# III

## SYMBOLISM AND SYNTAX

## A RULE OF THE ROAD

## THE SIXTEENTH CENTURY

My story has now reached a point at which it is necessary to give thought to some problems of a very general nature. Awareness of them is essential to an understanding of my argument. Many people regard these problems as highly theoretical and of no practical interest, but as I look back at my thirty years in an art museum it seems to me that a great deal of my time was devoted to wrestling with them as immediate and concrete difficulties. Here it is only possible to call attention to them, for their careful analysis would require a long and difficult treatise.

In the museum I learned the bitter way how inadequate words are as tools for description, definition, and classification of objects each of which is unique. I found that while I was not much interested in the actual processes which go on inside a man's brain and nervous system, I was desperately interested in the extent to which he could communicate the results of those processes. I also learned

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that baptism is neither explanation, nor description, nor definition. Baptism, the giving of a name, is merely the tieing together in association of a particular object or quality and a particular word. For those who know both the names and the objects or qualities to which they belong, the names do away with any necessity for description, definition, and classification as means of identification. In many instances the more absurd the names are the better they are for their purposes. Thus, in the Metropolitan Museum at one time there was much sculpture that had to be rather elaborately identified when we wanted to talk about it at the lunch table, but there were two much-discussed pieces of sculpture, one Chinese, the other Greek, which somehow took names unto themselves. The Chinese statue was Charlie Murphy and the Greek one was Pink Billy. While these names were silly and irreverent, they were absolutely precise as identifications and they saved much time. Once a name of this kind becomes familiar it serves as an identification long after its original has vanished from earth or even if it has never existed, as for instance such names as Julius Caesar and Excalibur.

However, very few of the specific shapes, colours, and textures of objects have proper names, and in a way it is very lucky for us that they do not, because an even smaller number of persons have memories so excellent that they could use them. Much of what we disdainfully call trade and professional jargon is nothing other than names that we don't happen to know. Thus for many purposes the fact that most of our words are mere class designations gives them their greatest usefulness. But, also, a mere class designation may cover an infinitely large number of distinguishable things, or qualities, or actions. When we try to describe a particular object in such a way as to communicate an idea of its personality or unique character to someone who is not actually acquainted with it, all that we can do is to pile up a selected group of these class names, like rings about a peg, in such a way that they overlap but do not coincide. By doing this it is sometimes possible to communicate such information that the hearer may be able to identify

the object when he sees it. But beyond that it is impossible for us to go with words, for the ipseity, the particularity of the object, its this-and-no-other-ness, cannot be communicated by the use of class names. If they could they would not be the things we think they are. Actual first hand acquaintance is the only thing that does the trick.

The only way that anyone can gain acquaintance with objects, as distinguished from knowledge of them, is through immediate sense awareness of them. It is thus necessary to keep clear the distinction between sensuous acquaintance on the one hand and knowledge by description on the other, for otherwise we are certain to fool ourselves on crucial occasions. We have many different ways of symbolizing both acquaintance and knowledge, but of them all the most important are words and visual images. Both words and visual images may very well be compared to fish nets. When a fisherman tell us that there are no fish in the bay to-day, what he really means is that he has been unable to catch any in his net—which is quite a different thing. The fish that are too big do not get into his net, and those that are too small simply swim through it and get away. So far as the fisherman is concerned fish are only such creatures as he can catch in his net. In the same way words and visual images catch only the things or qualities they are adequately meshed for. Among the things no word net can ever catch is the personality of objects which we know by acquaintance.

The only set of sense awarenesses for which we have succeeded in making nets that catch the personality of objects are those of vision, and even they catch only a certain portion of it. This method of symbolization is the making of pictures or images, which, unlike spoken words, are apprehended through the same sense organs which give us the awarenesses we try to symbolize. Practically speaking, the visual image is the only symbol we have that does not necessarily require the translation of a sensuous awareness into terms of some other associated sense awareness or else of some extremely limited, arbitrary, and artificial convention of correspondences. It is in these translations that we come to many of

our misunderstandings. The translation of a sensuous awareness that comes to us through one set of nerve channels into that which comes to us through another set of nerve channels is accomplished by association. Thus, although it is literally impossible to see a noise, we have no hesitation in saying that we have seen a man making a certain sort of noise, although in fact we have not heard the noise and have only seen him going through motions that we associate with that noise. In this instance the phrase 'making a certain sort of noise' is merely an associational symbol for the complicated series of motions we actually saw the man make. So-called illusions can almost invariably be shown to have arisen, not because the sense awareness actually involved has given us a false report, but because we have dragged into our account of what happened associated awarenesses that come to us through other channels.

Thus the more closely we can confine our data for reasoning about things to data that come to us through one and the same sense channel the more apt we are to be correct in our reasoning, even though it be much more restricted in its scope. One of the most interesting things in our modern scientific practice has been the invention and perfection of methods by which the scientists can acquire much of their basic data through one and the same sensuous channel of awareness. I understand that in physics, for example, the scientists are happiest when they can get their data with the aid of some dial or other device which can be read by vision. Thus heat, weight, lengths, and many other things that in ordinary life are apprehended through senses other than vision have become for science matters of visual awareness of the positions of mechanical pointers.

In view of this it is worth while to examine a little more closely the differences between word symbols and visual symbols. Spoken words are addressed to the ear. Visual symbols are addressed to the eye. A printed or written word or sequence of them is addressed to the eye, but is immediately, as the result of long training and habit, translated into sounds addressed to the ear. Actually a

sentence in print is composed of a number of superimposed symbols, each of which has only a vague and arbitrarily determined meaning. First, there are the letters of the alphabet, each of which is a conventional sign directing the man who sees it to make a series of muscular actions which, when fully executed, result in the making of a sound. Taken by themselves they have no meaning other than this conventionally assigned set of muscular actions. The letters of the Arabic or Hebrew alphabets have no meanings of this kind for those of us who are not acquainted with those languages. Many letter designs are made according to topological recipes. Thus the recipe for each Roman capital letter is simple, abstract, and completely arbitrary. Starting with the idea of a line and the distinctions between up and down and right and left, it is devoid of any requirement of particular shape, size, or proportion. The recipe for each letter can be analysed into the number of times a given number of lines intersect one another and the order in which the intersections occur. This permits of an infinite number of particular shapes for each letter. Thus, when we see a series of Roman capital letters we are called upon to recognize not any particular shapes but a series of representative members of particular classes of topologically defined forms. We call any member of the 'A' class 'a', and any member of the 'B' class 'b', and so on. The consequence of this is that when an instructor dictates a sentence to his class each student can write it down in his peculiar, personally adopted, set of letter shapes. Then, if all the copies are proof read and corrected, all the copies, in spite of their remarkable differences in particular shapes and general appearance, contain representative members of each letter class used in the sentence, arranged in the same linear order. Thanks to this all the sentences as written are identical in their verbal content.

Each written or printed word is a series of conventional instructions for the making in a specified linear order of muscular movements which when fully carried out result in a succession of sounds. These sounds, like the forms of the letters, are made according to arbitrary recipes or directions, which indicate by

convention certain loosely defined classes of muscular movements but not any specifically specified ones. Thus any printed set of words can actually be pronounced in an infinitely large number of ways, of which, if we leave aside purely personal peculiarities, Cockney, Lower East Side, North Shore, and Georgia, may serve as typical specimens. The result is that each sound we hear when we listen to anyone speaking is merely a representative member of a large class of sounds which we have agreed to accept as symbolically identical in spite of the actual differences between them. These differences are sometimes so marked that persons coming from different parts of the English speaking world can no more understand each other than if they were speaking completely different languages.

The meanings of the combinations of sounds we call words are also the result of convention or of special agreement, and none of them, unless it be a proper name, has any very precise or exact meaning. They all have meanings that we can look up in the dictionary, but these dictionary meanings are frequently many in number and quite different from one another. Also, and most importantly, these dictionary meanings are words themselves, and in their turn have only conventional meanings. We all know the difference in practice between using a dictionary that contains no illustrations and using one that contains a good many.

Actually, the meanings of many of the most used words depend on their contexts. More than that, their meanings also depend very largely on their syntactical use. To show this it is sufficient to take three words, such for example as 'James' and 'Henry' and 'kicked', and arrange them in sentences. Unless the context tells us we have no way of knowing whether one or each of the proper names represents a boy, or a man, or a mule. The meanings of the sentences made of these three words depend, in English at least, on the time order in which they are used. 'James kicked Henry' has obviously not the same meaning as 'Henry kicked James', while 'Henry James kicked' has a meaning that is comically and in every way different from that of either of the two other sentences.

This means that, when the very simple three-word sentences I have just used are printed, each contains at least six or seven different layers of symbolic practice, each layer being composed of vague arbitrarily determined representatives of classes of shapes or sounds, none of which, so far as concerns communication, has any specific shape or sound or meaning.

The only wonder about the system is that men are able to get along with it as well as they do. It certainly is not nicely calculated to convey either precise meanings or any definite idea of the character, personality, or quality of anything. This is shown by the fact that while it is comparatively easy to write a recipe for the making of a class of objects, such, for example, as popovers, it is impossible to tell anyone what a particular popover either looks like or tastes like. Because of this a great many of our so-called descriptions or definitions are no more than generalized instructions for the making of things, in other words, mere cook book recipes. This is also the reason that many so-called descriptions are merely accounts of very subjective feelings or emotions that an object has given rise to in the beholder. As fine examples of this I may refer to Mr. Ruskin's description of the façade of St. Marks and to Mr. Pater's description of the Mona Lisa.

As matter of fact, the moment that anyone seriously tries to describe an object carefully and accurately in words, his attempt takes the form of an interminably long and prolix rigmarole that few persons have either the patience or the intelligence to understand. A serious attempt to describe even the most simple piece of machinery, such, let us say, as a kitchen can-opener with several moving parts, results in a morass of words that only a highly trained patent lawyer can cope with, and yet the shape of that can-opener is simplicity itself as compared with the shape of such a thing as a human hand or face.

As we think about this it becomes obvious why the tool-maker wants not a written description of the device which he is called upon to make but a series of carefully made drawings accompanied by terse specifications of materials, dimensions, and, especially, of

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tolerances. A purely verbal description demands of the tool-maker that he take a series of arbitrary, abstract, vague, word symbols arranged in a linear order and translate them into concrete forms of material in a three-dimensional space in which there is no linear or time order and in which everything exists simultaneously. Someone may wonder at my phrase 'materials, dimensions, and, especially, tolerances', and ask what tolerances have to do with the problem. The tolerances are the so-called accuracies within which the so-called measurements have to be made. They are literally the tool-maker's recognition that so far as he is concerned there is no such thing as a precise measurement, that for him there is no such thing as 'three inches', but only 'three inches by and large'. Actually the tool-maker requires two tolerances for each dimension—one for the dimension itself, and one for the place from which the measurement of the dimension is to be taken. It simply goes to show that in the most exacting business of making instruments of precision there are no such things as exact and precise dimensions.

Furthermore, if you want to hold a tool-maker to a complete series of dimensions and tolerances for the several parts of an instrument of precision you must not also try to hold him to a series of overall dimensions and tolerances. In both logic and actual practice he can do one thing or the other, but not both. This is the reason for the rule, in shops where they make drawings for instruments of precision, never to indulge in 'double dimensioning', i.e. never to give both a complete series of dimensions and their sum. Always there must be some dimension or dimensions that are left to the discretion of the maker. It is merely a humble work-a-day solution of the ambiguity which the astrophysicist refers to as the non-integrability of displacement.

In its way the situation is analogous to the problem of classification of natural forms which is faced by botanists and zoologists. You divide your total number of forms into two classes—one a defined class you call A, the other an undefined class you call Not-A. You then divide the Not-A class into two sub-classes, one

of which you define and call B, and the other of which you do not define and call Not-B. You proceed from there in the same manner, by dividing the undefined classes into defined and undefined classes. Thus there is always an undefined remainder. So soon as you try to break down a group of forms into classes in such a way that you leave none of them undefined, you are certain to be in trouble and to produce an impractical and unworkable scheme—just because you are dealing with actual objects and not with purely logical concepts. The actual object always has something about it that defies neat classification, unless you can manage always to stay in the middle of your definition and not get out towards its shadowy and slippery edges. In other words, our verbal definitions are only good so long as we do not have to think just what they mean. When we do have to think just what they mean we are more than apt to wind up with a very temperamental and wholly chance five to four decision.

Visual images, unlike verbal descriptions, address themselves immediately to the same sense organs through which we gather our visual information about the objects they symbolize. At one end of their gamut they are completely abstract diagrams, such as that of the drawing for the instrument maker about which we have just been talking. There is an infinite number of ways of making any such drawing and in the end they all come to the same thing— for very much the same reason that sentences written from dictation by a number of persons, once they have been proof read and conformed, all have the same symbolic meanings, despite their marked differences in particular shapes and general forms. As a matter of fact, practically all drawings of that kind are actually proof read, but the man who does it is called a 'checker'. The only reason he can do his work is that the lines in the drawing are mere representatives of classes of lines and from that point of view can hardly be called lines at all. Certainly they do not function as particular lines. At the other end of the pictorial gamut we find things like the micro-photographs which enable us to tell exactly from which pistol a particular bullet was fired. In this latter case

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the micro-photograph goes behind the general class description or definition and reaches the personality, the what for us is the 'this-and-no-otherness', of a machine which until that moment had been merely an unidentified member of a class without personality or individual character. This last class of visual statements not only cannot be proof read but, short of faking, cannot be conformed to what the proof reader calls 'copy'—and for the reason that there is no symbolic copy to read back to, but merely a concrete particular object. Should one of them be inaccurate or indistinct it has to be discarded, for it cannot be corrected. The probative value of a retouched photograph is singularly slight.

Visual statements are normally somewhere between the two ends of the gamut that have just been described. Some of them are purely schematic, and some of them are intended to catch the indicia of personality. An illustration in a botany or an anatomy can be almost purely schematic, for the thing it is intended to symbolize is not any particular instance of the shape of a concrete leaf or muscle, but a broad general class of shapes. However, when it comes to such things as the illustrations in a history of painting or sculpture what is desired is a visual statement of the characteristics or qualities which differentiate each work of art from every other work of art. These are not generalities but the most concrete and precise of particularities.

Before the days of photography and photographic process, it was impossible to hope for any such visual statement as that made by a photograph, and the most that could be asked for was a first-hand statement by a competent and honest observer and recorder.

The competent and honest observer and recorder, however, had his very distinct limitations. In the first place, he could only draw a selected and very small part of the things he did observe. More than that, courageous and sharp-sighted as he might be, he had learned to see in a particular way and to lay his lines in accordance with the requirements of some particular convention or system of linear structure, and anything that that way of seeing and that convention of drawing were not calculated to catch and

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bring out failed to be brought out in his statement. For shortness' sake I shall frequently refer to such conventions as syntaxes. Thus the Germans of the Renaissance had one kind of vision and drawing and the Italians had another. Furthermore, when it came to copying a picture, that is to making a visual statement about a visual statement, the copyist felt under no obligation to be faithful to either the particular forms or the linear syntax of the earlier draughtsman he thought he was copying. Painstakingly and carefully as Dürer might copy a real rabbit or a violet in his own syntax, when it came to copying a print by Mantegna he refused to follow Mantegna's syntax, and retold the story, as he thought, in his own syntax. I doubt if it ever occurred to him that in changing the syntax he completely changed both the facts and the story. The comparison of the two, the Mantegna and the Dürer, is very illuminating about a great many things.

Another important difference between visual statements and collocations of word symbols, is that while there are dictionary meanings for each of the word symbols, and while there may be dictionary definitions for the names of the things symbolized by a complex of lines and spots, there are no dictionary definitions for the individual lines and spots themselves. It is much as though we had dictionary definitions for sentences and paragraphs but not for individual words. Thus while there is very definitely a syntax in the putting together, the making, of visual images, once they are put together there is no syntax for the reading of their meaning. With rare exceptions, we see a picture first as a whole, and only after having seen it as a whole do we analyse it into its component parts. We can begin this analysis at any place in the picture and proceed in any direction, and the final result is the same in every case. It is a very different situation from that exemplified in our little three-word sentences about Henry and James, in which we have to begin with the component parts as they are given to us in a time order and only after the sentence is finished are able to effect a synthesis of them into a whole. This leads me to wonder whether the constantly recurring philosophical

discussion as to which comes first, the parts or the whole, is not merely a derivative of the different syntactical situations exemplified on the one hand by visual statements and on the other by the necessary arrangement of word symbols in a time order. Thus it may be that the points and lines of geometry are not things at all but merely syntactical dodges.

I have a notion that much of the philosophical theory of the past can eventually be traced back to the fact that, whereas it was possible after a fashion to describe or define objects by the use of arbitrary and exactly repeatable word symbols addressed, mediately or immediately, to the ear, it was not possible to describe or define them by exactly repeatable images addressed to the eye. Of course, the ancients could make pictures of particular things, but their pictures were of little use as definitions or descriptions because they could not be exactly repeated, a thing that it is impossible to do so long as every copy of a picture has to be copied by hand. Pliny's account of the predicament of the Greek botanists is a striking example of how this worked out in practice. We have seen another very pretty example of it in the history of botanical illustration between the years 1480 and 1530.

A definition or description that cannot be exactly repeated is not only of little use but it introduces extraordinary complications and distortions. If it had been impossible ever to repeat exactly a verbal formula there would have been no law, no science, no religion, no philosophy, and only the most rudimentary animal technology—and it may be doubted that human beings would be able to communicate with each other much more effectively than so many geese or wild dogs.

Practically speaking, a definition or description that constantly undergoes changes does not help communication but interferes with it and results in a confusion greater than that which existed before it was attempted. It is to be remembered that the only statements the ancients knew which could be exactly repeated as often as was practically necessary were composed of word symbols which were mere representative members of classes. Under the

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circumstances, I believe, it was only natural that the ancients came to think that there was some magic in words, of such a kind that they were real and that the shifting changing phantasmagorias of sensuous awarenesses they described were at best composed of imitations or faulty exemplifications of the reality that existed in the word. Plato's Ideas and Aristotle's forms, essences, and definitions, are specimens of this transference of reality fromt he object to the exactly repeatable and therefore seemingly permanent verbal formula. An essence, in fact, is not part of the object but part of its definition. Also, I believe, the well-known notions of substance and attributable qualities can be derived from this operational dependence upon exactly repeatable verbal descriptions and definitions—for the very linear order in which words have to be used results in a syntactical time order analysis of qualities that actually are simultaneous and so intermingled and interrelated that no quality can be removed from one of the bundles of qualities we call objects without changing both it and all the other qualities. After all, a quality is only a quality of a group of other qualities, and if you change anyone of the group they all necessarily change. Whatever the situation may be from the point of view of a verbalist analysis, from the point of view of visual awarenesses of the kind that have to be used in an art museum the object is a unity that cannot be broken down into separate qualities without becoming merely a collection of abstractions that have only conceptual existence and no actuality. In a funny way words and their necessary linear syntactical order forbid us to describe objects and compel us to use very poor and inadequate lists of theoretical ingredients in the manner exemplified more concretely by the ordinary cook book recipes.
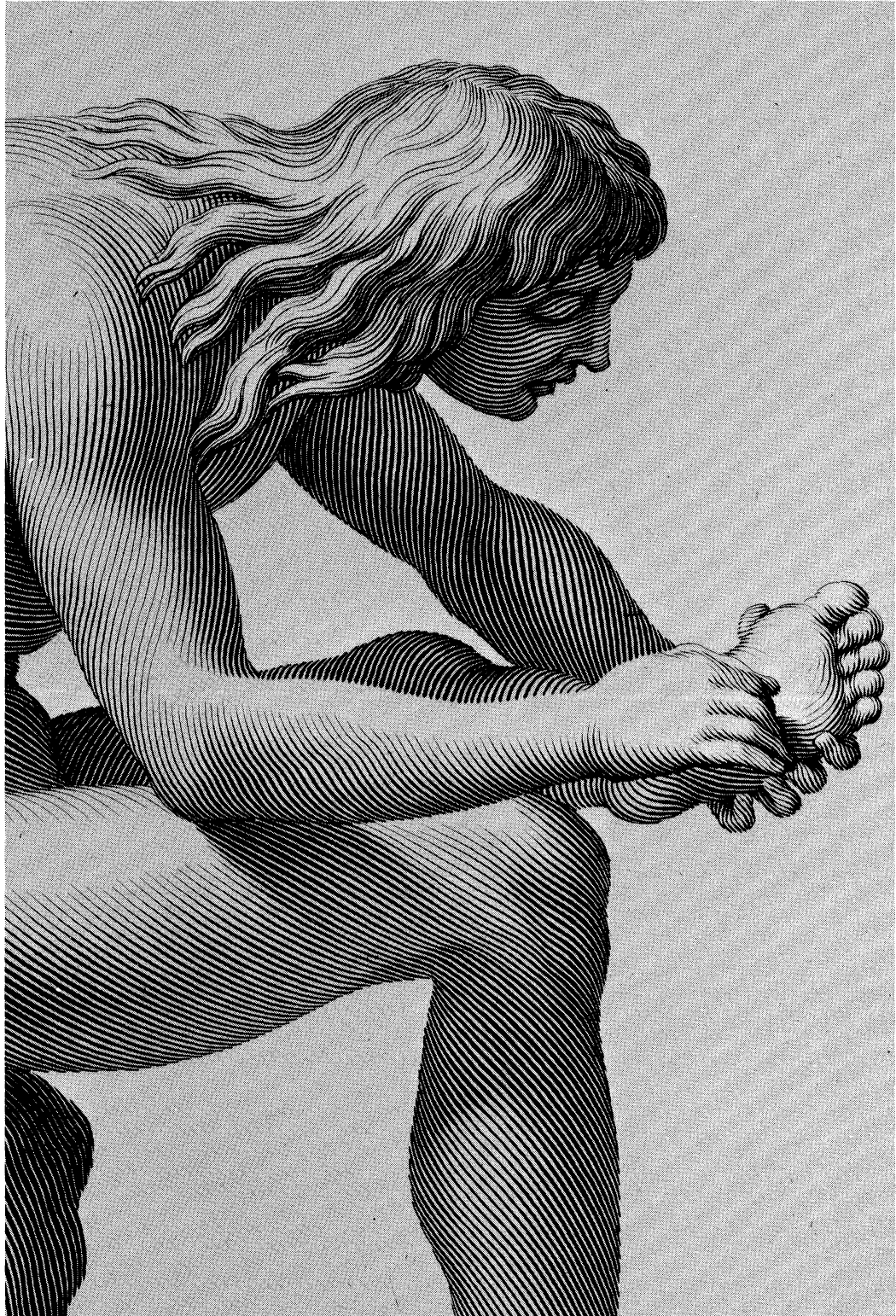
Now, to come back to prints—the earliest engravers had no systematic system of shading or laying their lines. They covered any such portion of the plate as required to be shaded with a series of scratchy, scrabbly, lines, laid anyway. All that they asked of these lines was that they should give a tone to the spots where

they appeared. This can be seen, for example, in many of the so-called niello prints, in the 'fine manner' prints of the Florentine school, and in some of the more primitive prints of the German school. It may be that these prints represent the goldsmith's tradition of drawing. However, it was not long before trained draughtsmen began to make engravings, and as they did so they introduced into engraving their habitual methods of laying lines with their pens. Pollaiuolo and Mantegna drew firm carefully considered outlines, and shaded by using almost parallel lines running tilted from right to left without regard to the direction of the outlines. This gave somewhat the effect of flat washes of monochrome. In Germany the artists, true to their caligraphic habit of drawing, shaded with lines that had a tendency to follow the shapes, as can be seen in the prints of the Master E. S., Schongauer, and Dürer. The Italians spent most of their time and thought on their outlines, and their shading was primarily a rapid way of producing an added sense of three dimensionality. The Germans put as much time on the mechanical neatness of their shading and its calligraphic slickness as they did on their outlines. They also tried to combine with this all sorts of information about the local details and textures of the surfaces of the objects they represented. Like the Nature of the old physics books, the Germans hated what they thought of as a pictorial vacuum, and believed that a good honest workman should fill his plate from corner to corner. If I may put the matter in philosophical jargon, even the greatest of them saw objects located in a space that was independent of them and unrelated to their forms, whereas the greater Italians saw that space was merely the relation between objects. If you see in this latter way, the spaces between objects become just as important as the objects themselves, for they are actually part of the objects, even possibly their most important part. But the Germans never discovered this, and kept right on filling their plates with objects deprived of space. One result of this was that while the Italians not infrequently achieved a sense of volumes through the quality of their merest, baldest outlines, the

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Si non amplexus gustaßet Sanson amoris
Dalila non vires abripuißet ei.

C. Mellan (?) pinx. et f.                    Romæ Sup. pm.

37. 'Samson and Dalilah', an engraving by Mellan (1598-1688). Reduced.

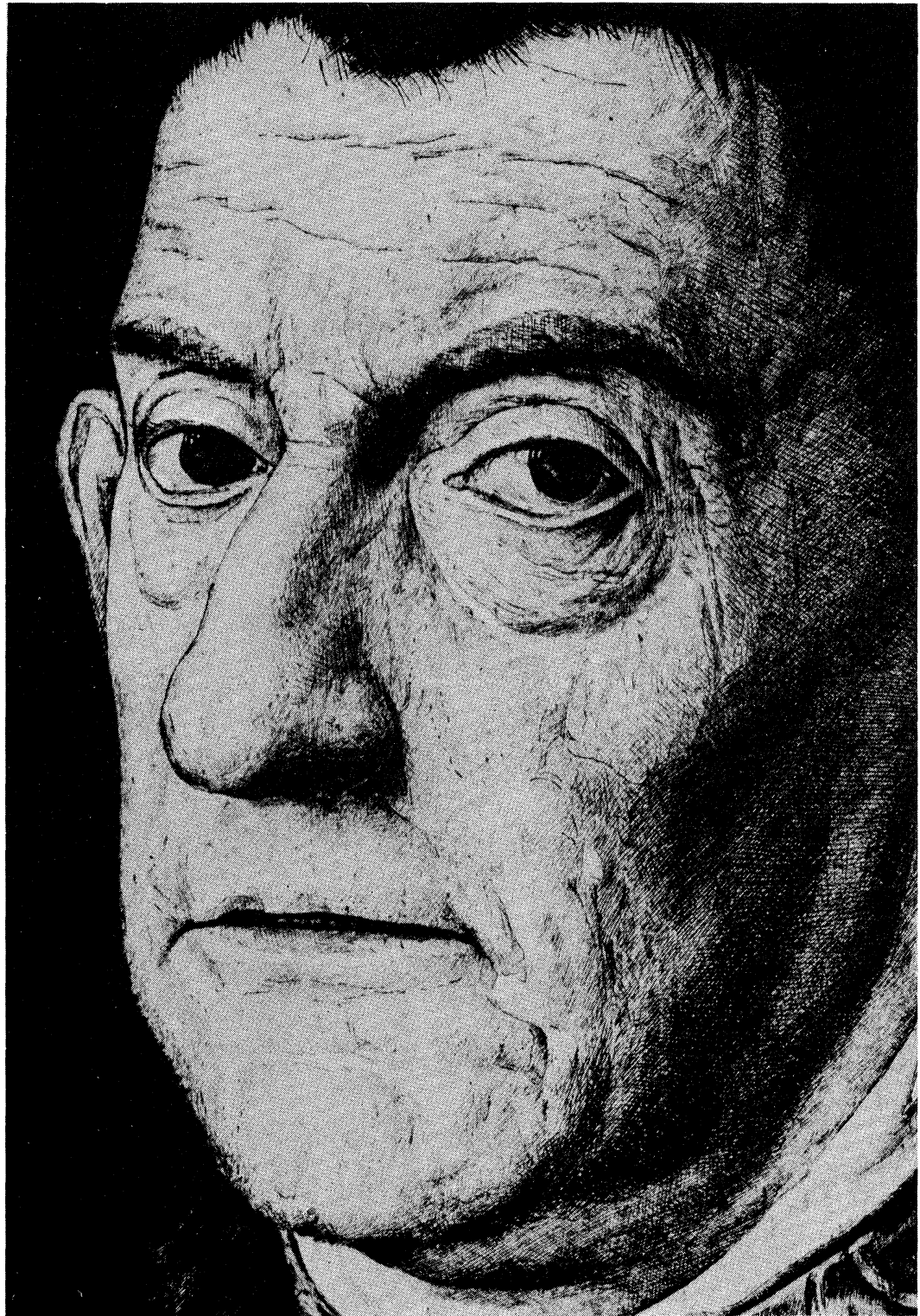38.  Portion of an engraving of 'The Spinello' by Baudet (c. 1636-1678).

39. Face from the engraved portrait of Pomponne de Bellelievre by Nanteuil
(1623–1678). Enlarged.

40. Modern half-tone of detail from the painting of 'Le Mezetin' by Watteau (1684–1721). Reduced.

41. The same detail from the engraving by Audran (1667–1756). About actual size.

42. Face from the engraving after 'L'Homme a l'œuillet' by Gaillard (1834–1887). Enlarged.

**43.** Head from an engraving by Caylus (1692-1765) after a chalk sketch by Watteau. About actual size.

44. Figures from an etching of 'The Agony in the Garden' by Rembrandt 1606-1669). Enlarged.

Germans rarely or never achieved any sense of space or three dimensionality, much as they piled up contour within contour in their system of laying lines. Dürer, as I have shown elsewhere, actually worked out a system of perspective that resulted in a systematic denial of the homogeneity of space. Much of the peculiar psychological quality of his work can be traced directly to this. His various figures and architectural settings frequently have nothing to do with one another and exist in different spaces.

Incidentally, the Germans began to superimpose neat tidy systems of lines running in different directions and thereby produced a shimmer or play of textures that gave a sparkle to their prints, much as though they were textiles woven with several kinds of threads running through each other in different directions. In a way it may be compared to the patterns of the damask table cloths of our youths. While this superposition of systems of lines was easy for the pen draughtsman and for the engraver, it was not practical on the wood-block, for there it infinitely complicated the task of the woodcutter called upon to dig out the whites from between the pen lines on his blocks. Because of this, for example, the linear web of Dürer's engravings is not the same as that to be found in his woodcuts.

Marc Antonio, originally a Bolognese engraver of the primitive goldsmith type, wandered to Venice shortly after 1500, and while there produced engraved copies or piracies of Dürer's woodcuts of the *Life of the Virgin*, which are famous in the literature of prints for various reasons of no material interest. He also made copies of a few of Dürer's engravings. Out of this experience were eventually to come several things of great importance. Without discussing Marc Antonio's artistic abilities, it suffices to say that he spent much of his later life in Rome producing engraved versions of designs by such artists as Raphael and Peruzzi, as well as of ancient sculpture. The details of his relationship with Raphael are vague, indefinite, and unreliable. The earlier copyist engravers who had worked after Mantegna's pen drawings had simply copied the lines that Mantegna made with his pen. But Raphael's drawings

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were not of that type. His outlines were broken, and within these there was no close system of shading, but they conveyed an amazing sense of three-dimensionality, that is of volumes. Dürer and his German predecessors were practically devoid of this sense for volumes. Some way had to be devised of conveying this so important sense for volumes in the engravings after Raphael's drawings. Here Marc Antonio's experience in copying Dürer gave him the answer, but one that was far different from anything that Dürer himself ever did. Taking elements from Dürer's two different linear systems, that for his woodcuts and that for his engravings, Marc Antonio devised a kind of shading that represented not the play of light across a surface, and not the series of local textures, but the bosses and hollows made in a surface by what is under it. In a way it corresponds closely enough to the kind of drawing that is familiar in the maps of the geodetic surveys. With the curious Italian logic of his time he reduced this to a sort of rudimentary grammatical or syntactical system. Lucas of Leyden, fascinated by this, ceased to be an inspired teller of fairy tales and became a great theoretical grammarian of the engraved line. The followers of the two men in the south and the north eventually developed the idea into a very full fledged linear syntax. The phrase that Professor Saintsbury used in describing what he called English Augustan prose style may be applied to it. It was a most adequate instrument for an average purpose. It was fitted for the average skill of the average engraver, for it enabled him to produce tidy organized linear webs that called for no mental alertness. It could be learned as a routine. Marc Antonio's invention of it undoubtedly had much to do with the great esteem in which his work was held during the long reign of reproductive line engraving.

While this syntactical development was taking place, print publishing came into being as a specialized, specific trade. Prior to this time, so far as the records seem to show, goldsmiths and painters had made engravings with their own hands, professional engravers had worked independently for their own profit, and some of them had copied or pirated the drawings and prints of

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other men. The earliest corpus of etched work, that of the Hopfer family of Augsburg, consists almost entirely of rapidly made copies of other men's work. Etching was the quickest way there was of getting out prints. For many years this was undoubtedly its principal virtue in the eyes of the trade. But the print publisher, unlike the painters and the independent engravers, was a capitalist entrepreneur. He hired men to make prints for him, which he stocked, and published, and dealt in just as though he were an ordinary manufacturer-dealer. He owned the plates and they represented a large part of his invested capital. His only reason for being in the business was to make money.

Lafreri in Rome and Cock in Antwerp may be taken as typical of the tribe. They determined what their prints should look like, just as they determined what they should represent. Lafreri discovered the horde of travellers who came to Rome and wanted to take home with them pictures of what they had seen there. So he had prints made which he sold singly, or in sets, or in complete collections. Cock in the north, himself an engraver, also realized the popularity of Italian paintings and subjects, so he made drawings of them and had other artists make them for him, and then had the drawings engraved in his shop by his employees. He did the same thing for the work of the popular northern painters. Pieter Brueghel the elder provided him with many drawings of landscapes and satirical subjects to be engraved.

In the course of this commercial development a curious thing happened. Functions that had been filled by one man got split apart in a specialization of labour. The painter painted. The draughtsman for the engraver copied in black and white what the painter had painted, or the Roman view, or ancient statue. The engraver rendered the drawings of these draughtsmen. The engravings in consequence were not only copies of copies but translations of translations. Except where the engraver had before him a pen-drawing, such as one of Brueghel's, which was at one and the same time an original work of art and a detailed set of plans and specifications for the lines of the engraving which the engraver could

copy as directly and slavishly as some of the early copyists had copied the drawings of Mantegna, he—the engraver, that is—had to translate all the various kinds of drawings that came to him into some kind of standardized linear system. That is what happens in shop work done for an entrepreneur whose name is signed to the finished work. The 'house' develops a style and a quality by which it is known and which it does not willingly part from after it has become known. It is part of its 'good will'. This is one of the reasons that etchers and engravers who have been tied to particular publishers are so apt to show little artistic development in their work and to make so few experimental plates. What their employer wants from them is just what the farmer wants from his laying hens, a regular production of eggs of the same standardized size, colour, and weight. The only way to secure this is through the adoption of a syntax of the laying of lines for an average purpose. What Marc Antonio and Lucas of Leyden had adventuresomely started was reduced to a wholesale practice and technique of the standardized article.

Of course this development was not as simple and direct as my account of it, for there have always been artists who have thought and worked in their own ways, making works of art. However, in the vast field of prints for information, for profit, for propaganda, for sale to anyone and everyone, I believe my account is substantially true. It is important to observe that this development took place just in the period when the shift from the woodcut to the copper plate began in the illustration of books—and my account is borne out by the illustrated books and the countless sets of views and allegories and beauties and fancy subjects and pieties that lumber up the great European collections and the dusty shops on such streets as the Rue Bonaparte and the Rue des Beaux Arts. The names of the most proficient practitioners appear lumped together in the dreariest paragraphs of the conscientious historians. What we forget, however, in our boredom with these dull things, is that it was exactly they which constituted the back bone of the print trade and which gave the world such visual

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information as it had of the things represented in them. The great influence of Italy on the north, and later that of Paris on the rest of Europe, was exerted through reproductive prints which carried the news of the new styles. If we would understand those influences and the forms they took, we must look not at the Italian and Parisian originals but at what for us are the stupid prints which the publishers produced and sold in such vast quantities. This is a point that is all too often overlooked by art historians.

Standing out from the dull industrious day labourers in the vine-yard there was a little group of virtuosi of the engraver's tool, whose names and performances were famous so long as the world had to depend on engravings for its information about the shapes of things that were not at hand for inspection. As always happens when there is a distinction between the creative artist and the performer, as for example in music and on the stage, people lose their sense of discrimination. The performer ceases to be a puppet moved by the creator and becomes a person in his own right. People knew Garrick's *Hamlet* and not Shakespeare's. The self-assertiveness of the performer shows itself in the invention of mannerisms and tricks calculated to call attention to himself at the cost of the explication of the creator's ideas. Where the creator creates characters and situations, the performer exhibits and emphasizes himself, and, curiously, he does this even when he writes the plays in which he is the star actor. A very great deal of the standard history of prints is devoted to prints, both 'original' and 'reproductive', which are neither more nor less than the performer's assertions of his own physical personality. Thus in engraving there were performers who made great specialties of the rendering of glass and shiny metal, of silks and furs, and of foliage and whiskers. It is impossible to think that even so great an artist as Dürer was not tainted by this sort of virtuosity. The virtuoso engravers chose the pictures they were to make or reproduce not for their merits but as vehicles for the exhibition of their particular skills. The laying of lines, swelling and diminishing, the creation of webs of crossed lines, of lozenges with little flicks and

dots in their middles, the making of prints in lines that all ran parallel or around and around—one engraver made a great reputation by the way he rendered the fur of a pussy cat, and another made a famous head of Christ that contained but one line, which beginning at the point of the nose, ran around and around itself until it finally got lost in the outer margin,—stunts such as these became for these exhibitionists not a way of saying something of interest or importance but a method of posturing in public. Naturally the great showmen became the models of the less gifted but equally stupid routine performers, for all these trick performances contained far more of laborious method than of eyesight or draughtsmanship.

The webs spun by these busy spiders of the exactly repeatable pictorial statement were in some respects much like what the geometers call the 'net of rationality', a geometrical construction that catches all the so-called rational points and lines in space but completely misses the infinitely more numerous and interesting irrational points and lines in space. The effect of these rationalized webs on both vision and visual statement was a tyranny, that, before it was broken up, had subjected large parts of the world to the rule of a blinding and methodically blighting visual common sense. What was not according to the book of deportment for the makers of exactly repeatable pictorial statements was not only 'not done', but, worse, it was bad manners.

# IV

## THE TYRANNY OF THE RULE

## THE SEVENTEENTH AND EIGHTEENTH CENTURIES

I N the first half of the seventeenth century five very remarkable men made or published prints. Roughly speaking they were contemporaries. Between them they had great influence on the kinds of prints that were to be made for a long time. For three of them print-making was a business, a business to be minded just as carefully as any other commercial undertaking. These three were Rubens, Callot, and Bosse. Another made prints to please himself, apparently paid no attention to commercial considerations, and died in an asylum. This man was Hercules Seghers. The fifth man was Rembrandt, who went bankrupt years before he died and, never being discharged, had thenceforth little interest in money-making. Thanks to the later development of photography and photographic process, while we remember a good many prints of the Seghers-Rembrandt tradition, we have forgotten all but a very small part of the prints that came out of the Rubens-Callot-Bosse tradition, except as oddities that we sometimes see in old-fashioned houses and collections.

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