That the medium appealed to Blake technically and aesthetically is no doubt true, but text and illustration can be combined, and complete control of production secured, in intaglio printing also, as the etched plates to *The Gates of Paradise* and *The Book of Ahania* demonstrate. Only in relief etching, however, could Blake write and draw autographically and reproduce certain book conventions, such as facing pages.

Blake's basic tools were pens and brushes, and his main material, besides copper

plates and acid, a liquid medium. Together these implements exert far less dictatorial control over the hand and eye of an artist than do burins (or any other metal tool heavy with convention, technique, and translation), making possible spontaneous looking and calligraphic lines. Indeed, the execution of the design in illuminated printing is drawing in a literal sense: one produces rather than reproduces the appearance of drawing and writing because the acts one engages in are writing and drawing. With no resistance to the hand, the execution of the design is autographic, and, formed by a dark “impervious liquid” on a copper plate, the design is positive and direct. That is, the marks made by the tool are dark on a light background, unlike those in etching, which are light against the smoked ground, and they are the marks that directly print—unlike those in woodcuts, which do not print but delineate a shape that does. But like woodcuts, relief etchings are essentially two-dimensional, boldly contrasting black-and-white forms because, unlike intaglio lines, relief lines are all on the same level, receiving equal amounts of ink, and thus are incapable of producing tonal gradations.

But the way the design is put on the plate is entirely different from wood-cutting in tools, technique, and materials. If illuminated printing has a graphic-art analogue, it is lithography, which was called polyauthography when first invented (1796-98) and is neither intaglio nor relief but planographic. Although the marks

made in lithography have tone, they too are made autographically (with either a greasy ink [tusche] or crayon), and, more important, they print as they appear on the stone, instead of being translated into another kind of line. The lines Blake drew on the copper plate in asphaltum varnish would have retained their character in the print: fluid monochrome pen and brush lines on a metal plate. The main difference between the design on the plate and the print is due not to the slight thinning of the lines caused by acid but to the whiteness of the paper, which throws the design into much bolder contrast, revealing the purity of the forms and accenting its lack of detail.

To the untrained eye Blake's design looks very detailed, but the nib of a pen and the tip of a brush cannot make lines as fine as etching needles or burins. Given the basic materials of brushes, pens, and a liquid stop-out varnish, firm and simple outlines are inherent in the medium, making line, not detail or tone, the medium's natural language. That Blake should use this kind of line in relief etching is due in large measure to the tools, the medium's inability to define tone, and the small plate size, all of which subordinated detail to outline. Given these tools and materials, Blake could freely conceive, compose, and execute in the same medium and at the same time—the essential aspects of drawing on which illuminated printing is grounded.

Because of the central role of drawing in illuminated printing, the facsimile

exercise I use concentrates on executing the design, the first stage of Blake's process. We draw and write with fine quill brushes and real quill pens, though metal nibs are permitted. Instead of Blake's impervious liquid, copper plates, and acid, we use materials, analogous in appearance, feel, and method, that even the untrained can easily manipulate. In place of copper plates, we use four-ply copper-colored mat board; in place of asphaltum varnish, we use a dark-brown water-soluble drawing ink, the color of the varnish. For printing and coloring, we use a relief etched plate I have already made and we color the impressions. I show slides of those stages of the process that cannot be done in class or the studio, like preparing the copper plate to accept the varnish, biting the plate in nitric acid, and making ink and watercolors. Since my slides are unique, I suggest using photographs in readily available manuals like Chamberlain's *Etching and Engraving*. In this way, we experience Blake's process in all its stages.

Blake would start with a hand-hammered piece of copper, which he would plane and polish with oil, and then degrease with whiting to remove the oil so the design would adhere to the metal and not the oily film. Since matboard is analogous to polished, degreased plates, we skip this laborious but important step. The board, however, is already cut into roughly equal-sized plates. Consequently, the size of the plate, or "support," affects what the student can and cannot do, as I believe was true for Blake. Although eighteenth-century etchings and engravings began

with copper plates that were usually bought from coppersmiths already cut to size, Blake seems to have cut his small plates out of larger sheets of copper himself (Viscomi, *Art* 2-3). If the *Innocence* plates were cut out of larger sheets, then the number of desired parts into which a larger sheet could be cut—and not the design, letter size, length of text, and shape of the illustrations—would have determined the size of the plates. Even for *Innocence*, then, and not just for *Experience* and other illuminated books executed on the versos of earlier plates, Blake would have had to design within fixed shapes and sizes rather than cut and shape plates to fit existing designs.

The next step is to draw and write on the plate. But because a print is the mirror image of its plate, letters print in reverse unless they are written backward. It has long been suggested that Blake wrote his text on specially treated paper and counterproofed it on the plate, but Robert Essick, the leading expert on Blake's printing processes, and I have independently come to the conclusion that Blake did not use this method (Essick, *Printmaker* 89; Essick, "Review" 49, 49n; Viscomi, *Art* 4-8). Instead, Blake worked directly on the plate, writing his text backward, a skill neither difficult for, nor uncommon among, engravers, and one that we know he had mastered (Bentley, *Records* 212n1, 460n1). He would have drawn the illustration directly also, which explains why illustrations in the illuminated prints are the reverse of their sketches.

Working without a transfer means working without an original copy or, since we are really talking about pages in a book, without a makeup of the page design. In this method, therefore, the relation of text and illustration is not determined before the design is drawn on the plate. Unlike the copy engraver, Blake was not reproducing already existing designs, and unlike the chalk engraver or other facsimilists, he was not imitating the media of original designs, since these designs per se had not yet been invented. The few pencil sketches of illustrations that exist are studies and ideas; poems, whether written in pen or pencil, are manuscripts. Independent of each other they are only raw materials and do not constitute designs or copy to be reproduced. The image drawn on the plate, then, was the original invention, because it was the first time that these raw materials came together and were actually composed and set as designs and pages. In illuminated printing, as in drawing, execution and invention were inseparable. Since the size and shape of the plate preceded the design, and since Blake executed the design directly on the plate without a makeup or transfer, the relation and proportion of text and illustration are variable and not predetermined, invented only during the execution of the plate image. This method of composing meant that Blake, unlike letterpress printers, could not cast off copy. In a narrative poem, he did not know what stanza would go on what particular plate, or how many plates the poem would need. Working without model or copy forced him to

compose his pages seriatim rather than in forms. Such a composing process allowed each illuminated print and book to evolve organically.

To reproduce Blake's composing process, then, and not merely the appearance of his prints, students need first to learn reverse writing. Aside from simple practice letter by letter, one especially effective technique is to place a mirror next to Blake's design and to copy the image reflected in the mirror, text and illustration, as one integrated form. As with upside-down drawings, the left side of the brain doesn't recognize the patterns and allows the subordinate right side, which is designed to process visual information spatially, to take over. Writing backward a text already known is drawing words: words cease to be symbols or names and become forms, marks, lines, things. Students need also to copy a few songs in different sizes, copying the design—not the coloring just yet—as closely as possible, first as seen, which forces attention to the minute events taking place in the composition, and then in the mirror, which forces them to see the design holistically as a composition. With this preparation, the student is ready to compose designs in Blake's style for the in-class exercise.

Students bring to class a short poem or song, with, preferably, a thumb-nail sketch separate from the poem. They also bring a fine brush (.000), a quill pen, and a board on which the plates can be placed. The board is slanted at about forty-five degrees, like a scriptorium, and the pen kept horizontal to the desk. This position

facilitates writing the text (especially if one were to use real asphaltum varnish).

The teacher supplies the plates, which have already been cut to the size of the *Songs*, and the brown ink, which can be dispensed into shells, the traditional vessel for ink and watercolors.

The students begin by writing the text. The main technical difficulty they will encounter is not in writing backward but in giving the letters the proper slant.

Blake wrote Roman and pseudoitalic scripts, both of which we see in *Songs*; probably for technical as well as aesthetic reasons, the latter came to dominate.

Italic script looks more difficult to execute, but to connect letters and to give them a slant in the direction the pen is moving is actually easier than to write one letter at a time with a vertical axis while moving from right to left. Because there are fewer letter ends to coordinate, an italic script makes it easier to keep lines straight and words the same size. Besides simplifying the writing of the text, italic script also simplifies biting the plate: words are better protected against foulbiting and undercutting when fewer letter ends are exposed to acid.

Whether writing an italic or a roman script, students must keep the space between lines tight or break it up with ascenders, descenders, and interlinear decorations.

As they are composing text and illustration, they need to imagine how their design will be affected by the second and third stages, biting the plate in acid and printing it in ink. A tightly composed design need not be etched as deeply as one with open

areas, which further reduces the chances of the design's lifting off of the plate in the acid bath. By filling out lines, interlinear decorations become part of the relief line system, and by decreasing the number of open areas, or shallows, they help to keep the ink dabber on the surface, thus preventing ink from touching those areas bitten below the surface that are to print white. (Blake himself did not seem to follow any set rules to determine which he executed first, text or illustration.) Note too that in the *Songs*, the illustration is usually placed at the bottom of the print, unless the poem is very short or very long; the long poem's need for a second plate makes it possible to start with an illustration without crowding the text.

The objective of this exercise is to give students a clear idea of Blake's composing process, not of how the design is put in relief. Consequently, we use no acid and produce no printable plate. Extending the exercise to include printing plates and coloring impressions requires a relief plate, a rolling press, oil-based relief inks, and printing papers. I use a facsimile plate I made according to Blake's technique; for nonprintmakers, I recommend having an unmounted line block made of an uncolored *Songs* impression in *The Illuminated Blake*. A commercial printer can do this from a photocopy for a nominal fee.

One can print a relief plate by burnishing the paper from the back. Blake, though, used a rolling press, and you may want your students to experience the

“machinery” of printmaking. Such a press may be found in the college or university’s printroom. Use commercially made relief inks, which are easier to handle than intaglio inks, the kind Blake seems to have used, and spread a thin, even film on a marble slab. Apply the ink with hard rollers rather than with the cumbersome but traditional linen ink dabbers. The paper should be pure rag (such as Arches Heavyweight or Rives BFK), cut to quarto and folio sizes, and printed damp, which produces better impressions and was standard practice in Blake’s day (Viscomi, Art 24n30). The paper should be soaked in a tub or tray of water for a few minutes before printing and the excess water blotted off.

Inking the plate, preparing and registering the paper, and pulling the plate and paper through the press are jobs that can be divided and rotated among three students. Each group of students should print impressions in either Blake’s early or late printing style. In the former, the plate, with its borders wiped of ink, is printed in a cool color (like brown) on both sides of the sheet. In the latter, the plate with borders is printed in a warm color (like orange) on one side of the sheet. These impressions can then be painted at home in imitation of Blake’s early or late coloring styles (as reproduced in the Trianon, or more accessible Dover, facsimiles of *Innocence*, copy B, and *Songs*, copy Z). The palette should consist of the following watercolors: Prussian blue, gamboge, yellow ochre, Indian red, umber, black, vermilion, rose madder, and alizarin crimson. Note that, in the

early style, colors are applied thinly and sparingly and not at all to the texts and that, in the later style, the palette is fuller, the colors more layered, the texts washed, and the designs given frame lines. The final step is to gather the impressions and bind them between two sheets of laid paper by tying string through three or more stab holes, the binding Blake used, knowing his buyers would have the books bound professionally. When bound, the impressions printed and colored in the early styles will face one another and function more like pages in a conventional, text-centered book; the impressions printed and colored in the later styles will function more like individual paintings and effect a different kind of relation with the reader.

“The activities necessary for producing a facsimile can themselves lead to insights about the originals” (Essick, “Review” 49). Indeed, they help us understand Blake as a printmaker and artist by forcing us to see more in the art and see more *like* an artist. Seeing “behind” the surface reveals what is not apparent, the alternatives and choices Blake had and made in his own compositions. To know how and why this or that mark was made, to understand its relation to all the marks around it, to begin to grasp the orchestration of all the minute events taking place, the relation (sometimes interdependence) between text and illustration (and their equality as *markings*), is to see the work as opposed to merely looking at it. Such an exercise in making also provides the opportunity to move from seeing to vision, from

altered perception to altered state of awareness.

[*] *Approaches to Teaching William Blake's Songs of Innocence and of Experience*. Ed. R. Gleckner and M. Greenberg. New York: MLA, 1989.67-73.

Blake's Workshop

Joseph Viscomi [*](#)

“Mechanical Excellence is the Only Vehicle of Genius”

Allow me to take the easy way out of this “chain prophecy” by predicting three things in the future of Blake studies which are interrelated and which I think we can all agree are inevitable: 1) more of Blake’s art work will be made available to us through reproductions; 2) there will be more critical comment about Blake’s illuminated books from linguistic philosophers and art historians, as well as from literary scholars, and 3) the scholarship of Blake scholarship will become increasingly unwieldy.

Now, all this activity is good news if you think aesthetic experience is based on one’s relation to the work of art as well as to the experience of that work by others, which is to say, on the entire linguistic context in which the art work and one’s response belongs. On the other hand, if you think that art is “addressed to the Imagination, which is Spiritual Sensation, and but mediately to the Understanding or Reason,” [\[1\]](#) or that “it is impossible for the Understanding to comprehend Beauty,” [\[2\]](#) then what we will do to Blake has diminishing returns.

The more a work of art becomes an object of criticism, the less it is an object of intuition. Nevertheless, whatever your definition of the aesthetic object or experience, one thing is certain: before there can be any kind of aesthetic or critical response, the work of art has to first come into being. This is true whether you identify the aesthetic object with the work of art itself, or locate it in the spectator's mind, or in the interaction between the spectator and artifact, or in the artist's mind, or think that the whole question about aesthetic objects is based on linguistic ambiguity in aesthetic discourse. And besides there having to be a work of art before there can be an experience of it, one other thing is certain: the conditions under which the art work comes into being shape what the work is and means.

Under what conditions did Blake's works come to be? We have actually come a long way in answering this question in that we now know better than to think of Blake as a "naive genius" working in a vacuum. We need, of course, still "more work that tells us just how Blake fits into his time," but that he was "part of his social and intellectual climate" has, fortunately, become an article of faith, at least among literary critics. Yet, analyzing Blake's art within the context of 18th-century culture, which admittedly makes good theoretical sense, will not tell us what Blake's "pictorial art is all about," nor will "more conversation across the academic disciplines" of literary criticism and art history, which admittedly is

necessary before we can develop a “language that will deal effectively with Blake’s art.” We will never fully understand how Blake’s art came to be if this conversation continues to exclude voices able to speak the language studied, i.e., the language of art, and specifically the language inherent in the media Blake used, and if the context remains only social and intellectual and continues to exclude the workshop. Essick’s advice to “the methodological sophisticates [to] stay in close contact with traditional historical scholarship” applies here: art and literary critics should stay in contact with artists, for the artist’s point of view can provide a “crucial anchor for critical speculations.” If we do not include the workshop and artist in our conversations about Blake’s art, I think we will continue to remark: “This is not what pictorial art is all about.”

It is not that craft and technical matters are de-emphasized in critical analysis; they are simply ignored altogether. It does seem that one’s answer to the question “how does art come to be?” depends on the side of the easel one stands on. Perceiving art as the act of translating preconceived ideas or images into a given medium prevents one from realizing what artists acknowledge intuitively: that processes and materials play a significant role in defining the very nature of works of art. To perceive art as the act of translating ideas is to perceive media as simply an obstacle or mediating vehicle artists must deal with in order to express their ideas and visions. The critical question is: Where did the *idea*

come from. Answer that and you'll know how the work came to be. Never mind that the art work literally comes from the workshop, and that Blake knew that work brings inspiration and vision, that "Execution is the Chariot of Genius," [3] never mind that Blake thought that "people [who] say give me the ideas, it is no matter what Words you put them into" and those who "say give me the design, it is no matter for the execution . . . know enough of Artifice but Nothing of Art." [4]

This attitude toward the messy business of making art is manifest in our thinking that Blake is less concerned about the quality of the marks made than what the marks mean, or as Blake and his contemporaries would have put it, less concerned about execution and more about invention. Aren't we treating Blake as a "naive genius" when we think the lines aren't quite right, but that's okay, the mind is in the right place? For the sake of the vision as a whole, poorly proportioned parts are justified, overlooked, or excused; the issue of bad art is sidestepped altogether. But no matter how literary and symbolic a painting is, visual art is not prose. The idea that the subject does not determine the meaning of a painting is, of course, anything but new, but giving it anything but lip service in Blake studies would be. And critics will continue to subordinate form to content not only because of an inability to understand the meaning of form, but also because of an eagerness to excuse or explain sloppy work—and, yes,

many of the illuminated prints were pulled and colored carelessly and uncaringly. On the other hand, there are books like *Urizen*, copy F, *Marriage*, copies I and H, *Songs*, copies Y and Z, *Europe*, copy C, and many others whose visual splendor reveal a love and intensity which can only be realized when artist and craftsman—and thinker—are perfectly united. It must be admitted and remembered that without such a union there would be no cause for seriously studying Blake as an *artist* in the first place.

A related but distinct opinion that also results from thinking of Blake more as a poet-philosopher and less as an artist is that he was *overly concerned* with each and every mark made, that the “minute particulars” of swirl, leaf, and bird—not to mention the direction of Los’s big toe—is overwrought with symbolic significance. Reading in this light, one critic even interprets the ink splatters in the background of *Jerusalem* prints as intentional mistakes made to remind the reader of the mechanical process behind the book. Acknowledging that process affects product is the right idea, but this is an overzealous interpretation, especially since Blake can never be accused of belonging to the “crystal goblet” school of printing. His books always show traces of the process. Indeed, it is snakes, birds, and other interlinear decorations that most clearly reveal the printing process, or rather, Blake thinking in terms of the process, of knowing that what he does during the execution of the plate-image will affect and be

affected by what he does in later stages. Filling out a line of poetry and breaking up space with decorations makes good technical sense because a tightly composed design is easier to etch and ink: it does not have to be bitten as long and deeply as one with open areas, and it keeps the ink dabber on the surface, thereby decreasing the likelihood of ink being deposited in the shallows—unintentionally. Breaking tip space also creates, of course, a visual arrangement of marks and space on the page, an arrangement that can move the eye of the reader or fix it on a certain word or image, in addition to being pleasing in itself. This is not to say that pictograms and other decorations in illuminated books are not significant, but only that marks on any given plate may function as part of the composition, or as part of the relief line system, and not necessarily, or only, as symbols from the Kabala.

The point here is that if we are going to treat Blake's illuminated books seriously as art, then we cannot excuse poor work because we are more concerned with ideas, nor can we read all marks as hieroglyphics. There are many reasons why something is the way it is in the illuminated books, why something is added, or deleted, or changed, looks good or bad. Aesthetic and technical considerations, and not just ideas, should be given more attention since they play a more important role in compositional decisions than is generally acknowledged.

The formula that Blake “had intense ideas and a peculiar imagination which he wanted to express” [5] should not blind us to the fact that ideas and forms—both visual and poetic—do not exist separately or causally, as is implied by the syntax: first there is an idea and imagination, then there is its expression. To think that they do is to fail to understand that in bringing forth the artifact there is a dialogue between the artist and the medium in which the artist both creates and receives impressions, and, even more importantly, that this dialogue is already taking place in the mind of the artist before anything touches the paper or canvas. This is why the means of expression is part of the idea expressed. Perhaps if the two dominant ways of viewing art, i.e., as a means of expressing and communicating ideas, that is to say, symbolically, and as formal design, that is to say, objectively, were not seen as mutually exclusive (like cultural and technical contexts), we would not feel so obliged to place Blake in only the former camp and read his visual art like poetry and prose. These two views form a continuum of ideal types; artists, however, are real people and Blake, as a real artist, must have existed somewhere in between these ideals, recognizing in the artifact both its symbolic and objective realities. This syllogism may be simplistic, but I do feel very strongly that Blake knew that whatever else art communicates, it must communicate itself to succeed as art. Literally and metaphysically the image *is* the idea, and the artifact must be experienced, and

not just be about an experience, if it is going to qualify as an “improvement of sensual enjoyment” [6] and be experienced by the senses, “the chief inlets of [the] Soul.” [7] It is the combination of formal organization and communication, and not just the combination of poetry and illustration, which makes the illuminated books composite art.

Analyzing the poetry, art, and aesthetics in the context of the physical and metaphysical workshop is, admittedly, more difficult than most other kinds of analyses. What little has been done to date is of dubious value, mostly because the attempt to acquire an approach as interdisciplinary as Blake's has relied on “conversation across . . . *academic* disciplines” only. I would like to agree with Essick about art historians being able to discern the importance of “formal and stylistic considerations,” but it has been my experience that too many tend to distrust people who get their hands dirty and that they seem, as Adams has pointed out, to be “deeply mired in assumptions that don't allow for Blake's existence.” They are just as prone as literary critics to read art as icon rather than as graphia. And when it comes to the illuminated books, they are no better informed than literary critics about the literature pertaining to the graphic arts, the diversity within 18th-century graphic arts, and the aesthetic context in which Blake's relief etchings properly belong.

So, if a literary or art critic does not already know the arts of printing and

painting—knowing in the sense an artist knows, which is, I suppose, analogous to knowing Young, Blair, and Ossian as an 18th-century poet knew them—the critic is not likely to understand in any great detail terms and practices no longer used, nor be able to see how the historical record reflects the thinking of artists, a kind of thinking we see manifested in Blake's art and ideas about art. There seems to be, then, something of a “catch 22” preventing our entering the workshop and obtaining Blake's point of view regarding his pictorial art. One needs to already know the processes to fully understand the historical record, but without scholarly research into 18th-century practices one cannot completely know the processes. But the paradox is only apparent. It is not a question of one person having to synthesize all these things well, but rather of critics, scholars, and artists acknowledging that the conditions that shaped and brought forth Blake's art are technical as well as intellectual and social, and that all of these conditions should be taken into account when studying the art, the aesthetics, and the man.

It makes good theoretical and practical sense, then, to think of the workshop as an integral part of the cultural context in which we place Blake and his art. The art materials and methods that he used and the vocational literature of his day form a significant part of the cultural and psychological context out of which evolved Blake's art, his ideas on art, and his conception of himself as an artist.

By knowing this particular technical matrix, we can begin to examine the effect that Blake's work as a printer and painter had not only on the language and imagery in the composite art, but also on his aesthetics and his idea of self. By knowing the cultural associations as well as the details of the processes, we will also begin to recognize verbal and visual allusions to technique that have been overlooked, misread, or whose significance has been underestimated. It is my belief, at any rate, that studio work combined with historical research is a kind of investigation that should be encouraged and taken more seriously; it will help us to understand what Blake borrowed, altered, rejected, and invented in practice and theory, and to appreciate more fully Blake's pictorial art as art.

NOTES

[*] *Studies in Romanticism* 21 (Fall, 1982):404-409.

[1] "To Rev. Trusler," August 23, 1799, *The Letters of William Blake*, ed. Geoffrey Keynes (Cambridge, Mass.: Harvard U. Press, 1970), p. 30.

[2] G. W. F. Hegel, *Hegel's Aesthetics*, tr. by T. M. Knox (Oxford: at the Clarendon Press, 1975), vol I, p. 111.

[3] "Annotations to Reynolds" in *The Poetry and Prose of William Blake*, ed. David V. Erdman (Garden City: Doubleday & Company, 1965), p. 632.

[4] "Public Address"; Erdman, p. 565.

[5] Laurence Binyon, *The Drawings and Engravings of William Blake* (London: The Studio Ltd; 1922), p. 3.

[6] *The Marriage of Heaven and Hell*, plate 14.

[7] *Ibid*, plate 4.