METROPOLITAN MUSEUM STUDIES

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PHOTOGRAPHY AND THE "MODERN" POINT OF VIEW
A SPECULATION IN THE HISTORY OF TASTE

By WILLIAM M. IvINs, JR.

I

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In December, 1927, there occurred the centenary of an event which was to prove the most revolutionary thing that has ever happened in the history of the graphic techniques. Having little or nothing immediately to do with art (as so frequently happens with things that actually determine its history and development), the centenary was not observed by any of the great museums. The event is, however, worth noting, if not for itself, for what came out of it, because it has given us new tools and, incidentally, new vision and memory and new thought.

Nicephore Niepce, on the eighth of December, 1827, submitted to the secretary of the Royal Society a memorandum concerning his experiments in making solar images, which was accompanied by examples of his work. In his search for a pictorial printing surface which might be made without the aid of a draughtsman or engraver, Niepce had made what today we should probably call a photogravure reproduction of an old engraving, and, as one result of his experiments to that end, he had succeeded in making the first permanent solar image. Another result was that in seeking to produce what we of today should call a "process" plate or block, he discovered or produced the first photographs as by-products. In the month of January, 1828, the memorandum was returned to him with the explanation that it could not be received by the Society in view of the fact that the processes he had used were not revealed. Niepce promptly returned to France and afi:er a long-drawn-out series of negotiations entered into partnership with a young man named Daguerre. Niepce, who had done the fundamental work, has been forgotten, but the name of Daguerre, through the word daguerreotype, has become a part of the vocabulary of educated people. Ten years later Mungo Ponton in England, by making the solar image on a piece of paper, which could be rendered transparent, rather than upon a sheet of metal, produced the first photographic negative. The first negatives on glass coated with albumen were made in 1847 by Niepce de St. Victor, the nephew of Nicephore.

In the 179o's William Blake produced relief etchings (e.g., his Songs of Innocence) but, aside from his own work, nothing practical came of his idea. In the 185o's a French experimenter named Gillot worked out a process for making autographic relief etchings which should take the place of woodblocks for book and magazine illustration. These gillotypes rapidly came into great popularity with the French publishers.Possibly the two best-known books illustrated with them were Jacquemart's *Histoire du mobilier* (1876) and Havard's *La Hollande* a *vol d'oiseau* (1881), both of which were illustrated with these *eaux-fortes typographiques-thosefor* the first book being made by Jules Jacquemart, arid those for the second by Maxime Lalanne. The gillotype, however, had the inconvenience that it required the draughtsman to use special materials. So the younger Gillot, turning to photography, evolved a method of photographically transferring to his zinc plates any line drawings no matter of what size or in what media. Shortly after the appearance of Havard's book, there was published (in 1882) an edition of Quevedo's *Pablo de Segovie,* illustrated by Daniel Vierge, which has been said to be the first book illustrated with photographic line cuts of the kind now in use in all of our newspapers and magazines.

REPRODUCTION OF A PRINT MADE BY NIÉPCE
AFTER AN OLD ENGRAVING

Shortly after Bewick, who died in 1828, people began to make tint engravings on wood, but these always necessitated a draughtsman to make the drawings on the blocks. Sometime in the 185o's an Englishman named Bolton sensitized the surface of a boxwood block and took a photographic print upon it in such a way that it was no longer necessary to make drawings on the block. Out of this in time grew up the type of wood engraving of which, in this country, Henry Wolf and Timothy Cole were perhaps the best-known makers. As the cost of these elaborate tint wood engravings was very great and as they were slow in the making, there was an immediate and practical incentive to carrying on the experiments towards a relief process that should eliminateboth the draughtsman and the engraver. The steps in the development of photographic relief printing surfaces may never be traced out as the experimenters were widely scattered and did so much of their work in secret. Especially was this true of the half-tone. The essential story, however, seems to be somewhat like this -

REPRODUCTION OF A WOOD ENGRAVING
AFTER FLAXMAN BY THOMAS BOLTON, WHO IS S\ID TO HAVE BEEN THE FIRST TO PHOTOGRAPH
HIS PICTURE ON TO THE BLOCK BEFORE ENGRAVING IT. C. 1861

As early as 1852 Fox Talbot had had the idea of using a screen of crepe or muslin for breaking up the printing surface into points so that relief prints could be made. This idea if followed up would have produced immediately the now familiar half-tone screen, but for

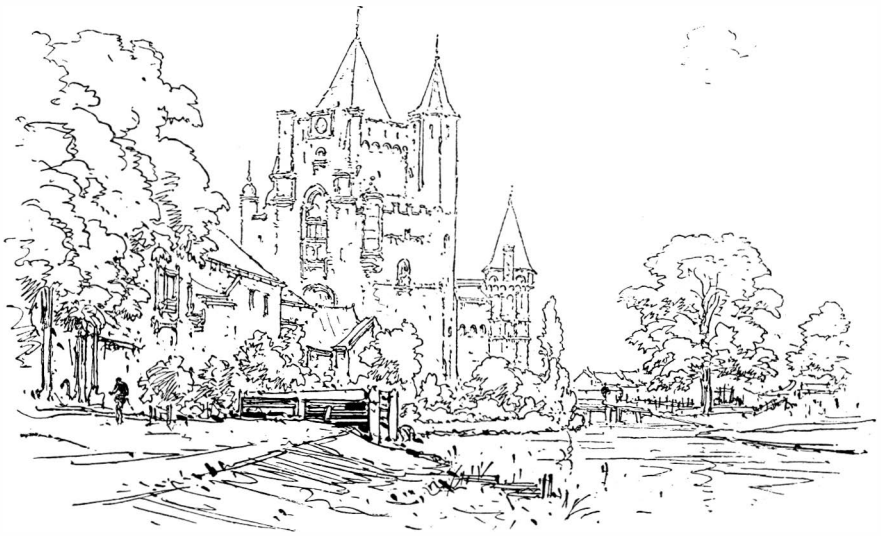
some reason the experimenters devoted most of their time and thought to grain and single line half-tones. In 1877 Max Jaffe, of Vienna, by using a screen of bolting cloth, produced the portrait of Adam von Burg, which is here reproduced, and which may possibly be looked upon as the first practical cross line half-tone. The problem was primarily one of the screen - how to get cross lines instead of the then more or less familiar single lines and granular dots. In 1879 Joseph Swan, of London, gave his single line screen a quarter turn during the exposure, and thus produced a cross line effect. In 1882 Meissenbach, of Munich, took out a patent for much the same process as Swan's, the difference between the two lying principally in the fact that Meissenbach's scheme was more generally taken up. In the middle eighties F. E. Ives, of Philadelphia, who is happily still alive, produced the first practical and accurate cross line screen by fastening together two single line glass screens. In 1893 a practical commercial way of making half-tone screens was worked out by Max Levy. Thus, in the Ives process, at last the dream of Niepce was realized, and it was possible not only to make a photograph, but to make a printing surface of that photograph, in such a way that accurate pictures could be printed from relief blocks without the intervention of either draughtsman or engraver. It is perhaps not without significance that this period of forty years from 1852 to 1893, in which men were busy learning how to make pictures without the intervention of the human hand, coincides so remarkably with the realistic movements in art known in England as Pre-Raphaelitism and in France as Impressionism, and with the dominance of the most thoroughgoing mechanistic theories in science and its philosophy.

REPRODUCTION OF A GILLOTYPE BY DAUMIER FROM LA MUETTE, PARIS, 1870

At the time it may be doubted whether anybody realized quite what had happened. Hitherto, all printed pictures had been composed of lines, tints, or dots made by the human hand in such ways that all printed pictures were highly *subjective,* full of what is known as "personal equation," and in consequence scientifically quite untrustworthy. They told far more about the man who made them than about the objects represented. Now for the first time in the history of man it was possible to have a cheap, easily multipliable, entirely impersonal, wholly objective picture of anything that could be seen by the physical eyes of men.

For purposes of record, it was for the first time now possible for a man to produce relief-printed pictures which could serve as a basis for scientific thought about the objects represented. So far as all the descriptive sciences are concerned, that is to say, those sciences which concern themselves with the inventory, a new era had begun. To take a minor example, scientific connoisseurship of works of art has not only been put upon a wholly different basis, but the

So far as the general public is concerned this series of discoveries and inventions has brought to us by far the greater part of our knowledge of the external world. By half-tone illustrations in our magazines and newspapers we know what things look like in India and South Africa and Iceland; we also know about fashions and about the faces and figures of famous contemporaries. In science the camera and the half-tone not only map the heavens, but show us



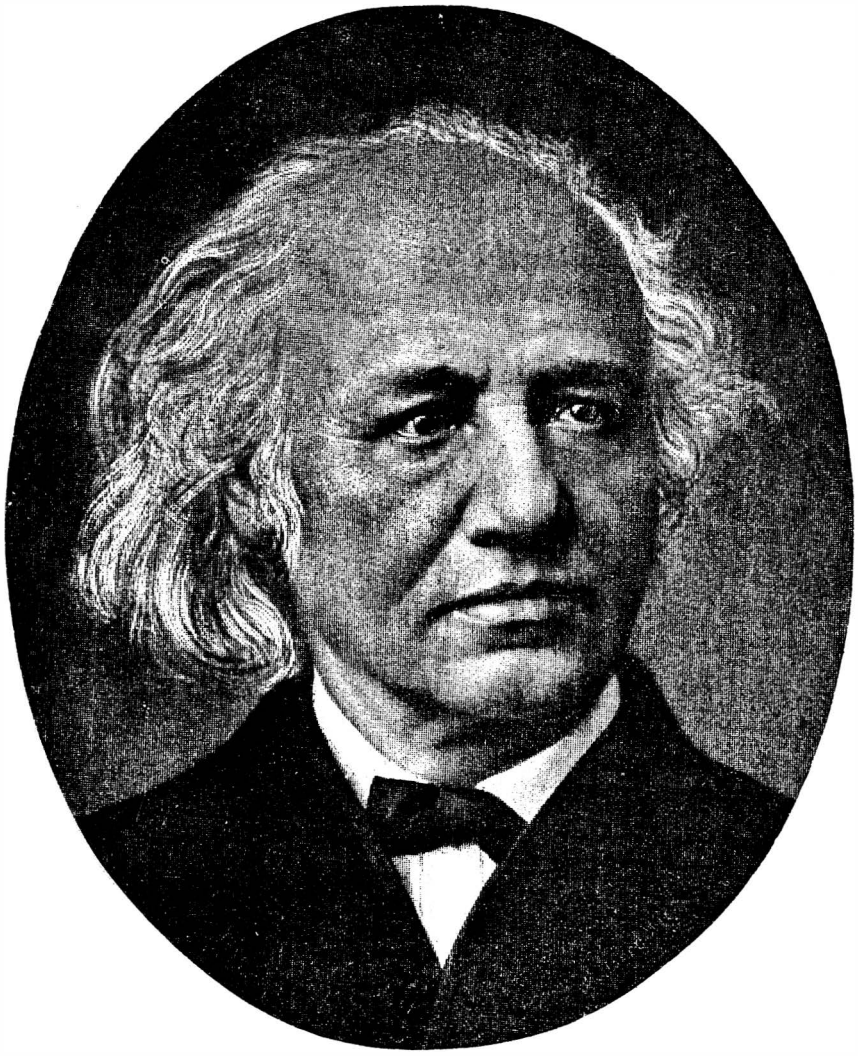
REPRODGCTION OF AN AUTOGRAPHIC RELIEF ETCHING BY LALANNE FROM HAVARo's HOLLAND 1 VOL o'oISEAU, PARIS, 1881

histories of many of the arts have had to be completely rewritten since 1886. Previous to the invention of photography it was impossible to make definite comparisons between objects situated in two different places. The photograph made it possible for a man in New York to have side by side upon his desk absolutely reliable reproductions of a series of drawings in London, Paris, Berlin, Vienna, and Florence, and to draw from them conclusions concerning the originals which scholarship would accept. The half-tone made it possible for the price of one photograph to have a great collection of similarly objective records brought together within the covers of a book so that students the world over could check up and verify each other's insights and stupidities.

the tracks of alpha and beta particles. The pervasion of the mechanically objective printed picture has been so great that we may truthfully say that as compared with our children our grandfathers were almost blind, for they had few printed pictures and not one that could be relied upon as a critical source of information about the objects shown in it.

So far as the graphic arts are concerned this development of photography and photographic process has had the most unexpected results. In the days when all printed pictures were made by hand, no matter what their purpose or their technique, the printed pictures which were intended to be expressive works of art were very few in comparison with the tremendous output of printed pictures which, although

made by hand, had purely utilitarian purposes. For one woodcut or etching that was meant to be a work of art in itself there were hundreds which were mere memoranda of fact. So long as this condition existed it was inevitable that the norm of representation in the graphic arts should be that of the patient, careful, pedantic imitation of appearance which was required by the prints which took the places of photographs and half-tones before the latter had been invented. The tyranny of the reproductive, imitative requirements was so all-pervading that people, never having known anything else, were utterly unaware of it. They excused what they regarded, in their enlightenment, as the inaccuracies and distortions of primitive (and Eastern) art on the score of the "ignorance" of its makers, but when a modern European or American failed to observe the code of the tyranny they lost their tempers in great gusts of that righteous anger which is the proudest prerogative of orthodox ignorance. Any such statement as that of J. S. Haldane, that "it is only through the constant negation of mere appearance that personality realizes itself," could hardly have been made in the



PORTRAIT OF ADAM, FREIHERR VON BURG. ONE OF THE EARLIEST HALF-TONES MADE IN 1877 BY JAFFE OF VIENNA WITH A BOLTING-CLOTH SCREEN

nineteenth century, and had it been it would have been regarded as both unenlightened and perverse. Blake might have understood it, but for that very reason he himself was misunderstood by his contemporaries and their children.

This condition in the graphic arts led to very odd results among which not the least curious was a severance in the popular mind between the picture and the technique in which it was translated or represented. Except by a very small portion of the community a print was not good or bad in accordance with its expressiveness, but in accordance with its tidiness, accuracy, and mechanical meticulousness of work. People collected works of reproductive engravers and enjoyed and savored their craft without even stopping to think of the men who made the pictures which these engravers translated. Thus there grew up an attitude of mind in which people when looking at a print asked themselves not, "Is it a good picture?" but, "Is it a good engraving or a good etching?" When they came to deal with original prints they carried over to them the same standards of judgment which they had erected for their reproductive prints. Thus it is interesting to notice that the greater reputations among the nineteentJ. -century original print makers who worked prior to 1890 are all based to a great extent upon criteria which had been formed for judgment of reproductive work. The most celebrated set of prints made in England between 1800 and 1850 is doubtless Turner's Liber Studiorum. Their technique is absolutely that of the most polished virtuosity in reproductive work. The mezzotints which Lucas made after Constable's designs, no whit less fine as works of art, have never gained a reputation comparable to that of the Turners, for the simple reason that to the uneducated observer they look scratchy and unfinished as compared with the machine polish of the Liber. Meryon is always held up as the greatest etcher of architecture.

REPRODUCTION OF A PHOTOGRAPHIC LINE CUT BY VIERGE FROM P1\BLO DE SEGOVIE, PARIS, 1882

He had the complete technique of the most astoundingly able reproductive etcher and his work everywhere betrays the fact that he was actually making e;tched reproductions of drawings, which happened in most but not all cases to be by himself Even Whistler, by the mere fact that his admirers always spoke of the quality of his etchings as etchings rather than of the quality of his etched pictures as pictures, had in his reputation more than a little of the points of view and the prejudices that were based upon the tradition of reproductive work. The emphasis on his use of his medium rather than upon his pictorial inventiveness and imagination was highly symptomatic, for people become much interested in media only when they have ceased to think about what media contain - and such a perversion of emphasis rarely happens except in a period dominated by repro-

ductive or mannerist work. It is not mere accident that Whistler and Gaillard were immediate contemporaries or that their prints were collected by the same people.

Today if people want an accurate representation of an object or a person or a scene the photograph or the half-tone is there to give it to them in perfection. The human hand is no longer asked to do the impossible, to dehumanize itself and make purely objective statements. The difference between the engraving and the half-tone is well shown by the two versions of a detail from a painting by Vermeer of Delft in the Metropolitan Museum. Doubtless, if there can be such a thing, the engraving by Wolf is "better in itself," but the half-tone tells us far more about Vermeer and his painting—and in the long run that seems to be the point.

The result is that not only the graphic arts of today, but painting and drawing as well, rejoice in a freedom of expressiveness and a gen-

ORDINARY PHOTOGRAPHIC CROSS-LINE HALF-TONE AFTER THE PAINTING BY VERMEER IN THE METROPOLITAN MUSEUM

DETAIL OF HENRY WOLF'S WHITE LINE WOOD ENGRAVING AFTER THE PAINTING BY VERMEER. MADE OVER PHOTOGRAPHIC PRINT ON THE WOOD BLOCK

era! appreciation of that expressiveness such they have rarely or never known in all past history. The generation that is grown up is fully aware of this, though possibly definitely conscious of how and why, and with pleasure upon pictures which cause nothing but pain to those who grew up in the before the development of photographic processes. The younger generation knows the difference between pictures as expression of personality and pictures as documentary representation, where the older generation was incapable of making any such distinction, except difficult and rarely taken effort.

The naïve worship of "objective fact," which came into picture-making with the development of the scientific attitude during the Renaissance, finally succeeded in the nineteenth century in producing its own impersonal, mechanical, objective methods of representation and in so doing gave back to human personality and character things that had belonged to them before objective science became a ma-

[1] Reproduced here by the courtesy of Harper and Brothers.

human preoccupation. There is perhaps more than a coincidence in the fact that the creation and pervasion of photographic process were followed so closely in time not only by their immediately logical sequel of "modern art," bu by analytic psychology as well, and by a modern philosophy of science which, unlike the older ones, seeks answers to its problems in theories of emergence and personality rather than in a bald mechanism. But such problems of the *Zeitgeist* are matters for speculation in other places and by other and more learned hands. What is here of importance is that photography and photographic process, which have been regarded as merely mechanical things, in addition to giving us a new and a sharper vision with all that that means, have, by taking over the business of the inventory and the ledger, released the older pictorial techniques to the untrammeled telling of fairy stories.