

AN ILLUSTRATED QUARTERLY

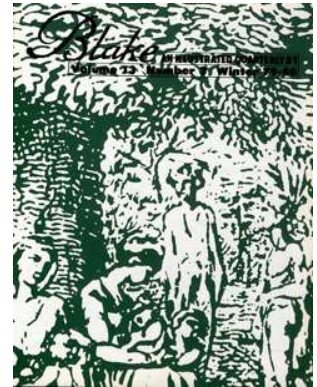
# BLAKE

A R T I C L E

## Teaching Blake's Relief Etching

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# TEACHING BLAKE'S RELIEF ETCHING

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**B**lake advertised "illuminated books" in "illuminated printing." Technically he usually meant "watercolored relief etching." The excuse most often given for separating them into a print-component to be interpreted by one class of specialists and a design-component to be interpreted by another is lack of expertise. Usually the interpreter politely says that he lacks expertise in dealing with one component or another, and then just as often he takes it all back and says that really it was Blake who lacked the expertise, and we must presume that it is only the interpreter's good fortune to lack expertise in the same area in which Blake lacked it. If Jacob Bronowski, Harold Bloom, and F. R. Leavis don't mind excusing themselves on those grounds, it shouldn't be any surprise to find ourselves shirking the demands Blake's illuminated printing makes on us. If we shirk, who can blame our students?

This is not supposed to be a paper on why the print-component and the design-component should be interpreted together. (I have provided a short bibliography for those interested enough to pursue the matter.) But lest someone think I am implying that the proper answer is the classic nonanswer to all what-for questions, formulated, I understand, by Sir Edmund Hillary in regard to an adventure that was certainly as crazy as anything Blake ever would force us to attempt, I want at least to recall the classic answer invented by Jean Hagstrum, who in his book on Blake several years ago said memorably, "What Blake has joined, let no man put asunder." Taken with everything that it implies, it's an answer that satisfies me. But it was an answer that Wimsatt, especially, always on the lookout for intentionalism in all its forms, found hard to take as the last word on the subject. This

paper assumes that the question has been answered in the affirmative and that the problem has shifted from theory to practice and, in the college classroom, to convenience.

But even if we want to proceed in the face of fear, ignorance, and prejudice, all sane teachers know that you can't teach things like relief etching in the classroom. You can't even show slides without looking like Urizen tangled up in his systems. I have never discovered a solution to the slide-technology problem, but two tactics and a formula ease the way for watercolored relief etching. The tactics are (1) avoiding the danger, expense, and exoticism of relief etching by using a surrogate printmaking medium, namely, linoleum-block cutting; and (2) letting students figure out the details of most of the techniques by themselves at home, instead of spending hours of class time giving out technical recipes and explanations which are only confusing anyway, like lectures on auto repair.

I hand out two sheets of instructions that take care of almost everything important: a list of essential materials and techniques, and a list of requirements for the project, with deadlines.

## I. WHAT THE PRINTMAKER NEEDS (& A FEW TIPS)

### 1. SOMETHING DRAWN

For any printmaker this is the "DESIGN." There is no true preliminary design for any plate from Blake's illuminated books--including full text and



pictures--and therefore Ruthven Todd once claimed that as evidence for Blake having used a process in *transferring* his design that *eliminated* the design at the same time. Of course the design can be drawn freehand directly onto the copper or the linoleum. But most professionals work out their designs on paper and transfer them to the plate or block. A design that includes words has to be reversed to make the writing read the right way around. (Engravers get used to imagining things in reverse, and Blake drew a number of important metaphors from this peculiar experience.) There are many simple ways to transfer and reverse. The simplest is probably to draw on paper that is transparent or semi-transparent (TRACING PAPER, ETC.). Turn it over; that reverses the writing, which can, however, still be seen from the wrong side of the paper. Now transfer it in reverse to the plate using CARBON PAPER and a BALLPOINT PEN.

No one really knows quite how Blake got his text onto the plates for relief etching. When working as a commercial reproductive engraver, however, he used the methods common in his trade.

## 2. SOMETHING TO MARK ON

For Blake this would be a metal plate, usually copper. Linocuts are made on sheets of LINOLEUM mounted on plywood to make a block. These are available in several sizes from all art supply stores. The linoleum is usually dark red; it comes already painted white so that lines carved into it show up red. Engravers had a similar problem with red copper, and they coated it in various ways--smoking the surface with a sooty candle, for instance--to make their lines show up.

## 3. SOMETHING TO MARK WITH

If a plate is a flat surface--like linoleum or copper--then to make a design the printmaker has to use something to remove the material that isn't going to print. In a relief process, everything left standing on the surface prints; everything taken away doesn't, because it's too low. Imagine the designs carved out of potatoes by children, or a rubber stamp, or the letter on a typewriter key: those are all ways of printing in relief. The medium of Blake's illuminated books is called "relief *etching*" because he used acids to eat away the unwanted copper. Whatever he didn't want the acid to eat, he covered with a substance that was impervious to acid, probably a mixture of waxes and tars called a "resist" or a "ground." He probably applied the ground in several ways depending on the local need: with a brush, with a dauber, by transfer, perhaps with a quill of some sort. The plates of *America* show very clearly in several instances how he then used the engraver's other most common tools, the burin (or "graver," the old-fashioned term) and etching needle, to scratch marks into the ground and to make shapes out of unshapely areas of etching ground.

Linocutters don't use acid, of course, but to carve away the unwanted linoleum they do use TOOLS that are remarkably similar to burins and etching needles. They come in a box, usually one handle and three cutting blades. But engravers used a variety of tools, some improvised, and likewise, anything that will mark on linoleum is a potential tool.

## 4. SOMETHING TO PRINT WITH

This is ink. Because watercolor will be applied to the print later, the PRINTING INK must be oil-based.

## 5. SOMETHING TO APPLY INK TO THE BLOCK WITH

No one knows for certain what Blake used. Ruthven Todd suggested that Blake's relief was so shallow that he had to apply the ink to his plate by covering another plate with a thin coating of ink and pressing it onto the plate he wanted inked. John Wright assumed that Blake used some kind of roller. Robert Essick says Blake probably used an ink ball (of the sort that printers and engravers used frequently) skillfully enough to ink his relief plates. A BRAYER--simply a roller with a handle--is the usual modern inker; cheap ones are available in art supply stores. The object in inking is to spread a *thin* and *even* layer of ink over the surface, usually by rolling a small glob of ink as if it were dough on a very smooth surface--like a piece of glass from a picture frame--until the ink thinly covers the brayer; then roll the brayer over the block. Ink does not have to be applied with a special tool. Fingers can smear ink thinly over glass, too, or over a blank linoleum block (imitating Todd's method, above).

## 6. SOMETHING TO PRINT ON

Blake printed on good paper. Almost any surface will accept a print--rice paper, etching paper, watercolor paper, cardboard, plywood, the nearest wall. Damp paper often prints better than dry, but all printmakers experiment. The variations in the amount of reticulation in the ink of Blake's prints indicate a lot of experimentation.

## 7. SOMETHING TO APPLY PRESSURE WITH

One of the advantages of relief printing is that a high-pressure press isn't necessary as it is for intaglio printing. Anything that can mash the paper onto the block will suffice: standing on it, rubbing it with a large spoon, rolling it with a dowel, typewriter platen, or rolling pin. It isn't at all certain that Blake always used a press to print his relief etchings.



## 8. SOMETHING TO COLOR THE PRINT WITH

This is watercolor. Dimestore quality will do, several colors in one tin box with a brush.

Those are the techniques, and they are even simpler when you do them with your hands than when you listen

to a description of them. But since the instructional aim is not at all to teach linocutting, and not even quite to show someone the steps in watercolored relief etching, but to show what a knowledge of Blake's printmaking medium can add to the experience and understanding of his illuminated books, there has to be something beyond a list of technical facts. No doubt many educational schemes would work. I use some version of the one that follows.



1 When someone--one of John Linnell's children, you or I, one of our students--colors a print that Blake designed and printed but never colored himself, what is the relation of the colorist to the designer and/or printer? The fundamental version of the question is probably the one that involves Blake most directly: when Blake colored one of his own prints, what was his relation to it? For instance, is the printed design a kind of script or score that the colorist performs, as Bob Dylan sings a song he has written? Might Blake the colorist--as he decides how to watercolor a plate of *America* forty years after he printed the first copy--be justly considered a member of his own audience or an interpreter of his own work? A strong line of Enlightenment thought proposes that Blake might be better at imagining the work he wanted to do than actually doing it, or better at doing certain things than at others. We might want to hear Beethoven "perform" one of his own piano concertos; but he could only "conceive" his string quartets, never "execute" them, if execution = performance, as Enlightenment theories usually seem to assume. One of the most striking effects of such theories is the sanction they give to specialized divisions of labor. Blake returns again to the issue as it arises in questions such as the following: What does "better" mean in the assertion that "I know someone who colors Blake's uncolored prints better than Blake himself?"

What defines the relations between the inventor, the executor, the performer, the individual reader/onlooker, the collective audience, and the commentator? For the purposes of their relief-etching exercise, at least, I encourage students to think of coloring the tiny figures living in the crevices of the body of the main figure on the last plate of *America* as a test of perception, interpretation, imagination, and evaluation. Catching an uncommitted glimpse of those tiny figures at the top of *America* 16 while you commit your real powers to making sense of the words in the text is like glimpsing birds--grasshoppers? fairies?--on fence posts as you plow a field. But coloring a design is like feeling it. Coloring the miniatures on plate 16 is like holding a fairy in your hand.

Blake's visual metaphors offer the colorist a number of tough choices: is the sky gray or blue? the season spring or winter? do the trees need leaves, then? how do a couple of trees look like a couple of people? how does a woman look like a cliff with a waterfall for hair?--the human form of the waterfall or the waterfall form of the human?). The text helps in answering some of the questions--if the illustration is supposed to correspond to the text. But Blake does not always choose correspondence as the relation between text and illustrations.



## II. THE EDUCATIONAL RECIPE

### 1. COLORING AMERICA

Early in the semester, while in class we are discussing the earliest illuminated books, the class buys a cheap, unbound facsimile edition of *America a Prophecy*, which later they'll use for studying that work, but which for now they are going to use as a kind of coloring book, because it has high-contrast reproductions of the plates of *America*. The initial assignment is to watercolor five plates with very different designs and textures. The instructions are to use Blake's coloring as seen in the Trianon/Blake Trust facsimile of *America*--which they consult in the library--as a model for their own coloring in three plates, and to invent their own contrasting kinds of coloring in the other two plates. The point of watercoloring is to force attention to the details of imagery, handling, and texture in Blake's designs, each of which presents a different problem in coloring.

2 When students first hear of this odd assignment, their anxiety-level begins to rise: I'm no artist; I've never been good at technical things; Isn't this a course in literature anyway; Do you expect us to learn printmaking in two weeks; I can't afford all that expensive equipment. I try to allay their fears by the following tricky means: to show students how to do their linoleum block, I flash a sequence of slides using my son Obadiah (then 6) as the craftsman in charge. I make it clear that he is making the family's Christmas cards with a few tools and supplies bought with his allowance of (then) 60¢-per-week. Here he shows how to hold the linocutting tool, which closely resembles an engraver's burin in size and shape.

3 Obadiah shows weak-wristed beginners how to dig linoleum with two hands when one isn't sufficient.

4 A roller (brayer) helps to turn a blob of printer's ink into a thin, even layer. Brayers are a convenience. Blake himself almost certainly inked his plates with a "dauber" or tightly wrapped pad (see Essick's book in the bibliography below). Anyone interested in historical reconstruction can make a dauber, and not much skill is required to ink the high relief surfaces of a linoleum block with one. But the surfaces of Blake's own relief-etched copper plates were not very deeply etched, and considerably more skill and experience were required to ink them satisfactorily. Blake's skill at inking with a dauber distinguishes him from several experimenters who have tried to reconstruct his method of etching and printing in relief. As Essick points out, none of the engraving handbooks of Blake's time mentions the roller as a tool for inking. But in using printmaking as a classroom exercise, I have not stressed historical accuracy, as is evident in the rather careless substitution of linocutting for real relief etching. Stressing instead the technical variety and flexibility of printing processes seems to encourage students to work in what I regard as the proper spirit of adventure.







## 2. MAKING A PRELIMINARY DESIGN

Meanwhile in class we've been talking about the principles of design in the early illuminated books, the *Songs*, *Thel*, and *Visions of the Daughters of Albion*, and discussing Blake's development in *The Marriage of Heaven and Hell* of his discovery that drawing and printmaking can become basic controlling metaphors, and that one of the natural themes of art is artmaking. Students try to express their understanding of these matters into a preliminary design for a plate of their own. Since the aim of the project is imitative instead of creative, they can choose between copying a design of Blake's; assembling elements from Blake designs and poems into a new composite; and making a design that is distinctly Blakean but not Blake's. In any case it must combine pictures with some words, which of course is the basic design problem in Blake's illuminated books.

At the same time they write a one- or two-page description and rationale of their design.

## 3. MEETING TO TALK ABOUT THE DESIGN

I prefer to have individual conferences with students to talk about their designs and their plans for a print. I intervene in two cases: when the designs don't look like Blake's, and when the designer has forgotten that outline drawings are different from relief prints. This is an essential lesson. Blake said that all true visual art finally depends upon "drawing" and "outline," but the way he used the brawny surfaces of his relief-etched copperplates shows that he didn't mean that he couldn't tell the difference between outlines in pencil and whatever corresponds to them artistically in the sculptured

5 Obadiah's flumey Christmas-tree whale is sound in imagination and sound in technique. His design uses graphic relief in ways that are characteristic of the medium (and therefore of Blake's work in it): concentration on rugged sculptural surfaces and bold contrasts instead of "photographic" tonal refinements.

6 Similar surfaces appear in this rugged linoleum block carved by a student whose amalgamated inspirations were coming from Blake and Spenser.

7 By imitating plate 11 of *Europe* a student discovered that "relief" is a repertory of technical choices, not a monolithic system. The wings of the figure at the top are done with white-line work, and the angelic pair at the bottom are similarly floated out of the surrounding inked surfaces. Blake used lots of white-line work in *Europe*, much less in *America*. In looking for their own techniques, students quickly become aware of the variety of graphic possibilities available in relief. They become far more perceptive in examining the plates of the illuminated books because they understand in practical terms how certain graphic effects are achieved.



surfaces of the plate. The student already knows this from experience in coloring the plates of *America* and has only to be reminded that the differences between a pencil drawing and a print in relief reflect essential differences in tools and materials.

#### 4. MAKING THE PLATE & THE PRINTS

The final requirement is to transfer the design to the plate, the linoleum block, to carve it in relief, print it, and watercolor it. I ask for a kind of portfolio consisting of several prints made from the block in earlier "states" that also show experimentation with inking, paper, surface textures, etc.; one finished print--watercolored--of the final state of the plate; and a written description, in the form of an essay or a diary, of the designing, printing, and coloring of the print.

Of course I vary the format with the nature of the class. If it's a class on the English Romantic poets, I abbreviate the scheme and make most of the work independent, outside of class. If it's a class on Blake alone, I like the atmosphere of a workshop: I do a demonstration of relief etching, that is, the real thing, and I encourage students to bring in their work at various stages of completion, and we all talk about the problems of designing, printing, and coloring. Sometimes I assign readings after the project--never before--on Blake's graphic processes (see the bibliography).

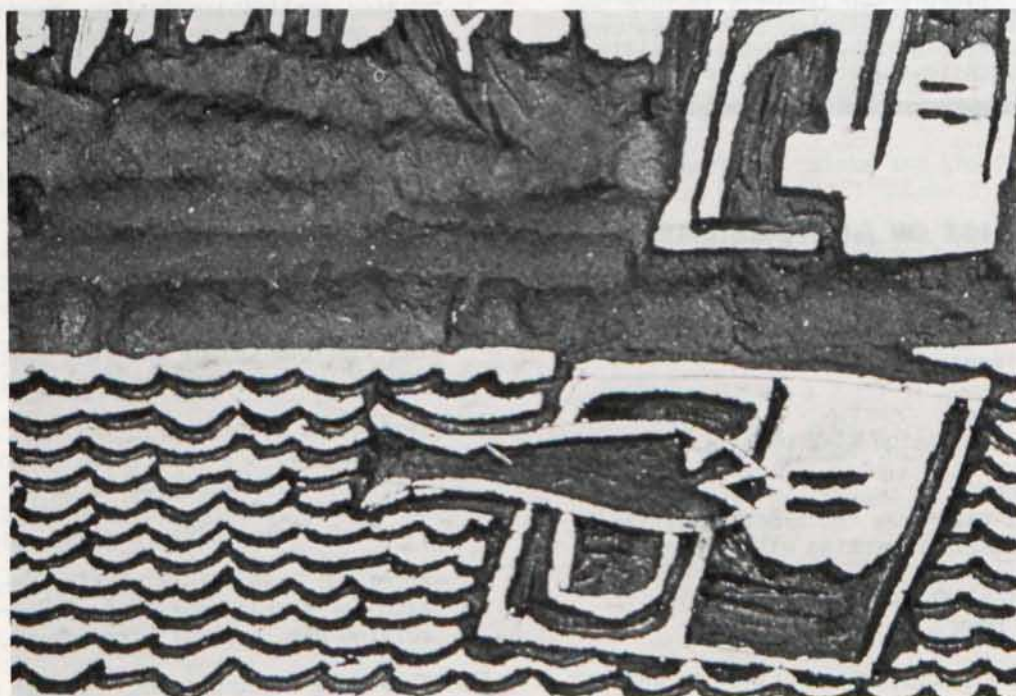
Students frequently make their experience with relief printing a basis on which to write longer critical or scholarly papers, proceeding with a good deal more confidence in their knowledge than one usually expects.

At any rate the results are always striking. While students are fearfully challenged at having to do something so utterly strange, the strangeness seems to be liberating, perhaps because they know I'm not interested in their linocutting skills, only in their dedicated efforts. I find very few shirkers and almost no serious complainers at this work. "This took me four hundred hours of work," they'll say, "and I have callouses and dirty fingernails." But they seem to know somehow that the work was worth it, and that what they are able to notice and know about Blake's illuminated books now is being noticed and known at a different level of competence. They see things they couldn't see before, and they have a new context for what they see. Most important, though, is their newfound willingness to grant the request that Blake makes at the beginning of *Jerusalem*: "dear Reader," he asked, "forgive what you do not approve, & love me for this energetic exertion of my talent." This is the educated benefit of the doubt that Wimsatt and Leavis found it impossible to give, but that all great art, Blake's more than most, requires.

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8 Another student discovered some of the metaphorical uses of printing, in this case using the contrast between white-line and black-line relief as the basis for one of Blake's own favorite graphic metaphors, reversal--as in the mirror-writing of *Milton*, the devil's reflection in *The Marriage of Heaven and Hell* 6, and the contrary states of the *Songs*.

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9 In the printed and watercolored version of the plate shown in illustration 6, the artist has used a second plate, as Blake occasionally did, to solve a technical problem in combining text and design. In another copy the movable text might have been printed in the sky at the top of the plate. It might have been printed with another illustration altogether. Or the same illustration might have been printed with yet another text. Blake's own tendency to mine one poem for another or several others, and to use one basic design in several different contexts, called for comparable flexibilities.

## APPENDIX 1. LIST OF ASSIGNMENTS

1. Watercolor 5 pls. from *America*
  - a. 3 imitating Blake's handling & color scheme
  - b. 2 using a contrasting scheme
2. Preliminary design  
Rationale for the design (1-2 pp.)
3. 1 linoleum block  
Several prints made from the block in earlier "states," and experimenting with paper, ink, etc.  
2 prints of final state, watercolored in contrasting ways
4. Description of the designing, printing, and coloring of the prints

## APPENDIX 2. SHORT LIST OF TOOLS & MATERIALS

For initial watercolor assignment: reproduction of *America* published by Blake/*An Illustrated Quarterly* (\$2.50, high contrast black & white reproduction on one side of each page, medium contrast on the other side)

1. Making preliminary design: pencil, ballpoint pen, paper
2. Linoleum block
3. Transferring design to block: ballpoint pen, tracing paper, carbon paper. If reducing or enlarging: pantograph or ruler for making proportion squares
4. Engraving design onto block: handle with tips (Speedball). Any number of tools can be improvised. Nails and knives are useful. An oven or hotplate for warming the block makes the linoleum softer and less brittle (oven: 300° F. with door propped slightly open)
5. Inking the block: printing ink, oil-base (Speedball); ink-ball (make it yourself) or brayer (roller: Speedball, or piece of dowel, or kitchen rolling pin); smooth surface (piece of glass from a picture frame, etc.)
6. Printing: paper (use what's at hand, or buy etching paper); source of pressure (brayer, rolling pin, back of large spoon, hand)
7. Watercoloring the print: set of child's watercolors and brush



## APPENDIX 3. FURTHER READING

### PRACTICE

Essick, Robert N. *The Visionary Hand*. Los Angeles: Hennessey & Ingalls, 1973.

The opening section reprints technical recipes contemporary with and relevant to Blake. Also reprints Todd (below), with slightly revised notes.

Essick, Robert N. *William Blake as a Printmaker*. Princeton: Princeton Univ. Press, forthcoming.

A full and sound account of Blake's practices as a printmaker, complete with historical documentation and, when necessary, speculative reconstruction of techniques based on a rigorous combination of personal experiment, close examination of Blake's prints, and historical context. The best single source of information. Illustrated.

Keynes, Geoffrey. *Blake Studies*. 2nd ed. Oxford: Clarendon, 1971.

"Blake's Copper-plates," pp. 122-29.

Lister, Raymond. *Infernal Methods: A Study of William Blake's Art Techniques*. London: Bell, 1975.

A conventional account, not very well organized or presented. Illustrated.

Todd, Ruthven. "The Techniques of William Blake's Illuminated Printing." *Print*, 6 (1948), 53-65, and *Print Collector's Quarterly*, 29 (Nov. 1948), 25-36.

A description of techniques Blake might have used to transfer his design and/or text onto copper for relief etching. Illustrated.

Wright, John. "Blake's Relief-Etching Method." *Blake Newsletter* 36 (Spring 1976), pp. 94-114.

Uses electrotypes, made directly from some of Blake's relief-etched plates before they were destroyed, as evidence for Blake's practices. Illustrated.

Wright, John. "Toward Recovering Blake's Relief-Etching Process." *Blake Newsletter* 28 (Fall 1973), pp. 32-39.

Describes experiments carried out at the Slade School of Fine Art in transferring, etching, repainting, etc. Illustrated.

### THEORY

Eaves, Morris. "Blake and the Artistic Machine: An Essay in Decorum and Technology." *PMLA*, October 1977, pp. 903-27.

On the relationship between artistic techniques and artistic principles. Illustrated.

Eaves, Morris. "A Reading of Blake's *Marriage of Heaven and Hell*, plates 17-20: On and Under the Estate of the West." *Blake Studies*, 4 (Spring 1972), 81-116.

On the uses of etching and engraving techniques as metaphors. Illustrated.

Eaves, Morris. "What Is the History of Publishing?" *Publishing History* 2 (1977).

On the broader historical implications of Blake's artistic theory and practice in the context of 18th and 19th century publishing.

Erdman, David V. "Postscript" to "A Temporary Report on Texts of Blake," in *William Blake: Essays for S. Foster Damon*, ed. Alvin H. Rosenfeld. Providence: Brown Univ. Press, 1969.

A reading of the printing-house allegory in *The Marriage*.

Erdman, David V. *The Illuminated Blake*. Garden City, N.Y.: Doubleday, 1974.

The commentary demonstrates the uses to which metaphors from Blake's graphic processes can be put.

Essick, Robert N. *William Blake as a Printmaker*. see above.

Essick places his discussions of Blake's prints and printmaking in the context of Blake's artistic theory, and the book includes a discussion of the imagery that Blake draws from his own technical practices. Illustrated.

Essick, Robert N. "Blake and the Traditions of Reproductive Engraving." *Blake Studies*, 5 (1972), 59-103.

On the metaphors suggested by systems of engraving. Illustrated.