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"Is This a Private War or Can Anyone Join In?": A Plea for a Broader Look at Blake's Color-Printing Techniques

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ing press in the Science Museum, London (Fig. 34), the same rolling press that was on display in the Tate Britain Blake exhibition and illustrated in the exhibition catalogue (p. 101).

A more flexible method of registration was also described. Using this method the monochrome impression and registration sheet passed between the rollers, but before the impression was lifted from the plate a weight was placed at one end. This allowed the opposite end of the impression to be lifted and the copper plate to be daubed with color, or for the plate to be removed, cleaned and applied with color before being placed back into register. As I describe, using this second method also made it possible to remove the print and replace it with a second monochrome impression, which could then be color printed using the color pigments remaining on the plate (pp. 107-08).

Relying upon photographic reproduction led to the error published in my book. Such a mistake illustrates how there is no substitute, however sophisticated, for seeing Blake's illuminated books and prints firsthand, ideally in laboratory conditions where special lighting and magnification are available. Only by studying Blake's illuminated books and prints in this way are we able to discover the materials that he used and how they were printed. This in turn will bring us closer to an understanding of the time and effort that were involved in their making, and place us in a position to address questions of intention and audience that follow directly from such an understanding.

I have recently confirmed my description of events with Geoffrey Morrow. He adds: "The main point, that Blake did use a double printing technique on occasion, is one about which we are in full agreement. Only by examining prints like the title-page under the conditions you describe can the technical reality be experienced with full understanding."

"Is This a Private War or Can Anyone Join In?": A Plea for a Broader Look at Blake's Color-Printing Techniques

By MARTIN BUTLIN

This article arose as a response to "An Inquiry into William Blake's Method of Color Printing" by Robert N. Essick and Joseph Viscomi that first appeared on the latter's web site on 15 October 2001. A revised version appeared in Blake/An Illustrated Quarterly 35 (winter 2002): 74-103. This piece, in its concentration on technical detail and its assertion that Blake's color-printing in his illuminated books was only feasible through an exclusively single-pull technique, seems to me to miss out more general considerations of

Blake's overall development in the 1790s and to leave several important questions unanswered.¹

First, as they say in the Michelin guides, un peu d'histoire. The opening paragraphs ("Introduction" in the web site version) assert that the "first, prominent appearance" of the two-pull technique was in the catalogue of the Tate Britain Blake exhibition of 2000-01, followed by Michael Phillips' William Blake: The Creation of the Songs from Manuscript to Illuminated Printing, published by the British Library in 2000. It was only in 2000 that "printing techniques rose to the forefront of attention among the small band of scholars interested in how Blake made his books ..." (74). This assertion is almost immediately contradicted by footnote 2 (significantly revised in the printed version, 74), which shows that the question of Blake's color-printing techniques has been discussed from at least as early as Graham Robertson's account in the 1907 edition of Alexander Gilchrist's The Life of William Blake (404-06). This supports the double-pull theory, but the authors discount this by distinguishing Blake's technique in the large color prints of "1795," discussed by Robertson, from the color-printing technique in the books, despite the fact that the former grew directly out of the latter. In fact, the double-pull theory was generally accepted, if only as an assumption rather than on the basis of any deep research, until relatively recently. The footnote also refers to the fact that the one-pull method was described by Essick in William Blake Printmaker, but fails to point out that the description is somewhat qualified: "Blake's technique unites the design or 'key' plate and additional color plates into one relief plate, and requires one, or at most two, printing operations" (125). It was in fact Viscomi, in his epochmaking Blake and the Idea of the Book (119-28, 287-88, etc.), who first wholeheartedly promulgated the idea of the onepull technique at the expense of any other method; this is again relegated to the footnote. The authors fail to point out that, in this respect, Viscomi's theory was challenged in an otherwise highly positive review of the book in The Burlington Magazine 137 (Feb. 1995): 123. Alas, The Burlington Magazine, the leading art-historical journal in Great Britain, clearly does not make a prominent appearance in American literary circles, despite the fact that the review was listed in G.E. Bentley, Jr.'s listings for that year.2

Publications referred to in abbreviated form in this essay are: Robert N. Essick. William Blake Printmaker. Princeton: Princeton UP, 1980.

David V. Erdman, ed. The Complete Poetry and Prose of William Blake. Garden City, NY: Anchor Books, 1982.

Joseph Viscomi. Blake and the Idea of the Book. Princeton: Princeton UP, 1993.

D.W. Dörrbecker. William Blake, The Continental Prophecies. London: William Blake Trust/Tate Gallery, 1995.

Phillips 2000; see below.

 [&]quot;William Blake and His Circle: A Checklist of Publications and Discoveries in 1995," Blake/An Illustrated Quarterly 29 (spring 1996): 163.

It may seem petty to niggle about a mere footnote but, sadly, its approach is symptomatic of the Inquiry as a whole. Surely, the article was, specifically, a review of Phillips' views on color-printing in his book and at the Tate Gallery.

And now, to go back nearly three hundred years for another piece of history, Blake's prospectus "To The Public" of 10 October 1793 (E 692-93). The authors of the Inquiry go to some pains to define Blake's term "Illuminated Printing," later qualified by Blake as to be "Printed in Colours," as being "created simply by printing from relief-etched plates" (75). This excludes the books of 1795 printed in intaglio. It seems far more likely however that Blake is relating his books to the "illuminated manuscripts" of the Middle Ages in which text and design are combined on the same page; the use of the word "illuminate" in this sense goes back to the beginning of the eighteenth century. Incidentally, the authors' restricted definition of the books in "Illuminated Printing" has now become their accepted usage, as in their essay in the recent festschrift for Morton Paley; 3 so quickly does a theory become an assertion of fact.

Lacking the detailed expertise and technical experience of the authors of the Inquiry, I must leave most technical details to the better qualified, though one or two points deserve comment, such as the question of the mis-registration of the "Nurses Song" in Copy E of Songs of Innocence and of Experience. The Inquiry seems effectively to demonstrate (96-98) that what caused the mis-registration in this case was not color-printing but a reprinting of the outlines of the text in a yellow ink rather than the more painterly pigments of Blake's color-printing technique; the yellow ink must have been fluid enough to have produced a linear, rather than a more general blotting effect, and indeed the authors refer to the fact that "Yellow ink on top of green color means that the inked text was printed after the color printing in green" (97). In other words, it is not color-printing at all in the usual sense, and Blake soon realized that it was much easier to reinforce such linear elements with the pen or the point of the brush (96). Incidentally, while disposing of the suggestion that the mis-registration of "Nurses Song" proves a two-pull process, the Inquiry fails to take up Phillips' point (103) that "small failures of registration in colour-printing can also be seen in" other plates in Copy E of the Songs. In fact the authors repeatedly assert that the "Nurses Song" is the sole example of mis-registration (81, 94, 96, 98, 100). Interestingly, these cases seem to have been confined to the odd pages that Blake salvaged for his special copy of the book that he prepared for Thomas Butts in about 1805.

Blake's main use of color-printing in his books was to produce a depth of color and a textural effect that was impossible in his previous procedure of coloring by hand in watercolors, and it was used for the illustrations and decorative features rather than for the text itself. Linear quality was the one thing for which this technique was not suited. In the first book that Blake seems to have designed from the beginning to be color-printed, The First Book of Urizen, 1794, he was careful to distinguish the pictorial areas, whether they filled a whole page or part of a page, from those occupied by the text. In already existing books, such as Songs of Innocence and of Experience and The Marriage of Heaven and Hell, he did add color-printing to the decorative details that appear among the body of the text. Here the blobs of colorprinted pigment can be seen to be more or less superimposed upon the linear decoration but they do not follow the lines with any exactitude. Nor do the fields occupied by the independent designs follow the areas defined by the passages of text with any precision, tending to spread beyond the borders implied by the width of the text. The same happens in The Song of Los of 1795 where, presumably to match the preceding "Continental" books, the format is larger and retains decorative features among the text. (Here, to complicate matters still further, Dörrbecker has suggested that the full-page illustrations were "coloured-printed from almost unetched plates, occasionally in multiple layers of paint ..." (Continental Prophecies 319); this implies multiple pulls.) Exact registration is therefore hardly a consideration when discussing Blake's usual form of color-printing and, despite the assertions in the Inquiry, it is very difficult to see that any of the color-printing in Blake's books, as defined in this sense, avoids the muzziness that the authors claim would result from a two-pull process.

The Inquiry's description of how Blake might have used a two-pull process (taken but elaborated from Phillips 95) seems to be deliberately designed to put this process in its worst light by making it as complex as possible (80). The authors seem to have forgotten one of Viscomi's most important discoveries, that Blake, in his illuminated books of 1789 and the early 1790s, tended to print individual pages in series with one inking of the plate, sometimes continued with a renewed printing possibly in a differently colored ink, before assembling the pages into different copies of the book and coloring them by hand (Idea 112-18, 260-61). The Inquiry admits that such series printing could occur in the color-printed books, as in the argument over the "Nurses Song" (96), and also that the color-printing medium could be applied more than once (84n15, 87), but insists on assuming that Blake would have had to wipe the plate completely clean of ink before adding colors, and then wipe the color off the plate before adding ink for the second impression (80). If in fact Blake first continued with his existing practice of printing the outlines on a number of sheets in series, and then went back and printed the same series of sheets with his thick color medium (renewing the color as necessary), the problem of registration would not have been nearly so difficult, particularly in view of the fact that, as we

Morris Eaves, Robert N. Essick, and Joseph Viscomi, "The William Blake Archive: The Medium When the Millennium Is the Message," Romanticism and Millenarianism, ed. Tim Fulford (New York: Palgrave, 2002) 220.

have already seen, precise registration is not in question. Indeed, Viscomi (*Idea* 126-28) accepts that "Color printing did not prohibit edition printing," adding that "Unlike ink, water-soluble colors, even those mixed with a retardant, would have dried on the plate had Blake dawdled."

Another assumption made by the authors of the Inquiry is that, in a two-pull process, the color-printing would have to be done whilst the ink was still wet (87). If individual sheets were printed in series, first in ink and then by color-printing, there would have been no necessity for this. However, the authors never examine directly the question of the different drying times of ink and Blake's color medium, though the implication is that ink took considerably longer to dry, both on the plate and on the paper.

There is also the problem of what actually happens to the ink in a one-pull process. In my simplistic way I see the processes, whether one-pull or two-pull, as producing a sort of sandwich. In a one-pull process one has the plate at the bottom, then the ink defining the text and the outlines of the designs (the authors suggest that there are exceptions to this when only part of the raised surface of the relief etching is inked) and finally the color-printed medium (again applied selectively); one then adds the paper on top. Removing the paper from the plate reverses the sandwich and one has the final colored page. In a one-pull process one would then expect to find the ink lines lying on top of the denser colored areas. In the case of a two-pull process, the inked text and outlines would be applied to the paper first and subsequently covered, at least in part, by the thick color medium. To the naked eye it would appear that, in so far as one can see the printed outlines, they lie below the colorprinted pigment. The authors of the Inquiry use enlargements and enhancements to refute (86-88) Phillips' theory (102-03) that the printed date 1794 in Copy T1 was covered by color-printing, saying that this was in fact done by hand. This is, of course, extremely difficult to prove absolutely, and the Inquiry's approach does not altogether arouse confidence.4 The caption to illus. 16 (85) reads "Detail showing

4. Any form of reproduction, including digital techniques, involves a sampling process. Hence certain audio perfectionists still prefer LPs to CDs, claiming that analogue reproduction preserves subtleties lost in digital recording. Whereas enlargement in color on the web site of a detail of the "Nurses Song" from copy E of Songs of Innocence and of Experience (section 6, illus. 65 and 66; less effectively reproduced in black and white in Blake p. 97, illus. 32) does convincingly demonstrate that the yellow ink is on top of the green, the illustration of details involving the printing over or hand-coloring over of the date on the title page of Experience in copy T1 of Songs of Innocence and of Experience (digital version section 5, illus. 46a, 46b, 47; Blake p. 88, illus. 20, 21, 22) conveys nothing of the texture on which the argument is based. No form of reproduction, and in particular none that involves projection onto a screen, can convey the three-dimensional quality of a painterly medium. Examination by the eye, including scrutiny under magnification, is essential. (Thanks to Robin Hamlyn, Rosie Bass, and Chloe Johnson of Tate Britain for introducing me to the mysteries of the web.)

printed colors painted [sic] over inked relief lines ..."; are these details printed or painted and which finish up on top? On page 87 it is admitted that the black color on certain pages of Copy E of Songs of Innocence and of Experience "is easily confused with true color printing."

The recently sold independent plate 3 from *The First Book of Urizen* (Christie's London, 18 December 2001, lot 84, illus. in color) seems to show, as well as the lines added after the coloring by pen or the point of a brush, printed lines beneath the color. To add to the complications Richard Lloyd, head of the prints department at Christie's London, has argued to me, unprompted, that in one place a layer of water-color has been added over the printing in ink but under the color-printed pigments. Despite the miracles of modern technology, one feels that such distinctions will always be a question of opinion rather than provable fact.

Another general point not fully discussed by the authors is that of the relative pressures needed to print on the one hand the outlines in ink and on the other the designs in Blake's color medium. We are told that printing in color from the depths of a relief etching requires greater pressure than from the surface of a plate (83; Viscomi, Idea 123, 126) but not how this compares with the pressure needed for printing in ink. It is assumed that color-printing from a relief-etched plate and printing in ink are compatible. However, what does seem to be clear is that printing in intaglio requires a much greater degree of pressure (Viscomi 103, 367). That the color-printing was done planographically from the surface of a more or less smooth plate rather than from a relief-etched plate would still create a two-pull process, nor can one see how, for instance, the design at the foot of page 6 of The Book of Ahania, let alone that filling the bottom right-hand corner of page 5 of The Book of Los, could somehow have been applied at the same time as the areas of text above were being printed under much greater pressure. Here surely a two-pull process was necessary, as is admitted by Essick (Printmaker 130):

The pressure needed to print the intaglio texts in these books was too much for simultaneous color printing from the plate surfaces. That Blake used a separate printing for the designs is confirmed by the title-page of *The Book of Los* Even in a reproduction, the deep platemark caused by intaglio printing is visible. On both the left and right margins, the design extends about 2 mm. beyond the platemark, indicating that the design could not have been printed from the text plate. The design must have been painted directly on the print and blotted, printed from another plate with a very light pressure, or printed from a sheet of paper

Again, whatever the precise technique, the process was a multiple one.⁵

The title page of The Book of Ahania seems to show Blake experimenting in a different form of color-printing to create textural effects

Moreover, if, as we are assured by the authors of the Inquiry, the one-pull process was "more efficient, direct, immediate, and artistically exciting ..." (100-01), why should Blake move from this supposedly much easier and more exciting process by switching to intaglio printing? It is much easier to believe that this switch was intended to make it easier to print by the two-pull process. The whole development of the books of 1794 and 1795 supports this.6 Firstly, there is the simplification found in The First Book of Urizen whereby the color-printed designs are confined to particular areas. This was accompanied by the increase in the number of full-page illustrations which, in the case of The Song of Los, may not have required any etching or printing of the outlines as such at all. Finally, in the last two books of the 1790s, The Book of Los and The Book of Ahania, Blake realized that it was easier to use a two-pull process if he distinguished between linear elements and pictorial elements, and also that it was simpler to print planographically from a basically smooth surface rather than from the pitted surface of a relief-etched plate, hence intaglio printing. Given that, in these two books of 1795, Blake seems to have been obliged to use a two-pull process, and given the way that this seems to have arisen as part of the development shown in the previous books, one can no longer assert that Blake must have confined himself exclusively to a one-pull process.

One must also remember that, until he started using colorprinting, Blake employed a double process, printing the text and design outlines from the relief-etched plate and then coloring the plate by hand in watercolor. Conceptually this is as much a "two-pull" process as if he did it in two different sorts of printing. Moreover, the two-pull process does not necessitate "a man who favored precision over variation" (101). It was indeed anything but a mechanical process creating precise registration; rather, it was the reverse of the precision that, it is claimed, could have been produced by a one-pull process. Blake recognized this, in his more detailed designs, by being forced to fill in the outlines in ink or with the point of a brush. Just the same happened in the large color prints of "1795" which the Inquiry leaves out of the discussion. Surely, whatever the precise dates of these large prints and the separate Books of Designs of 1796, they represent a culmination of Blake's color-printing experiments in which, recognizing the power of his designs on their own, he was able to discard any written text. These prints in their turn led to the small paintings in tempera of 1799-1800, just as the later pulls of the larger color prints, those on paper watermarked 1804⁷ (and still neglected for their implications for the dating of the color-printed books), led to the tempera paintings that formed the basis of Blake's one-man exhibition of 1809.

There are also further related topics to be explored. At the end of this crucial period in Blake's development there is the question of the independent color prints, where Blake seems to have dispensed totally with a printed outline, leading to such experiments as the repeated printing of his color medium under increasing pressure as the medium thinned out from copy to copy. Bentley has led the way with his fascinating article on the full-page plate 21 of The Book of Urizen from Copy B of The Large Book of Designs in the National Gallery of Victoria, Melbourne.8 This appears to be a repeat pull without any further coloring of the page in Copy A of the same book, and Blake, to obtain a more effective transfer of color, considerably increased the pressure of his printing, resulting in a heavily embossed platemark and the registration of Blake's relief-etched lines on the reverse of the paper.

In addition, at the beginning of this period, 1793, there is the (to me) strange case of America, of which only four of the known eighteen copies (of which three are posthumous) have been colored, and that in watercolor rather than by color-printing. Stephen Behrendt has stressed the "monochromaticism" of the uncolored copies and the way in which this underscores their "radical departures from the visual form of the conventional typeset book adorned with engraved illustrations,"9 and Viscomi has pointed out how the lack of color makes "America the most printlike of the early illuminated books" (Idea 264). Dörrbecker goes further in claiming that the particularly elaborate etching technique, including white-line modelling, of America demonstrates that, at least in "the first edition of the 'Prophecy', Blake must not have intended to add watercolour washes to these prints" (Continental Prophecies 77). All this suggests that Blake was experimenting in two radically opposed directions in the crucial years 1793-94, on the one hand towards the richer effects produced by color-printing and on

on the otherwise blank paper as well as more typical areas of color around the figure; see David Worrall, William Blake, The Urizenic Books (London: William Blake Trust/Tate Gallery, 1995) 161, and color illustrations on 169, 180, and 181. The effect is very different from, say, the facing frontispiece. Indeed, as Essick says of the two Beinecke Library proofs, "these proofs may record Blake's progress from single to double printing for his intaglio color printed books ..." ("New Information on Blake's Illuminated Books," Blake/An Illustrated Quarterly 15 (summer 1981): 12)—that is, if Blake was actually moving from a single-pull process.

^{6.} I have been discussing, rather superficially it must be admitted, the development in Blake's books leading up to the great color prints of "1795" ever since I began a series of reviews of the original Blake Trust's facsimiles with *The Book of Urizen (Burlington Magazine* 101 (July/Aug. 1959): 301-02; see also ibid. 102 (1960): 544-46, and 103 (1961): 368); these reviews are omitted from Bentley's *Blake Records*.

Martin Butlin, "A Newly Discovered Watermark and a Visionary's Way with his Dates," Blake/An Illustrated Quarterly 15 (fall 1981); 101-03, and "Paintings and Drawings of William Blake: Some Minor Additions," Blake/An Illustrated Quarterly 17 (spring 1984): 159.

G.E. Bentley, Jr., "The Shadow of Los: Embossing in Blake's Book of Urizen," Art Bulletin of Victoria 30 (1989): 18-23, recto illustrated in color, verso in black and white.

^{9.} Stephen C. Behrendt, Reading William Blake (London: Macmillan, 1992) xiii.

the other towards an engraving technique by which he could dispense with color altogether.

Such questions necessitate a much wider approach to this short but radical period of technical experimentation than one confined to the establishment of whether Blake used an exclusive one-pull process or a two-pull process. I do not claim to have answered all the points raised by the Inquiry, let alone to have proved that Blake used an exclusively two-pull process. What is necessary, however, is that those with the skill and technical expertise to research this question should distance themselves a little from the technical details and approach the subject impartially in the light of Blake's development as a whole. Research along these directions cannot but be more enlightening for our appreciation of Blake's achievement.

Blake's Method of Color Printing: Some Responses and Further Observations

By ROBERT N. ESSICK AND JOSEPH VISCOMI

Authors' note: An online version of this article, with illustrations in color, is available on the journal's web site at http://www.blakequarterly.org. Readers interested in the full pictorial evidence supporting the views expressed here are encouraged to consult the online version.

"Labour Well the Minute Particulars, attend to the Little-ones"

We wish to comment on Butlin's observations seriatim as they arise in his essay.

Butlin notes that "the concentration" of our article "on technical detail" missed out the "more general considerations

 William Blake, Jerusalem, plate 55, line 51. Complete Poetry and Prose, ed. Erdman, 205. Hereafter cited as "E" followed by page number. of Blake's overall development in the 1790s" and left "several important questions unanswered." Our essay indeed concentrated on a single issue raised by Phillips' book, Blake's color printing of relief-etched plates. This topic, however, covers more than 600 impressions in ten books and touches on one of the major goals in Blake studies, that of understanding Blake's practice and thinking as an artist. More general considerations of all the techniques Blake deployed in his illuminated books, and the evolution of those books into the large color prints of 1795 and finally into the tempera paintings of the late 1790s, would take a book-length study. We (and we suspect the editors of this journal and most of our readers) found our article long enough as it is. The fact that most of the large color prints are planographic (i.e., printed from the surface), and that the temperas were painted (not printed) on their supports, does not alter the way Blake color printed his relief etchings. We continue to believe that questions about print technology are best answered by looking closely at the primary evidence (in this instance, color-printed impressions of Blake's relief etchings), by conducting experiments in the print studio, and by contextualizing one's findings within the history of color printing in the eighteenth century. Connoisseurship that produces only the most general comments ("looks like two pulls to me and my friends"), or rounding up the opinions of various scholars and taking a vote, are not as helpful. Technological issues are best resolved by considering "technical detail," even if this tends to bore or annoy some of our readers. But since Butlin has raised questions about the colorprinted intaglio plates and color-print drawings that followed the color-printed relief etchings, we feel compelled to answer them, which we do later in this response.

Butlin's second paragraph forces us to quibble over the meaning of "prominent." As we pointed out in our second footnote, several scholars, including Butlin, had indicated a belief in a two-pull process prior to Phillips' book. These earlier comments are brief and not even "prominent" within the essays and books in which they appear. It seemed to us discourteous to critique those who had only mentioned the two-pull process in passing and had not offered any supporting arguments or evidence. The history of the two-pull theory prior to Viscomi's 1993 study, Blake and the Idea of the Book, appears to be one of those cultural traditions that many assent to but none investigates. Surely Phillips must be credited with the first, prominent attempt to make a case for the two-pull theory.²

2. Butlin refers throughout his response to an online version and a "significantly revised" print version of our essay. He is confusing the final online version with an early draft of the essay (15 October 2001) that the authors put online for the purpose of eliciting responses from curators, scholars, print historians, and other invited guests. The published online version (February 2002) and the print version are the same essay, except that the latter has fewer and only black and white illustrations and some of the captions and descriptions of the illustrations are altered to take that into account.