

The Art of the Day

*What one needs to know in order to make posters, woodcuts, advertisements,
Produce books, newspapers, and placards,
And what possibilities are opened up by photo-mechanics.*

NIKOLAI TARABUKIN

Translated by Rosamund Bartlett
Introduction by Maria Gough

*Between 1921 and 1928 the Russian art historian and critic Nikolai Tarabukin, best known today for his Productivist tract *Ot mol'berta k mashine* [From Easel to Machine], published over a hundred articles and four short books. The following text comprises the first English translation of the preface and final chapter of his *Iskusstvo dnia* [The Art of the Day], a collection of essays on the "practical," "ephemeral" arts of everyday life: graphic design and photography. The collection was published in 1925 by Proletkul't, the association of proletarian cultural organizations. Since 1922, and thus contemporaneously with his position as academic secretary of the Institute of Artistic Culture (INKhUK), Tarabukin had been an instructor in the visual arts studio of the Moscow Proletkul't. Such studios were intended as the basic units in which the building of a "pure proletarian culture" was to be accomplished through encouraging the creative talents of young "worker-students," and enabling them to acquire the appropriate skills and training. According to Proletkul't policy, only the proletariat could participate in the creation of proletarian culture; admission to studios was thus restricted, at least in theory, to those who could demonstrate working-class origins or credentials such as party membership. The ranks of the instructors, however, included such "bourgeois specialists" as Tarabukin, who was also a regular contributor to the Proletkul't journals *Gorn* [Furnace] and *Rabochii zhurnal* [The Worker's Journal].*

*While without the prognostic and rhetorical ambition of the author's earlier Productivist tract, *The Art of the Day* nevertheless attests to the strengthening of the Productivist agenda within the Proletkul't after the INKhUK's rejection of the fine arts in late 1921. It also reveals much about how the Productivists sought to disseminate their platform to a broader audience. As suggested by its rather loose organization, didactic prose style, and frequent repetition of key ideas and phrases, the book was based upon lectures presented by its author in the studio. Its first six chapters explicate the general principles of advertising, poster and placard design, popular and agitational prints [lubki], and book and newspaper production. The final chapter, translated here, comprises the author's examination of photography's previously "unexplored potential," namely, "photo-mechanics."*

Tarabukin begins by contextualizing photography within the history of reproductive technologies such as engraving, etching and lithography. With the advent of photography, however, the reproductive process became subject to full mechanization, and the older technologies of reproduction based upon individual craftsmanship defaulted into pure or "easel" forms of art. But the author's major concern in the chapter is not so much the medium's reproductive as its agitational function. To that end, Tarabukin advocates the "radical reform" of contemporary photographic practice, that is, the de-naturalization of the naturalism with which photography is conventionally adequated. The practice of photomontage is of some assistance in this regard, but Tarabukin is more interested in stimulating his reader to experiments with the "mechanics" of photography itself through the use of a variety of lenses, including the anamorphic; the selection of atypical focus, angle of vision, and aperture; the manipulation of the negative in the darkroom; and printing on different kinds of papers. The guiding principle of such photographic reform was "deformation" [deformatsiia]—a cardinal concept of the Russian formalists—the ultimate purpose of which was, as Tarabukin saw it, the closer approximation of reality in accordance with contemporary conditions and modalities of vision.

Significantly, the chapter also appeared simultaneously as an essay in the Al'manakh Proletkul'ta [Proletkul't almanac] (1925), a compendium to which his colleagues Boris Arvatov (see October 81), Aleksei Gan, Sergei Tretiakov, and Dziga Vertov contributed as well. Every effort has been made to preserve as closely as possible the original text's typographic particularities—evidence, according to one reviewer at the time, that its author was overly preoccupied with the potential of typefaces and letting to increase the book's psychological impact upon the reader. All ellipses and notes are the author's.

—M.G.

The editors of October would like to thank Erika Wolf for proposing these sections of The Art of the Day for publication in the journal.

Preface

The conditions of contemporary Russian life have brought to the fore with particular vigor those forms of art that are most closely linked to the practical aspects of everyday life.

Posters, advertisements, placards, and newspapers are produced for practical purposes. They are not forms which "express" an artist's creative strivings, but are the means by which specific goals may be reached.

Inspired by topical issues, their lifespan is as short as an ephemera's. Having no claim to "eternal" significance, they are forms of art of the day, in the full sense of the word: they are born on a particular day, and perish at its close.

It would be impossible to write about these forms in the style of a "monograph," for a worker in this area needs practical instructions along with theoretical help. The social role of these types of expertise and the conditions of their production are the two assumptions placed by the author at the basis of the method that assisted in the fine-tuning of the material in this collection of essays.

Taking these assumptions as the point of departure, possible production methods are suggested for the forms of art mentioned in this book.

This is not "great" art.

But can we call that which is an active factor in public life today "minor"? Life knocks out of the art historian's hand the telescope through whose lens he used to look into the misty perspective of the past. Life forces him to look closely instead through a microscope at the minute things that happen in everyday life.

The gravitation toward things happening right now has often brought the author into contact over the past few years with "burning issues." Lectures given by the author, as well as magazine articles he has published in periodical publications, constitute a part of the material for the present book.

The author has reason to believe that this theoretical manual for practical work will prove useful for workers at clubs, students at art schools and studios of decorative art, as well as artists, typographers and so forth—all those, in other words, whose work involves practical application in the areas of the above-mentioned topics. This conviction is confirmed by the fact that the literature on these topics is poor both in quantity and quality.

—N.T.

Photo-Mechanics and Its Unexplored Potential in Photography

I. The Reproductive Role of Engraving

The many forms of engraving, lithography, and the various techniques of mechanical reproduction have been linked at every stage of their evolution with the development of the art of the book. Although wood-engraving was known before Gutenberg invented moveable type, one can nevertheless only speak of wood-engraving ceasing to be an isolated phenomenon after the appearance of the first printed books. In 1461 Albrecht Pfister produced one of the first illustrated typeset books.¹ Dürer's career extended into the time when the book was no longer in the incunabulum state.² A wood-engraving depicting Luke the Evangelist was regarded for a long time as being the first example of engraving here in Russia. It appeared in *The Books of the Apostles*, the first typeset book, which was printed in 1564 by Ivan Fedorov. Subsequent research³ has revealed that an engraving depicting Matthew the Evangelist is older and is the illumination of an anonymous Gospel from the Nikolo-Pereyaslavsky Monastery.

The connection between engraving and the book did not help the independent development of engraving as an art form. Engraving has occupied a role as an ancillary craft from the earliest days of its existence, serving as a means either for illuminating books or for reproducing and duplicating works of art.

ENGRAVING, AND SUBSEQUENTLY LITHOGRAPHY AND PHOTO-MECHANICS, HAVE ESSENTIALLY BEEN A MEANS OF REPRODUCTION.

The evolutionary process of this kind of expertise can only be understood from this point of view.

From linear engraving of the type such as *The Brussels Maiden* (1418),⁴ crudely carved with a knife on a wooden board that had not even been sawed from its butt-end, reproduction has improved to the point of the contemporary full-color mezzotint, printed on a rotating cylinder and conveying all the subtleties of color nuances of an oil painting with almost impeccable accuracy.

1. *Der Edelstein*.

2. That is to say, a book produced during the infancy of the art of printing before 1500.

3. By Viktorov and Nekrasov.

4. Libenau, Possavan and others have referred to several engravings that relate back to the twelfth century. The appearance of the first playing cards, made with a wooden block, is linked to the beginning of the thirteenth century. Wessely, however, declares: "The newest research shows that *Golishchmit* (in the form of prints on paper) preceded playing cards (*Identifying Engravings*, p. 19). The dating of the first engravings in Europe must thus be pushed back even further. Engraving was known about in China in the sixth century, according to Werman (vol. 1, p. 685).

It has been engraving and lithography for the most part that have fulfilled this reproductive role, which then transferred to photo-mechanics in all its many forms. As Wessely has commented, "Engraving was turned into the herald of the other arts. Just as the invention of book printing was a key factor in the flourishing of science, so the discovery of the art of engraving greatly contributed to the increase and dissemination of knowledge about art."⁵ Engraving was only transformed from a tool of reproduction into a form of "pure" art when its techniques could no longer satisfy the demands that time presented to the craft of reproduction.

THIS OLD-FASHIONED TECHNIQUE, WHICH WAS SUPERSEDED BY A NEW AND IMPROVED REPRODUCTION METHOD, BECAME A FORM OF EASEL ART.

The nineteenth century and the beginning of this century were thus marked by the cultivation of wood-engraving and etching as "pure" forms of art, independent of practical application.

And Dürer hardly constitutes an exception. It is important to remember that Dürer himself only rarely carved in wood. He completed the drawings, but it was engravers who reproduced them on wood. The name of Hieronymus Andréae, for example, who carved a significant number of Dürer's drawings, is well known.⁶ One could say that Dürer used engraving as a *means* of disseminating his drawings. This explains the freedom with which he handled lines and hatching. The wooden base material and the carver's tool did not in these instances cramp his style in these drawings.

Since lithography continues today to be used in the applied arts and reproduction, it has not yet found artists who are selflessly devoted to it, such as is the case with wood-engravers and etchers.

The very source of engraving's provenance shows that this art arose for a purely practical purpose. Carving in wood and metal was employed for several centuries before a technique for producing impressions on paper from carved boards was invented. The first prints were made on fabrics, with the aim of subsequently coloring and ornamenting them with drawings. The East Indians knew about printing technology even earlier than did the Chinese.

The Egyptians had stamps with which they made marks on bricks. Seals for the registering of names were widely in use among the Romans. Finally, in Italy,

5. Op. cit., p. 3. Engraving was particularly widespread in the eighteenth century. "All the most important works of art in England were immediately reproduced by means of engravings" (Werman, vol. 3, p. 509).

6. See Leman, *Engraving and Lithography* (St. Petersburg, 1913), and Wessely, op.cit.

mostly in Venice, the production of playing cards by means of making impressions of an embossed block became widespread in the thirteenth century.

II. The Evolution of Engraving

The manner of looking at a piece of carved board with a utilitarian purpose in mind transferred to the artist-engraver. From the very early stages of this art form, he set engraving specific practical tasks, in which it was to serve as a way of reproducing works of art and as a means of illuminating books. But if one compares the linear engraving *St. Christopher* from the early fifteenth century, and even the hatched engravings of Dürer cut in copperplate (dating from the early sixteenth century) with the oil paintings of that time, when the masterpieces of Botticelli, Perugino, Mantegna had already been executed, and when Leonardo and Raphael were already active, then the huge gulf between the technical possibilities of engraving and painting will become obvious. The crude, purely linear carving of wood engravings was incapable of conveying not only complex color tones in a picture painted in oils but also the virtuosity of the draughtsmanship. We can see that all the wood-engraver's energies were expended in

FIGHTING THE RESISTANCE OF THE MATERIAL

and attaining in the carving the sort of freedom which could make it possible to convey a picture reproduced on an engraved plate with the greatest possible accuracy.

Thomas Bewick began to cut his board across the top of the wood, rather than along its grain. The knife was replaced with the burin, which was a more flexible instrument. Palm, as the strongest kind of wood, was chosen as the best material. Finally, Menzel was able to create a virtuoso "toned" engraving, which could convey with extraordinary perfection not only the drawing of a particular picture but also its tonality. Drevet was able to remove in his engravings any impression of his having worked in wood, and the technical mastery of his wood engravings created the illusion of their having been carved on metal. The technology of wood engraving surpassed itself, resulting in a certain hypertrophy of its technical devices.

Indeed, it was at the point of such perfection that engraving on copperplate became possible. But with copperplate, the same goal of reproducing the "tones" of the engraving was reached with less effort, and with less violence to the material. This sort of process led to the degeneration of form and of carved engraving and anticipated the technique of etching. The engraving tool was replaced by a puncheon. Carved engravings were refined to the point of dotted lines being possible. Finally, etching technology freed the engraver from his dependence on the material. The physical labor of the engraver was replaced by the chemical process of etching. A needle replaced the cutting tool. Varnished primer replaced the metal plate.

Etching was in turn displaced by the more flexible technique of lithography. The method of drawing and writing on stone, little different from drawing on

paper, displaced in reproduction technology all forms of engraving on wood and metal and all combined forms of chemical etching using aqua fortis.

Lithography made it possible to convey the character of the artist's brush-strokes and even its textural qualities, circumventing the difficult apprenticeship in engraving techniques and the unreliable technology of etching. Polychromal printing from several stones, meanwhile, made it possible to achieve a significant degree of success in conveying the coloring of a picture.

The developments of technical methods in engraving and lithography were designed on the one hand to break down the resistance of the material by means of inventing ways of approximating the technique of engraving and lithography to that of drawing on paper. On the other hand, in attempting to convey the coloring of a picture, engraving and lithography technology departed from linear and hatching technologies. Apart from puncheon and dotted-line engraving, a number of very complex and singular techniques arose in response to these challenges, as a result of which it became possible completely to dispense with hatching and lines in engraving and replace them with patches of color of differing intensity. That is how mezzotint, aquatint, and wash-drawing arose.

The aquatint technique of "dusting" the etching plate with a layer of powdered asphalt made it possible to convey in an engraved print the soft contours and complex tonal transitions one finds in oil painting.

By replacing the style of depicting form through hatching with tonal transitions from dark to light areas, the mezzotint brought the engraved print closest of all to a photographic print. The furthest step in this direction was taken by

LIGHT-PAINTING [SVETOPIS']

III. Modern Alchemy

Although engraving still exists even now, it is undertaken by selfless devoted artists who see in it a form of "pure art." But modernity inevitably has to make itself known even in this sphere, and if people do not submit to it, it will grimace sarcastically at them.

If one looks at the "albums" that modern engravers publish from time to time, one notices the following particular circumstance. If an "album of engravings" has a large print run and is printed like a book, rather than like a loose-leaf folder with inserted pages, intended for a small number of enthusiasts, then it turns out that the engravings in the "album" are not original prints but reproductions made through photo-mechanical means.

Imagine the journey taken by the work of art!

First of all the engraver completes a design on paper. Then he transfers it to wood or metal. He engraves the design in this material. From the incised block he makes a print of the engraving. And if he wants to publish it with a large print-run, he hands it over to the photo-zincography workshop, where a photographic plate is made from it, from which prints are made for mass distribution.

A puzzling question arises: Why engrave the design on the wood or make an etching from it in the first place? Would it not be simpler to hand it over directly to the photo-zincography workshop? Why expend all that time, energy, and expertise in engraving a design on wood when it is going to be reproduced by photo-mechanic means, rather than from the wooden board and the hand-operated engraver's press?

Another grimace of modern life cruelly points up the irony of the engraver who ends up being a craftsman rather than an artist. The following relates what happens here. An artist is commissioned to design a cover for a book. He cuts out letters from magazines for the letters, finds a photograph of the author there too, and then assembles the cover using only scissors. Following normal procedures, this cover ought by rights to be sent to the photo-zincography workshop, where a photographic plate would be made of it in just a few hours. But it ends up with the hungry wood engraver, who spends several days cutting a block from the photographic arrangement for the cover on wood!

How did such an absurd state of affairs come about? It came about because the wood-engraving craftsman, having been ousted by the photographic industry, and unable to find outlets for his work, takes on projects which demand a great deal more time and energy than would be expended through photo-mechanical means for a lower fee than that charged by the photo-zincographer.

The art of engraving, which was once justified by a very real need, has turned into something resembling medieval alchemy now that there are the photo-mechanical means to reproduce any design!

IV. Photography

Photography has not only made it possible to raise the quality of reproduction to the level of a perfect copy, but to turn manual methods for engraving and lithography into mechanical processes...

WITH THE INTRODUCTION OF PHOTOGRAPHY INTO POLYGRAPHIC PRODUCTION, AN IMPORTANT REVOLUTION TOOK PLACE IN REPRODUCTIVE TECHNOLOGY.

Individual craftsmanship is destined to die out. Photo-mechanical technology is beginning to be used for reproduction. . . Plates are neither cut into wood or metal, nor designed on stone, but transferred directly to zinc or stone with the help of photography.

Along with this practical and secondary role, photography has also been witness to a "pure art" tendency. Two lines of concurrent development are being formed in photography:

REPRODUCTIVE AND ARTISTIC.

The application of photography for practical purposes is very widespread.

Science has found an extremely useful partner in photography. With the aid of photography it is possible to establish in a picture not only what is visible to the human eye, but that which cannot be seen directly. The X-ray has made a huge contribution to science. Using photography, astronomers have revealed the existence of new worlds, which are not only invisible to the naked eye, but also the most powerful telescopes. A photograph can pick up things under the microscope which the eye is not capable of doing. Fixing movement, meanwhile, has helped mechanics study much which cannot be directly observed.

Parallel to this line of development, photography evolved as a branch of art from the very beginning of its existence.

Looking at photography as a mechanical force which works “unconsciously, rather than freely,” which cannot invent because it cannot think,⁷ and contrasting it with “creative,” “spiritually free” art now seems completely naive. . . . We are now entering an era when all social production is the result of machine technology. This situation has not denied our era, however, a high surge of creative energy. On the contrary, it has become even more powerful.

It is customary to point out that photographers themselves, who often place their art on a lower level in comparison with painting, have shown energetically and skilfully not only the “equality of photography with other fine art forms,” but even its “greater significance than any other art form” where material gain from author’s copyright is concerned.⁸

What are the artistic tendencies of photography as an independent branch of art?

V. The Influence of Painting on Photography

If one studies the development of technical devices in painting or what is usually referred to in aesthetic terminology as the “succession of styles,” one can see that this succession comes about through a change in our ability to see, and expressing what we see is in its turn determined by social factors.

By studying the result of these expressions—painting—we can observe the complex evolution of visual apperception [*orientirovki*] in the physical world. Changes take place in the perception of both color and form. Cavemen knew only a few colors. The technique of coloring things with which they were familiar created an extremely limited range of color apperception. Whistler, by

7. Wessely, p. 87.

8. “Note on author’s copyright for photographers,” submitted by eleven Russian photographic societies to the State Duma.

contrast, was able to distinguish ten shades in each color. The medieval primitive is not only a conditional "style" but also a "manner of seeing" to a significant degree, just as much a manner as speaking is, and changing according to the shift in social conditions as it happens over time. The combination of technical methods that are succinctly and too generally characterized as "Eastern art" is nothing other than the former stylized reflex of the visual perception of reality, but now cast in a canonized artistic mold.

Our reflex, received as a result of visual irritation, has now changed in comparison with the reflexes of people in the second half of the nineteenth century. If naturalistic photographs and naturalistic paintings carried out their role in graphically reproducing reality about fifty or sixty years ago fairly successfully, a naive naturalistic interpretation of visual perception is nowadays inadequate to the task.

Light-painting arose in the first half of the nineteenth century initially in the form of the daguerreotype. Naturalism was dominant in the visual arts at this time. The naturalistic method of reproducing reality, which characterizes photography, was the final step in acquiring the possibility of capturing what is seen with "verisimilitude."

The age in which photography arose determined the visual form of the photographic image.

We do not know what the visual apparatus of the camera would have been like if it had been invented before naturalism gained hegemony in the arts.

With its sharply expressed naturalistic picture, the photographic image is a product of its time. And in fact, several decades later, when Impressionism became accepted as an artistic phenomenon, its artistic forms were also reflected in photography. Photographic portraits began to appear that were covered with a veil in the style of Carrière's paintings. In seascapes captured by photographers one could easily discern the misty haze of Whistler. And sun-drenched photographs of birch groves and parks clearly bore the stamp of the influence of the landscapes of Monet, Renoir, and even the Pointillists Sisley and Pissarro. A particular method of printing photographic negatives with gum arabic was invented, as a result of which photographs seemed reminiscent of Impressionist paintings. These tendencies in photography, which received the label "hazy," were in due course condemned by "academically" minded photographers.

The desire to give an ordinary mechanical photograph "artistic" qualities has also resulted in an increase in the practice of retouching. Similarly, it is not difficult to see the influence of artistic styles and the technical methods of painting.

In the second half of the nineteenth century, people used retouching to try to make a picture more realistic, by "livening up" the eyes on a portrait, for example, and making a person "beautiful," in accordance with individual concepts of beauty. These methods were soon ridiculed by photographers, and in

one book dedicated to retouching,⁹ one can read the following words: "It has often happened that a person visiting a photographer's studio with a serious-looking expression fully befitting his age ends up in the photograph looking like a sleek and smooth young boy of the Adonis type." The tasks of retouching were later understood as a means of correcting certain inadequacies in the photographic reproduction rather than as a means of "smartening up" the sitter.

In moving toward the mechanization of processing, photography naturally sought also to mechanize that aspect of photographic production that was dealt with by the retoucher. An "electric retouching machine" was invented in America as early as the 1870s, and in the 1880s an "electric retouching instrument" was constructed in Germany.

By being able to regulate the light allowed through the lens, choose from a selection of different kinds of paper for printing, and by using a whole series of chemical reactors which are used both in the negative and positive processes, the photographer is nowadays able to create a photographic image in which sharpnesses are evened out or, on the contrary, highlight certain areas, without having to resort to retouching. The photographer is therefore able to achieve the effects attained by the retoucher by using manually applied artistic methods through mechanical and chemical means.

Incontrovertible proof that the purely naturalistic photograph is no longer satisfactory for the modern "manner of seeing" comes from the fact that the photographers who are most successful are those who use extreme foreshortening or an angle of vision that is either excessively high or too low when taking photographs. In cinematography, the effect of "bird's-eye-view" photography is also produced by filming from an airplane, where shots are taken from an angle that is greater than that considered "normal" in naturalistic photography (40–45°). When taking photographs of large crowds or of a person giving a speech, the photographer fixes his line of "focus" not in the center of the composition, but on the speaker, as the main thematic figure of the particular subject. The crowd is reproduced as an endless sea of heads, covering the whole surface of the photograph.

In the last decade, photography has fallen under the influence of the latest trends in art: Cubism, Futurism, and Expressionism. In Germany, for example, there is such a thing as Expressionist photography, where photographs are extremely reminiscent of the deformed [*deformirovannuiu*] visual style of Expressionist painting.

9. Grasshof and Lescher, *Retouching in Photography*.

Despite all these artistic influences that are infiltrating photography, **THE PHOTOGRAPH STILL REMAINS NATURALISTIC.**

All the relatively insignificant experiments which have taken place so far have mainly concerned the positive process in photography, such as the above-mentioned "gum arabic" and "oil" methods. They do not change the graphic representation in a photograph, but only its coloring [*kolorit*], as it were.

But these are all just timid attempts to break free of the crude naturalistic photograph. More decisive measures must be taken in order to produce not only a bland record, providing a chronicle of reality, but also its expression, in which the acute vision of modern man is captured. A radical reform of the way in which the photographic lens perceives reality is needed, in order to create a photograph that under the contemporary conditions of "the ability to see" could respond to the new expectations of modern life and also the demands it presents to graphic expression as a means of visual apperception in the real world.

The method of combining several different photographs with the aim of creating a particular kind of composition has been employed a great deal in recent times. This kind of photograph has received the name of photomontage.

VI. PHOTOMONTAGE

Photomontage is the most characteristic sign of modernity. In it we may observe the application of many principles of modern "left-wing" art. Here we see the use of the planar construction of the composition that is such a characteristic method for the majority of "left-wing" tendencies in art. For the photographic image, born at the height of perspectival, illusionistic painting, alteration of the spatial-depth construction of the composition has not been possible. Any photograph will transgress the plane, as such, with the illusion of depth.

Photomontage, whose composition unfolds on several planes, makes possible planar graphic construction by means of a series of parallel planes. Photomontage makes possible the most unexpected juxtapositions, groupings, and changes in scale. Depending on the task, photomontage allows one to give one or other parts of a composition the most varied proportions and ratios, enlarging that which forms the subject of the composition, and obscuring that which is of secondary importance.

Photomontage IS NOT HOWEVER AN ACHIEVEMENT OF PHOTOGRAPHY AS SUCH.

Photomontage is rather the achievement of the artist-painter who makes use of the ready-made product of the photographic image for his compositions. Photomontage has not created any reforms in photography itself. The photographs that the photomontagist uses still remain naturalistic.

Photomontage IS A STAGE IN PAINTING, which has started to employ the mechanical strength of the camera rather than a drawing completed "by hand."

The artist makes use of the technical possibilities of photography in order to replace the manual form of the pencil drawing with a mechanical one.

Photomontage only appeared on the left front of art when abstraction [*bespredmetnichestvo*] had run its course... Photomontage came into existence through the agitational aspect of modern art. Realistic expression has become necessary once again for agitational art. But the artist has used it in a different way than the naturalist. The photo-montagist does not see representational art as the end, like the naturalist, but only as the means. For this reason he once again becomes a representational artist, but without making a *volte-face*. His representationality formally constitutes a new element in the work of art, which in no way coincides with the aesthetic role of representation in paintings by the naturalists.

APART FROM PHOTOMONTAGE, PHOTOGRAPHY POSSESSES IN AND OF ITSELF CERTAIN QUALITIES THAT ENABLE IT TO ESCAPE FROM THE NARROW ORBIT OF THE NATURALISTIC PHOTOGRAPHIC IMAGE.

Deformed from the point of view of naturalistic "verisimilitude," a photograph can be produced not only by processing the positive but also by working directly with the negative. That is to say, by using the physical qualities of the camera and above all its eye: the lens. If the human eye evolves in its capacity to see, the mechanical eye of the camera follows it by reorganizing itself as well. But not one photographer has seriously thought about the possibility of radically reorganizing the camera itself and attaining a compositional rather than a naturalistic photograph directly through the negative. Such possibilities exist, however, and are part and parcel of the camera itself.

VII. An Outline of Photographic Processes

If we were schematically to distinguish the sequence of processes that make up photography as a whole, we would get two basic rubrics: 1) the negative process, and 2) the positive process.

From the technical point of view, photography uses two kinds of materials for these two basic stages: a) the chemical properties of light, and b) the chemical properties of reagents.

The equipment that the photographer operates consists of: 1) the camera, 2) light-sensitive film, 3) light-sensitive paper, and 4) chemical reagents. The elementary surroundings which are necessary for producing a photographic image assume the presence of a subject that gives off the minimum amount of light within a range of distance that is workable for photographing.

In presuming the presence of an illuminated object, we must deal with the camera first of all.

The lens is the eye of the camera. The construction of a lens is determined by the viewing possibilities with the camera, and the character of this "vision."

VIII. The Lens

A lens possesses a number of properties which determine the character of the photographic image. First of all there are the phenomena of chromatic and spherical aberration.

The first essentially consists of the fact that the lens does not only refract light and draw a negative impression on the film, but also divides it up into its constituent color parts. Removing this property of the lens can only be achieved by joining two lenses together, which absorb and disperse light, resulting in an achromatic lens. The property of spherical aberration is demonstrated when you get a convex field of vision and the subject appears on more than one plane. The property of a lens that is called astigmatic is further to "distort" the representation of an object from the point of view of stylized naturalistic "verisimilitude."

It is well known in physics that glass lenses with a convex or concave surface will absorb and disperse light rays in different ways. The surface of the camera lens is rather like glass lenses of this kind. Consequently, by adjusting these lenses one can set up in each individual circumstance the necessary method for absorbing and dispersing light and thus influence the image registered on the film negative. One could, for example, create an image that is inordinately elongated vertically or stretched out widthwise in a horizontal direction. . .

THE ARRANGEMENT OF THE LENS IN THE CAMERA'S VIEWFINDER MAKES IT POSSIBLE TO CAPTURE REALITY IN A PHOTOGRAPH IN THE MOST VARIED MANNER and also to change the image in accordance with the tasks facing the photographer.

The imaginary notion of only "naturalistic" fixing being possible disappears. "Naturalism" is not an "innate" (immanent) feature of photography but is the result of adjusting the lens in such a way that its light dispersal creates a natural and "realistic" image.

Zeiss manufactured a special "anamorphic" lens, the adjustment of which in the vertical position was designed to produce an elongated image, and in the horizontal position an image stretched widthwise.¹⁰ The same effect can be reached in a more roundabout way by means of concave and convex mirrors, whose image is registered on the film.

Changing the scale ratios in a photograph is achievable even in normal photographic practice. The telephoto lens, for example, makes it possible to depict distant objects in a photograph in a larger scale. Telephoto lenses are used for landscapes with a broad and distant horizon. But enlarging the scale

10. For further information, see V. Chapek, *Photography in Science and Technology*, which contains photographs produced by the anamorphic camera.

of the "background" in photographs with a telephoto lens is so insignificant that it does not distort the impression of "verisimilitude" when distant objects are reproduced, and merely allows a more distinct visual "reading" of the remote plane.

In the hands of the reformer-photographer, the principle of the telephoto lens becomes a tool that assists in making possible radical changes to the scale ratios of various depth planes in a photograph, and in so doing achieve the required effect for diverse compositional aims. Here we come close in photography to the compositional method that is achieved in photomontage by means of juxtaposing photographs that differ in scale.

IX. Focus and the Angle of Vision

If we follow the photographer chronologically through each of the technical methods he uses, then we will next have to deal with the processes of adjustment of focus and aperture selection.

The photographer will start focusing his camera on a subject by seeking a medium-range, "normal" focusing distance. Instructions on this topic in photography manuals are all directed toward producing the same "realistic" picture. Photographic "standards" therefore come from naturalistic representation.

The photographer also selects an angle of vision when focusing. The standard for "verisimilitude" is set at 45 to 55 degrees. For portraits this angle is reduced to 30 degrees. If we increase it from 65 degrees to 90 degrees, what results is

"AN EXAGGERATED PERSPECTIVE" in a picture, as the naturalistic photographer assiduously warns.¹¹ Consequently, if what we want is precisely an exaggerated perspective, then in this "caution" we already have a set of prior instructions for how to produce one in a photograph.

Angles of vision that diverge from the "standard" provided by naturalistic photography are already used these days in photographs taken from a "bird's-eye view" or in pictures showing extreme foreshortening, creating a particular expression of visual effect.

Finally, the photographer sets the necessary aperture for each shot. By adjusting the aperture he can depict the background in a photograph with particular clarity.

Thus, 1) having focused the lens as necessary and composed a picture in the viewfinder, 2) fixed the angle of vision, 3) found the necessary focus, and not just

11. See "Notes on the lens' angle of vision" in the journal *Foto-liubitel'* [Amateur photographer].

the right one from the point of view of "verimilitude," and 4) selected the right aperture, we may get a picture of reality that will

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it in accordance with the photographer's aims, rather than just copy it. Through this mechanical method, using the physical properties of the camera, we may thus get a composed photograph.

By turning the viewfinder in a particular direction, it is possible also to create color effects in a photograph at whim. Thus it is possible, for example, to transform a sunny day in a photograph into a cloudy and rainy one. Such techniques are particularly vital in film-making, because effects that are possible in photography by means of altering the film negative are either extremely laborious to do or completely impossible on a film reel, due to its great length.

X. Stretching the Emulsion of the Negative

Apart from these devices, there are others that can be applied too. By removing the emulsion from the glass, one can either heat or stretch its elastic surface. By this means, one can deform the representation in the photograph. It is possible to distort a figure or a certain part of it at whim by stretching or flattening the image.

This method of altering what is depicted in a photograph is simpler than the method of setting up the lens in the appropriate way. Apart from that, it provides the possibility of changing just one part of an image, while otherwise leaving the rest of the photograph untouched. With this method, for example, it is possible to extend cheek bones and ears, or flatten a nose or a chin in an exaggerated way, leaving the portrait otherwise untouched. Caricature essentially follows the same path by distorting or accentuating only certain details.

A photograph taken with an anamorphic lens, which changes the whole image in a particular way, also prevents it from being altered both partially and in combined ways.

But the method of stretching the negative film is too crude and arbitrary. That is why attempts to reform the photograph must be directed for the most part at changing the setting up of the lens. Distorting what is depicted in cinematography is only possible with the help of a lens. For if an individual photograph can be stretched, it stands to reason that performing such an operation on a film reel that is hundreds of meters long and contains thousands of individual shots is unthinkable.

A number of compositional possibilities are opened up by taking many shots on a single piece of film. The pictorial elements of a photograph taken in this way have a greater organic link with each other than in a photomontage. Natural perspective and the illusion of space and depth are not eliminated in this case.

XI. The Positive Process

After the film is exposed, it undergoes development. Light no longer has an effect on the fixed film.

The fixed film then moves into the second stage of the photographic process, which is the positive stage. The photographer has a whole number of measures to hand with which he can affect how the image will appear. The emulsion of the paper itself, first of all, can create various graphic textures, since it consists of various materials. Printing on a platinum paper, for example, will make a photograph look like an engraving. The gum arabic method makes it possible for the photograph to resemble an Impressionist painting. Finally, in photography manuals there can be found a long list of "mistakes" that those working in photography are supposed to avoid. These warnings can be used to a significant degree as methods for achieving certain effects.

It is therefore possible to use the physical, mechanical, and chemical aspects of photography to radically reform the reproduction of reality by means of a photographic image. By making use of the many possibilities that photography itself offers, it is possible to create an image that transforms reality according to the photographer's will, rather than just copy it. The eye of the camera can be reconstructed in such a way that it will see what the eye of modern man wants to see today, rather than that which the naturalist-artist used to see in the middle of the nineteenth century.

XII. The Aim of Photographic Reform

If experiments have been carried out until now in areas that are of interest to us, they have nevertheless been undertaken out of curiosity rather than with the aim of achieving positive results. Parcell Muelbich's book is very interesting in this regard.¹² The varied materials collected in it as curiosities can be used also to achieve positive results.

What are the goals that can be put before a deformed photograph? There are bound to be skeptics who will remember the didactic lessons of the extreme "left-wing" trends in art such as Futurism, Cubism, and Expressionism, which are still fresh in our memory, and will ask: "Surely they are not recommending that the naturalistic image in a photograph be "distorted," so that the until now "healthy art" of photography becomes infected with "intellectual disorder" in the form of "abstraction," in order to drive it into the very same interminable impasse in which "left-wing" painting has ended up?" No, the experiment has been conceived with another purpose in mind. The experience with painting has been born in

12. *Photographic Amusements and Entertainments.*

mind and even used precisely in such a way so as not to repeat what has happened already.

The projected reform of photography intends to bring about photographs that will belong to so-called art photography and also be an aid in scientific experiments.

In those circumstances where photography serves as a record of reality or as a means for the reproduction of works of art, it stands to reason that the deformation of the photograph loses all meaning. In these cases the foundations of naturalistic photography remain unshakeable.

But there is reason to suppose that the deformation of images achieved through a photograph taken with a specially set up lens is justified not only by artistic but also by scientific considerations. . . . Certain phenomena that do not submit to fixing through observation might find an explanation this way. In any case it is theoretically admissible that science could use the deformation of the lens for its own necessary purposes.

In these pages I am talking about so-called "art photography," and how it can use the principles of image deformation in the photograph.

The aims of art photography, as with art itself, are varied. To say that they should be limited to copying reality is to sin not only against art photography but also against art in a broader sense. The practice of photography certainly is not limited to copying. . . . On the contrary, a photographer working on an artistic photograph sets himself many different tasks concerning the composition of light, texture, and so on, which bring him in line with the activities of a painter.

To maintain that art has only ever "imitated nature" or "reflected life" means disregarding the material of history. Those who usually particularly campaign for naturalism in art and in photography understand by this term naturalism the graphic interpretation in which it was presented in the second half of the nineteenth century in France in the painting of Courbet, and in the painting of Repin in Russia. People who are so inclined thus break with all historical fact. After all, *naturalism "in general" never actually existed* and cannot exist. The naturalism of the middle of the nineteenth century was a particular stage in the development of art, conditioned by a series of social factors of the time. To make criteria from this form of art for "all times and peoples" means making a dogma out of it, as well as succumbing to aesthetic standardization and making a logical error by replacing the whole with the part. If the concept of naturalism is not standardized, by selecting one of its historical expressions as the measure, then portraits of the Hellenic period that we find in Egyptian tombs would be naturalistic for their "time and place," as would be Pompeian frescoes, the miniatures in the manuscripts of medieval books, Corot's landscapes, Millet's paintings, and so forth. While "realistic" from the point of view

of "vision" in their time, in our time they represent only *stylistic* devices, by means of which artists formulated their "manner of seeing" within the confines of a certain historical period. Thus *our conception of naturalism in art and photography is all subject to the laws of historical "relativity."*

Apart from naturalistic tendencies, art has always had a number of other goals, however. There has been art that has been full of fantasy, didacticism, and satire, for example. Until now, photography as been too stagnant and has not attempted to move beyond the bounds of copying. The fact that photography today is only narrowly contained within these boundaries shows that even a photograph intended to be a conscientious registering of reality will not find a dry and bland record adequate, since it strives toward expression with expressive means. . . The use of an angle of vision that exceeds the standard of photographic practice established in the last century, the creation of a particularly exaggerated use of foreshortening, which changes the perspectival depiction of space and depth conditionally accepted as "normal," and a particular kind of focusing, which disregards prescriptions for "verimilitude" all show that even the traditional realistic photographer wants to be expressive in his work. I have in mind the photographic illustrations in modern weekly magazines, mostly published abroad.

The most extensive sphere for using all the possibilities that the distorted photograph offers are to be found in the production of advertisements, posters, and photographic caricatures.

XIII. The Photo-Advertisement and the Photo-Poster

Similar to the way in which the novelist or playwright would not be able to write witty, laconic, topical features, the easel painter—expert in all things to do with painting—would not be able to cope with the task of producing advertisements and posters. The habits of easel painting not only cannot be used by the poster specialist, but will only serve to the detriment of the advertiser, since they are so deeply bound up with the artist's work.

Western Europe and America have already created a "particular breed" of experts working in the advertising industry. Their mold of thinking, their visual orientation, creative temperament, and the technical devices they use to fulfill their tasks is of a completely different order to that of artists who paint.

The practice of contemporary commercial advertising shows that people often resort to naturalistic imagery as a means of expression in a poster. Almost half a century has gone by, however, since the traditions of naturalistic matter-of-fact drawing were broken with. Impressionism, then Cubism, and finally Expressionism cultivated in drawings the individual styles of artists and departed even further from dry exposition [*ot protokolizmor*]. This factor is undoubtedly

reflected in the style of contemporary drawing. Young artists who have been educated in the atmosphere of the new trends in art do not know how to execute the kind of drawing that sufficed for making naturalistic copies. This factor forces the poster-artist increasingly to turn to photography. In photography, moreover, he sees the means for achieving the necessary graphic effects in the easiest and quickest way, since it does not demand complex training in artistic schools and academies.

But the dryly naturalistic photograph is too bland for advertising purposes. It would still not be sufficiently expressive even if photomontage principles were used in its contemporary forms . . . That is why the sharpness, or the "pepper," as it were, of advertising has until now been created manually, directly by the artist himself.

THE NEW COMPOSITIONAL PHOTOGRAPH THAT DEFORMS THE IMAGE CAN COME TO THE AID OF ADVERTISING AND POSTER EXPERTS.

All the above-mentioned possibilities, which can assist in attaining the necessary transformation of the image for expressive purposes through mechanical means rather than montage, can be used to brilliant effect in photo-advertisements and photo-posters.

By focusing on the open palm of a model's hand, one can give it an exaggerated form, for example, while the body and face can seem at the time reduced in size. With its disproportional size when compared to the rest of the body, the palm will create the poster's peculiarly loud effect.¹³ Magnified to a large scale and reproduced through lithographic means, such photo-posters, in view of the mechanic nature of all the processes linked to their production, require less expenditure of effort and energy and work out cheaper when compared with posters produced by manual means, by means of a drawing completed "by hand" . . .

There is also potential to explore possibilities for original photographic methods in photo-caricature in magazines and newspapers.

XIV. Photo-Caricature

The pencil or the pen has served until now as the main tool of caricature. Caricature often deals with contemporary events and personalities, however. Capturing an interesting event that unfolds in front of the artist's eyes is often impossible, since the slow speed of the pencil cannot keep up with the events quickly passing by. A camera would not only be able to do this, but would also be able to interpret and provide a humorous "narration" if the camera lens was set up in the appropriate manner.

13. Photographs of this kind, taken under my direction, were reproduced for this article in *Al'manakh Proletkul'ta* [Proletkult Almanac] for 1925 and in the journal *Vremya* [Time], nos. 10–11 for 1924.

THE REFORM OF THE PHOTOGRAPHIC IMAGE OFFERS THE POTENTIAL OF CREATING A NEW GENRE IN THE POLYGRAPHIC INDUSTRY: PHOTO-CARICATURE.

Photo-caricature is an extraordinarily modern and necessary form of art. From the ideological point of view it is a form of agit-art. Caricature is one of the most topical forms of modern agitation. It could well become the main weapon of political satire. The intrusion of mechanical and chemical processes of photography into modern artistic techniques is now more than ever before in accord with the industrialization of polygraphy. Here photography is a necessary component part of the various mechanical means of illustration and illustrated publications, which are displacing the crude forms of engraving and lithography.

Photographic reform is thus not a simple amateur artistic experiment, arising as an exploration that is undertaken within the bounds of "pure" art. It is closely linked to the vital tasks of agitational art, that is to say, the most typical phenomenon in modern artistic culture.

The results achieved through experimentation may be defined as precise numerical definitions and used in precisely the same way that "standard" photography is used with its rules and instructions.

THE POTENTIAL OF PHOTO-CARICATURE HAS NOT YET BEEN EXPLOITED IN CINEMATOGRAPHY.

Extremely alluring prospects for it are opened up in this area, however, in the form of individual segments, for example, when it is necessary to produce a fantastic dream or portray a fantasy land where people and objects are presented in a strange and distorted form from the point of view of "objective verisimilitude," or in the form of a montage of cinematic caricature from start to finish. It is possible to create humorous films for the cinema with these effects that will make the viewer laugh not only at Charlie Chaplin's funny faces but also through the sarcastically screwed-up mechanical eye of the camera lens.