

Standardization, Reproduction and Choice

THE PROBLEM that I now propose to discuss is one that goes far beyond the realm of art itself; and I do not mean to let myself be unduly confined, in endeavoring to carry that problem to its conclusions. But the problem arose, perhaps earlier than anywhere else, in the domain of art, and I am grateful that the general scope of these lectures encourages me to draw most of my illustrations from the related fields of technics and the arts. As far as time allows, I shall follow the trail opened in the arts into the rest of life; and if I do not take you the full distance, you will at least have provisions of a modest kind for making the journey by yourselves. We have seen, so far, that the split between art and technics, which is such a vexing one in our life today, perhaps existed from the very beginning of their development: that Prometheus and Orpheus, if in a sense brothers, were also like Cain and

Abel bitter rivals, and that only in the more fortunate epochs of civilization were the two sides of life they represented fully reconciled.

But not least among the many paradoxes that greet us in the relations of art and technics is the fact that the process of quantification was, from an early time, applied particularly to works of art. Casting and molding and stamping are all of them very old technical devices: they are devices whereby, with a standard pattern or form, one can reproduce innumerable exact copies of the original work. At a time when the sanitation system of Athens would have disgraced a second-rate American country town, at a time when wheat was ground largely in hand querns, the process of reproduction by casting was applied with great success to statues. All this is in line with what I was saying in my last lecture; namely, that the first step in modern mass production—and so ultimately in the creation of our depersonalized, quantity-minded world today—took place when the almost equally ancient stamping process was applied to the mechanical reproduction of images, by means of wood-block printing. Though the first use for this adroit invention, it would seem, was the printing of playing cards—a characteristic contribution to the new spirit of gambling that went along with the early development of capitalism—the next use was the general making of pictures for wide distribution.

Just as the typographer took over from the calligrapher or copyist the more standardized part of his art, the printed letter, so the maker of woodcuts took over from the illuminator the freer and more imaginative part of his art, that associated with the image. This effort to

multiply and cheapen the means of reproducing pictures resulted in a remarkable series of inventions during the next five centuries. First, of course, wood-block printing: this was followed by copper and steel engraving, which served so well the new map makers and cartographers, helping to produce maps of unrivaled clarity and sharpness of line: this, again, was followed by various forms of etching, using chemical as well as mechanical processes, which enabled artists like Rembrandt to produce prints qualitatively different from those that a pencil or a pen could produce. Finally, the invention of the lithograph multiplied the facilities of the pencil. Along another line, beginning with the invention of the colored woodcut in 1508, there was a parallel growth, which led eventually to color lithography and later forms of photographic color reproduction. Even though there might be no increase in the technical mastery or the esthetic exploitation of the new media, the mechanical processes of reproduction were facilitated and extended. Along with this mass production of art, people tended to become more picture-minded; or rather, perhaps, they were confirmed in their original picture-mindedness.

To understand the bearings of this change we must realize that it was at once a technical innovation, a social device, a means of popular education, and a way by which the monopoly of art by a small group was broken down. With the invention of graphic reproduction, pictures could go into circulation like any other commodity; they could be sold at markets and fairs so cheaply that all but the poorest classes could afford to own them. Sometimes these early prints were the media of popular realistic education, as in Jost Ammann's noted series on

the crafts and occupations; sometimes they served as improvised newsheets to record remarkable or fantastic events; sometimes, at a later day, they would be used by Hogarth to point moral lessons or by Rowlandson to satirize the very middle class that was buying his pictures.

From the fifteenth century onward, the picture was not merely something that you saw, in the form of tapestry, on the walls of a castle, or in the form of a fresco or an oil painting in a church or palace: in the cheap medium of an engraving it could be carried home; and so, in a sense, what it lost in uniqueness it gained in intimacy and variety and wide distribution. As long as good examples still abounded on the higher levels of art, these vulgar reproductions retained many of the virtues of original painting. If they lacked pretentiousness, they gave to the unpretentious moments, the common occupations, the daily scene, the common pastimes, the dignity of being sufficiently memorable to be preserved. That was a victory for democracy, achieved in the arts long before its proposition, that all men are created equal, was put forward in politics.

This democratization of the image was one of the universal triumphs of the machine, as well as one of the earliest. So deep and widespread was its influence that it took place even in countries like Japan, where all the dominant patterns of society remained feudal and caste-limited; and, as in Europe, the method and the spectator's interest affected the content of the print, too. Long before mechanization had taken command of transportation and textile production, it freed the image for popu-

lar consumption and produced new images in large quantities.

Viewed in its beginnings, this whole process, like that of democracy itself, seems an entirely happy one. If art is good, then surely it is good for everyone. If painting and carvings are means whereby people become conscious of feelings, perceptions, interests that would otherwise be unexpressed or unformed, then why should not prints of all kinds perform the same office, in some degree to supplement the functions of collective art, as people viewed it habitually in their public buildings, civic and religious? If one does not in this minor form of art always reach the high and exalted level of public art, why should there not be a place for a less high-flown kind of esthetic response, fit to take its place, with its slippers on, before the domestic fire? In one age the Tanagra figurine; in another the woodcut. That there was something in the machine process itself that might, if people were unguarded, make this excellent development go dreadfully awry was a possibility that hardly anybody began to suspect before the nineteenth century.

Meanwhile, as the technical processes of reproduction were being invented and perfected, as mass distribution in the graphic arts was becoming ever more feasible, something had been happening of the same order within the domain of the symbol itself. The turning of interest away from the self and toward the object we associate with the growth of realism in late medieval and renaissance painting. That change manifested itself in a variety of ways. One of them was the devaluation of traditional symbols. Thus, for one thing, the austerely divine Virgin

of fourteenth century painting becomes the soft-curved doting mother of sixteenth century painting, that all too human creature: the subject ostensibly remains the same, but the descent from heaven to earth is swift. Or again, take Breughel the Elder's paintings, almost any of his figure paintings, but above all his interpretation of Christ bearing his cross to Calvary. That is in a sense one of the first bugle blows of democracy: it proclaimed liberty, equality, and fraternity more loudly than the French Revolution itself: above all, equality. For at first one looks all over the painting for the principal figure, only to find that, in the artist's perspective, there *is* no principal figure: Jesus himself is lost in a swarm of other figures and can be found only after some searching in the middle distance. One must take an imaginary ruler and draw intersecting lines from the four corners of the picture to find that Jesus occupies the mathematical—though not the visual—center of this space. Breughel, in his very method of composition, repeatedly proclaims the equality of all ranks; and the painters after him carried that leveling of persons a stage further toward the now depersonalized world of science by finding that the costume was more important than the human face, or that the landscape was more significant than the figures in it. In the end this led to the reduction of the artist into a mere transcriber of nature: a register of optical sensation: a blank surface on which images left a mark. What the Dutch realists began, the painters of the nineteenth century carried to a theoretic conclusion; and the results may be summarized by two characteristic remarks. Claude Monet, Cézanne observed, was only an eye:

but what an eye! Gustave Courbet said that he did not paint angels because he had never discovered any in nature. From these remarks one could draw two conclusions: the painter had become a specialist in sense-data; and the only world he knew was that which was external to him. Those remarks might have been enough to persuade any cultural historian that a development was about to take place in painting similar to that which had taken place in printing; and he would not have been wrong. As a matter of fact that change had already taken place even before Monet and Courbet and the other nineteenth century realists had started to paint.

As far as realism could go in search of visual matter-of-factness the seventeenth century Dutch realists had already gone. By conscientious effort they had produced the color photograph, in fact the best color photographs that have yet been made. The exquisite perfection of these handmade photographs has never been excelled, as yet, by any product of the machine. As with the manuscript copyist, their process was laborious; and in order to rival it by mechanical means, it was first necessary to simplify it, by reducing it to black and white. The original step toward this end was taken at a very early date—1558—by Daniello Barbara who invented a camera and stop for the diaphragm. The next step awaited the further development of chemistry; and it therefore could hardly have taken place till the nineteenth century. At length, in the 1830s, it occurred to two independent inventors, Talbot and Niepce, that the abstract office performed by the realist painter's eye could also be performed by a simple apparatus that would throw the light rays from

the outside world upon a chemically sensitized surface. With the invention of photography the process of depersonalization came to a climax.

Now, by perfecting a mechanical method, the "taking of pictures" by a mere registration of sensations was democratized. Anyone could use a camera. Anyone could develop a picture. Indeed, as early as the 1890s the Eastman Company went one step further in the direction of automatism and mass production, by saying to the amateur photographer—this was their earliest advertising slogan—*You press the button, we do the rest.* What had been in the seventeenth century a slow handicraft process, requiring well-trained eyes and extremely skilled hands, with all the rewards that accompany such highly organized bodily activities, now became an all-but-automatic gesture. Not entirely an automatic gesture, I hasten to add, lest any photographers in this audience should squirm in agonized silence or break forth into a loud shout of protest. For after all it turns out that even in the making of the most mechanically contrived image, something more than machines and chemicals is involved. The eye, which means taste. The interest in the subject and an insight into the moment when it—it or he or she—is ready. An understanding of just what esthetic values can be further brought out in the manipulation of the instrument and the materials. All these human contributions are essential. As in science, no matter how faithfully one excludes the subjective, it is still the subject who contrives the exclusion. All this must be freely granted. But this is only to say that in photography another machine art like printing was born; and that the standards of esthetic success in this art are not dissimilar

to those in printing. If we consider those standards for a moment we shall have a clue to one of the most essential problems connected with automatism and reproduction.

As with printing, photography did not altogether do away with the possibilities of human choice; but to justify their productions as art there was some tendency on the part of the early photographers, once they had overcome the technical difficulties of the process, to attempt to ape, by means of the camera, the special forms and symbols that had been handed down traditionally by painting. Accordingly, in the nineties, American photographs became soft and misty and impressionistic, just when impressionism was attempting to dissolve form into atmosphere and light. But the real triumphs of photography depended upon the photographer's respect for his medium, his interest in the object before him, and his ability to single out of the thousands of images that pass before his eye, affected by the time of day, the quality of light, movement, the sensitivity of his plates or film, the contours of his lens, precisely that moment when these factors were in conjunction with his own purpose. At that final moment of choice—which sometimes occurred at the point when a picture was taken, sometimes only after taking and developing a hundred indifferent prints—the human person again became operative; and at that moment, but only at that moment, the machine product becomes a veritable work of art, because it reflects the human spirit.

As far as its effect upon painting went, the first result of photography, perhaps, was to increase the danger of technological unemployment; for if the painter were

only an eye, the camera's eye was not merely his equal but, in many respects, his superior. While painters themselves were among the first to exploit the possibilities of the new art—Octavius Hill, the great Edinburgh photographer, for example, went into photography in order to get a record of a large group of clergymen he wished to work into a group portrait—the inevitable result of this art was to devalue mere realism. Wealthy patrons might continue to employ the painter because his images, being handmade, were rarer and more obviously expensive. But in the end, if the artist did not have something to say that could not be recorded by mechanical means, he and his tedious handicraft process were ready for the scrap heap. On the level of mere visual abstraction—for of course a photograph, accurate and realistic, is an abstraction from the multidimensional object it interprets—there was nothing more for the painter to do. As against a single person who could use a brush passably, there were thousands who could take reasonably good photographs. Here the first effect of the machine process was to deliver people from the specialist and to restore the status and function of the amateur. Thanks to the camera, the eye at least was reeducated, after having been too long committed to the verbal symbols of print. People awoke to the constant miracles of the natural world, like an invalid long secluded in a dark room, able for the first time to breathe the fresh air and feel the sunshine, grateful for the simplest play of light and shade over the landscape. But though the art of taking pictures is necessarily a selective one, the very spread and progress of that art, not least with the invention of the motion picture, was in the opposite direction: it

multiplied the permanent image as images had never been multiplied before, and by sheer superabundance it undermined old habits of careful evaluation and selection. And that very fact, which went along with the achievement of a democratic medium of expression, has raised a whole series of problems that we must wrestle with today, if, here as elsewhere, we are not to starve in the midst of plenty.

This brief review of the course of the reproductive processes in art, from the wood engraving to the colored lithograph, from the photographic painting to the photograph proper, capable of being manifolded cheaply, does not take into account various subsidiary efforts in the same direction in many of the other arts, such as the reproduction of sounds, by means of the phonograph and the talking film; to say nothing of the fortunately abortive efforts of James Watt to find a mechanical means of reproducing, in the semblance of sculpture, the human form, an effort on which the inventor of the steam engine curiously wasted some of the best years of his life. I have filled in this background briefly merely in order to prepare the way for discussing the results of these many efforts to multiply the symbol, and so to deal with the problem of assimilation.

What has been the result of the mass production of esthetic symbols that began in the fifteenth century? What benefits have we derived from it and what dangers do we now confront? With your permission, I shall speak only briefly about the benefits, since we are all conscious of them. By means of our various reproductive devices, a large part of our experience, which once vanished without any sort of record, has been arrested and fixed. Be-

cause of the varied processes of reproduction that are now at hand, many important experiences, difficult to transpose into words, are now visible in images; and certain aspects of art, which were once reserved for the privileged, are now an everyday experience to those who make use of the resources of printing and photography. The gains from these processes are so demonstrable that we have, unfortunately, become a little unwary as to the deficits and losses; so I purpose now to point out how our very successes with the reproductive arts present us with a problem whose dimensions have been increasing at almost geometric ratio, year by year.

The fact is that in every department of art and thought we are being overwhelmed by our symbol-creating capacity; and our very facility with the mechanical means of multifolding and reproduction has been responsible for a progressive failure in selectivity and therefore in the power of assimilation. We are overwhelmed by the rank fecundity of the machine, operating without any Malthusian checks except periodic financial depressions; and even they, it would now seem, cannot be wholly relied on. Between ourselves and the actual experience and the actual environment there now swells an ever-rising flood of images which come to us in every sort of medium—the camera and printing press, by motion picture and by television. A picture was once a rare sort of symbol, rare enough to call for attentive concentration. Now it is the actual experience that is rare, and the picture has become ubiquitous. Just as for one person who takes part in the game in a ball park a thousand people see the game by television, and see the static photograph of some incident the next day in the news-

paper, and the moving picture of it the next week in the newsreel, so with every other event. We are rapidly dividing the world into two classes: a minority who act, increasingly, for the benefit of the reproductive process, and a majority whose entire life is spent serving as the passive appreciators or willing victims of this reproductive process. Deliberately, on every historic occasion, we piously fake events for the benefit of photographers, while the actual event often occurs in a different fashion; and we have the effrontery to call these artful dress rehearsals "authentic historic documents."

So an endless succession of images passes before the eye, offered by people who wish to exercise power, either by making us buy something for their benefit or making us agree to something that would promote their economic or political interests: images of gadgets manufacturers want us to acquire; images of seductive young ladies who are supposed, by association, to make us seek other equally desirable goods, images of people and events in the news, big people and little people, important and unimportant events; images so constant, so unremitting, so insistent that for all purposes of our own we might as well be paralyzed, so unwelcome are our inner promptings or our own self-directed actions. As the result of this whole mechanical process, we cease to live in the multidimensional world of reality, the world that brings into play every aspect of the human personality, from its bony structure to its tenderest emotions: we have substituted for this, largely through the mass production of graphic symbols—abetted indeed by a similar multiplication and reproduction of sounds—a secondhand world, a ghost-world, in which everyone lives a second-

hand and derivative life. The Greeks had a name for this pallid simulacrum of real existence: they called it Hades, and this kingdom of shadows seems to be the ultimate destination of our mechanistic and mammonistic culture.

One more matter. The general effect of this multiplication of graphic symbols has been to lessen the impact of art itself. This result might have disheartened the early inventors of the new processes of reproduction if they could have anticipated it. In order to survive in this image-glutted world, it is necessary for us to devalue the symbol and to reject every aspect of it but the purely sensational one. For note, the very repetition of the stimulus would make it necessary for us in self-defense to empty it of meaning if the process of repetition did not, quite automatically, produce this result. Then, by a reciprocal twist, the emptier a symbol is of meaning, the more must its user depend upon mere repetition and mere sensationalism to achieve his purpose. This is a vicious circle, if ever there was one. Because of the sheer multiplication of esthetic images, people must, to retain any degree of autonomy and self-direction, achieve a certain opacity, a certain insensitiveness, a certain protective thickening of the hide, in order not to be overwhelmed and confused by the multitude of demands that are made upon their attention. Just as many people go about their daily work, as too often students pursue their studies, with the radio turned on full blast, hearing only half the programs, so, in almost every other operation, we only half-see, half-feel, half-understand what is going on; for we should be neurotic wrecks if we tried to give all the extraneous mechanical stimuli that impinge upon us anything like

our full attention. That habit perhaps protects us from an early nervous breakdown; but it also protects us from the powerful impact of genuine works of art, for such works demand our fullest attention, our fullest participation, our most individualized and re-creative response. What we settle for, since we must close our minds, are the bare sensations; and that is perhaps one of the reasons that the modern artist, defensively, has less and less to say. In order to make sensations seem more important than meanings, he is compelled to use processes of magnification and distortion, similar to the stunts used by the big advertiser to attract attention. So the doctrine of quantification, Faster and Faster, leads to the sensationalism of Louder and Louder; and that in turn, as it affects the meaning of the symbols used by the artist, means Emptier and Emptier. This is a heavy price to pay for mass production and for the artist's need to compete with mass production.

Behold, then, the so-far-final result of our magnificent technical triumphs in the reproductive arts. We diminish the contents of the image: we narrow the human response: we progressively eliminate the powers of human choice: we overwhelm by repetition, and, in order to stave off boredom, we have to intensify the purely sensational aspects of the image. In the end, the final effect of our manifold inventions for manifolding is to devalue the symbol itself; partly because it comes to us, as in a tied-in sale, attached to some other object which we may or may not want; partly because it has multiplied to such a point that we are overwhelmed by sheer quantity and can no longer assimilate anything but a small part of the meaning it might otherwise convey. What

is responsible for this perversion of the whole process of reproduction? Something we should have been aware of from the beginning. We have gratuitously assumed that the mere existence of a mechanism for manifolding or mass production carries with it an obligation to use it to the fullest capacity. *But there simply is no such necessity. Once you discover this, you are a free man.*

I speak with some feeling on this subject, and a little experience, because for the better part of a summer I was annoyed by a loud-speaker operated by a neighbor of mine who runs a small summer hotel and who had installed this formidable instrument for the entertainment of his guests. He is a thoroughly nice man, with whom I am on very neighborly terms, and he merely thought to provide all the benefits of modern science for his temporarily rusticated urban clients. Unfortunately, though I am a quarter of a mile away, the sounds of his loud-speaker blared into my small study, as insistently as a drunken man shouting in my ear. It took weeks of vexing argument and tactful persuasion to drive home to him two simple principles: first, just because a loud-speaker is called loud, it needn't be turned on at its loudest volume in order to fulfill its mission; second, just because a machine can be on duty twenty-four hours, that is no reason for keeping it operating on that schedule. The great principle here is that as soon as mechanical limitations are thrown off, human restrictions must be clamped on. I trust that this argument will prove as convincing to this audience as it did to my neighbor; for his loud speaker is now so inaudible that I begin to fear he has gotten rid of it altogether. But that would unfortunately mean that he had not really grasped

my point; for I was pleading, not for abolition of the machine, but for its effective control.

Now let me carry this general argument about the devaluation of the image back into the realm of art. One of the real achievements of technics during the last half century has been to devise means of making color reproductions of pictures with increasingly high fidelity. Where sufficient care and craftsmanship is used, in the gelatine process, it is possible, at least in the case of pen drawings and water colors and sepia washes, to reproduce pictures so faithfully that the artist himself has often mistaken the reproduction for the original work. As a result, for a small fraction of the price of an original painting—itself sometimes priceless and beyond the means of even the wealthiest bidder—the ordinary citizen may have, as his private possession, a picture that in its original form was entirely beyond his reach, physically as well as financially. On the surface this seems an unalloyed triumph for the mechanical process. Does it not, in no small degree, atone for the devaluation of the esthetic symbol in other departments? In one sense, this actually *is* a genuine triumph for popular education, for it is capable of fulfilling the otherwise demagogic promise of making every man a king, even as it in some degree reduces the king—the proud possessor of a unique object—to the level of the man in the street.

As with the entire democratic process of equalization, that process which de Tocqueville described as the essential theme of the last seven centuries, mechanization brings about a true leveling off in both directions, upward and downward: fair esthetic shares for all, as the British could say. But what, if you look closer, is the *actual* re-

sult? Thanks to our confirmed habits of *non-selectivity* the outcome is not quite so happy as one might fancy. The actual result is that already, in big cities at least, there is a whole group of great pictures, so frequently reproduced, so often hung, so insistently visible, that they have forfeited, no matter how faithful the reproduction, all the magic of the original. We all have seen these pictures, but alas, once too often. When I was a boy such a picture was Sir Luke Fildes' painting of the benign bewhiskered physician visiting a sick child, a bathetic piece of popular art, whose devaluation would now bring tears to no one's eye. But the same thing is happening again, because of the very raising of the level of popular taste, with paintings of the highest excellence. There are paintings by Van Gogh and Matisse and Picasso that are descending the swift slippery slope to oblivion by reason of the fact that they are on view at all times and everywhere. And whereas, with every great work of art, the more one returns to it the more one sees in it, once one has reached a certain point of super-saturation, the result is the rapid effacement of the image: it sinks into the background: indeed, it disappears.

Mind you, I am not speaking about the effect of poor and inadequate reproductions of paintings; though of these unfortunately there is a terrifying abundance. I have seen reproductions of great paintings on view in famous museums of art that reflect on either the sound eyesight or the elementary honesty of their curators and directors, so false was every value and color to the original. So, too, I have looked into textbooks on art, prepared for elementary schools, in which bad pictures paraded as high art, and in which good pictures were so vilely re-

produced that they constituted an esthetic betrayal of both the artist and the student. Our coarseness of discrimination here, indeed our absence of decent morals, is disquieting. But the vice I am now speaking about is quite different from these misdemeanors. Even when our reproductions are adequate, even when they are marvelously good, near to being perfect, we must still confront one very significant fact that our whole civilization seems, in its preoccupation with mechanical competence, to have long lost sight of. My elders used to put it, somewhat smugly as it seemed when I was young, by saying that it was possible to have too much of a good thing. But the long experience of the race stands behind that dictum: It *is* possible to have too much of a good thing; and indeed, the more intense, the more valuable an experience is, the more rare it must be, the more brief its duration. One could perhaps sum this up by saying that a blessing, repeated once too often, becomes a curse. Now, regularity and repetition, those gifts of the machine, must be confined to those parts of life that correspond to the reflex system in the body; they are not processes that have anything to contribute, except in a strictly subordinate way, to the higher functions, to the emotions and imagination, to esthetic feelings and rational insight. The danger of an overregulated, overroutinized life, given to excessive repetition, was long ago discovered in the monastery. It produces the special vice called *acedia*, or abysmal apathy. Any object that is too constantly present, however interesting or desirable it may be in itself, presently loses its special significance; what we look at habitually, we overlook. Gilbert Chesterton used that perception in one of his Father Brown

stories, in which the murder was committed by the postman. No one suspected the postman, indeed no one *saw* him come to the house at the hour the crime was committed, precisely because that was his usual time for making his usual rounds. His very constancy put him completely out of the minds of the witnesses. So, perhaps, many a man has fallen for the lure of another woman, not his wife, not because her charms were necessarily in any way superior, but because he has actually ceased to observe, and so ceased to respond to, the charms that his mate too habitually exposed to him; and the very irregularity and unexpectedness of his new relations gave them a disproportionate attraction. This general truth about constancy and repetition has a direct application to reproduction and domestication in art. Novelty, adventure, variety, spontaneity, intensity—these are all very essential ingredients in a work of art; and a great work of art, like El Greco's *Toledo* at the Metropolitan, is one that presents this feeling of shock and delight, of new things to be revealed, at every encounter with it. Such works are inexhaustible in their meaning. But with one proviso: one must not go to them too often. The rarity of the experience is an essential preparation for the delight. Without rhythm and interval there is only satiation and ennui.

But all this in opposition to the tendency of mass production. Mass production imposes on the community a terrible new burden: the duty to constantly consume. In the arts, at the very moment the extention of the reproductive processes promised to widen the area of freedom, this new necessity, the necessity to keep the plant going, has served to undermine habits of choice, discrimination,

selectivity that are essential to both creation and enjoyment. Quantity now counts for more than quality. There used to be an old popular song with the words, "I'll try anything once, if I like it I'll try it again." But under the machine system, you'll not only try it again, you'll try it a thousand times, whether you like it or not, and a vast apparatus of propaganda and persuasion, of boasting and bullying, will coerce you into performing this new duty.

You know the old fable of the Sorcerer's Apprentice, which Goethe thought it worth while to put into verse, and which has even, in our time, gotten into the animated cartoon: the clever apprentice who repeated the old sorcerer's spell and got the pail and the broom to do his work for him, when the master was away, while he stayed idle. Unfortunately, though he knew how to bring into existence a whole regiment of pails and brooms, which went about their work with unflagging automatic energy, he had never mastered the formula for bringing their activities to an end: so presently he found himself floundering in a flood of water that these self-willed pails were pouring into his master's house. So with the apprentices to the machine. We not merely encourage people to share the new-found powers that the machine has opened up: we *insist* that they do so, with increasingly less respect for their needs and tastes and preferences, simply because we have found no spell for turning the machine off. The grim fable of the Sorcerer's Apprentice applies to all our activities, from photographs to reproduction of works of art, from motor cars to atom bombs. It is as if we had invented an automobile that had neither a brake nor a steering wheel, but only an accelerator, so that our sole form of control consisted in making the machine go

faster. For a little while, on a straight road, we might feel safe, and even, as we increased our speed, gloriously free; but as soon as we wanted to reduce our speed or to change our direction or to back up, we should find that no provision had been made for this degree of human control—the only open possibility was *Faster, faster!* As our mass-production system is now set up, a slowing down of consumption, in any department, produces a crisis if not a catastrophe. That is why only under the pressure of war or preparation for war, in which wholesale waste and destruction come to its aid, does the machine, as now conceived, operate effectively on its own terms.

The tendencies I have been describing are, you will recognize, universal ones; but in no realm have they been more fatal than in the realm of art. As long as a work of art was an individual product, produced by individual workmen using their own feeble powers with such little extra help as they could get from fire or wind or water, there was a strict limit to the number of works of art that could be produced in a whole lifetime, whether they were paintings or statues, woodcuts or printed cottons. Under such a system of production there was no problem of quantity; or, rather, the problem was that of too little, not too much. Natural and organic limitations took the place of rational selectivity. Only those who exercised some special political or economic monopoly were ever even temporarily in a position of being threatened by a surfeit; and so the appetites remained keen, because only rarely could they be sated. Under such conditions, there was little reason to exercise a vigilant control over quantity, for fostering a discipline of restraint and a habit of

studious selection; such discrimination as was necessary was that exercised on a basis of quality alone.

What has happened during the last century has brought about just the opposite kind of condition. As a result of our mechanical reproductive processes, we are now creating a special race of people: people whom one may call art-consumers. From earliest youth they are trained to conduct the normal activities of living within the sound of the radio and the sight of the television screen; and to make the fullest use of our other facilities for reproduction, they are taken, in all big cities at least, in troops and legions through the art galleries and museums, so that they may be conditioned, with equal passivity, to the sight of pictures. The intimate experiences, the firsthand activities, upon which all the arts must be based are thrust out of consciousness: the docile victims of this system are never given enough time alone to be aware of their own impulses or their inner promptings, to indulge in even so much as a daydream without the aid of a radio program or a motion picture; so, too, they lack even the skill of the amateur to attune them more closely to the work of art.

Those who have pushed the reproductive processes to their limit, forget the essential nature of art: its uniqueness. While a certain kind of order and form should prevail in the background of all activities, esthetic interests that promote any intensity of stimulus and meaning must necessarily be of short duration. The fact is that our reproductive facilities in the arts will be of human value, only when we learn to curb the flood of images and sounds that now overwhelm us, until we control the occasion, the quantity, the duration, the frequency of repe-

tition, in accordance with *our* needs, with *our* capacity for assimilation. These are the saving imperatives of an age that has made the fatal error of the Sorcerer's Apprentice. Expressive art, just in proportion to its value and significance, must be precious, difficult, occasional, in a word aristocratic. It is better to look at a real work of art once a year, or even once in a lifetime, and really see it, really feel it, really assimilate it, than to have a reproduction of it hanging before one continually. I may never, for example, see the Ajanta cave paintings. From reproductions, as well as from travelers who have been in India, I well know that these paintings are worth seeing; and if ever I make the journey I expect to carry away a unique impression, reinforced by the strange faces, the different languages and customs, I shall meet on my pilgrimage. But better a few short hours in the cave, in direct contact with the work of art itself, than a lifetime in looking at the most admirable reproductions. Though here, as in many other places, I shall be grateful for the mechanical reproduction, I shall never deceive myself by fancying that it is more than a hint and a promise of the original work.

Or take, for another example, the intense enjoyment of solitude in nature, in a noble grove of trees or on a high mountain top. No small part of that particular experience comes from the fact that only a few human souls are present at any moment. This is what adds the last edge of esthetic significance and emotional stimulus to the experience. If you cut a three-lane highway to the top of that mountain and bring five thousand people to enjoy the solitude, the very essence of the experience is gone: it is replaced by something else, the gregarious good nature, the commonplace sociability, of five thou-

sand people, meeting on a mountain top instead of a city park, but with little sense of nature and with no sense of cosmic isolation.

Thus I come to the final point and moral of this lecture. The quantitative reproduction of art, through the advance of technics, from the woodblock print to the wire-recording phonograph, has increased the need for qualitative understanding and qualitative choice. At the same time it has imposed upon us, in opposition to the duty to participate in mass consumption, the duty to control quantity: to erect rational measures and criteria of value, now that we are no longer disciplined by natural scarcity. The very expansion of the machine during the last few centuries has taught mankind a lesson that was otherwise, perhaps, too obvious to be learned: the value of the singular, the unique, the precious, the deeply personal. There are certain occasions in life when the aristocratic principle must balance the democratic one, when the personalism of art, fully entered into, must counteract the impersonalism, and therefore the superficiality, of technics. We do no one any service, with our reproductive processes, if we limitlessly water the wine in order to have enough to give every member of the community a drop of it, under the illusion that he is draining an honest glass. Unless we can turn the water itself into wine, so that everyone may partake of the real thing, there is in fact no miracle, and nothing worth celebrating in the marriage of art and technics. On the other hand, if we establish this personal discipline, this purposeful selectivity, then nothing that the machine offers us, in any department, need embarrass us.

This conclusion should go some distance in repairing the breach that has so long existed between art and

morals, between goodness and truth. The fact is that to enjoy the perfections and delights of art, above all in a day of mass production, the whole organism must be keyed up to its highest level of vigor, sensitive and responsive as only healthy beings are sensitive and responsive; and to achieve this state requires not only hygiene and gymnastic, as the incomparable Athenians knew, but a high state of moral alertness and conscious control. This means, finally, a readiness to reject many inferior goods in favor of the supreme good offered by a genuine work of art, which is like the blessing of friendship, when offered by a person who gives you his best without reserves.

To control the quantitative flood that our mischievous Sorcerer's Apprentices have turned loose, we need to develop habits of inhibition on which we too glibly have bestowed, in the recent past, the epithet puritanic. You will not accuse me, if you have heard these earlier lectures, of being anything but a fervent admirer of William Blake; but for all that I would amplify one of his aphorisms—*Damn Braces, Bless Relaxes*—and would say that there is no chance of coping with the evils of mass production unless we are likewise ready to bless braces and to exercise, whenever needed, the most strenuous control of mere quantity. To have the right amount of the right quality in the right time and the right place for the right purpose is the essence of morality; and as it turns out, it is perhaps the most important condition for the enjoyment of art. Here if anywhere, Nietzsche's words, as uttered by Zarathustra, actually hold: "Choosing is creating." Yes: choosing is creating. "Hear that, ye creating ones!"