### THE FIGURATIVE THOUGHT

# OF THE RENAISSANCE

Attempts to reconstruct the "psychology" of a past era always have a specious side which should properly be mistrusted. Was the "Renaissance man" a visualizer? Arguments for and against this thesis have been found, but nothing can be solved, because it will always be impossible to prove that a phenomenon, even if it is very widespread and completely characteristic of a given period, is symptomatic of a particular psychic constitution of the men of that time. If the writings and the art of the sixteenth century seem to us to include the elements of a complete logic of figurative thought, which would certainly be of interest for the history of intellectual methods, the fact as such must not be translated into terms of the psychology of individuals.

Theoretically, the idea of a logic using metaphors and images instead of universals depends upon a broader question, also debated in the schools and in the treatises since the first codifications of medieval culture: Is logic a descriptive or an instrumental discipline? Or, as it

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was said then, is it a science or an art? It is a science if its objective is to define the elements, the nature, and the formal conditions of true thought; it is an art (in the old, broad sense of the word) if it helps men in true thinking. But, according to Aristotle, art is concerned with the singular. Strictly speaking, logic would then always be an art. because thought is always "situated" before a problem, and because every problem is, as such, a unique case. To reflect upon the nature of negation, or upon the definition of definition, is to behave as an "artist," as a man who seeks to solve a singular difficulty; science comes only afterward, for it is merely the corpus of the acquired and transmitted truths. In addition, the term "art" designates the whole of the processes or the prescriptions which cover and solve all the possible cases within a given field. Fencing, oneiromancy, poetry, the solving of a type of mathematical problem were "reduced to art" when the way was found to mechanize the exercise completely. Logic "reduced to art" would thus teach the manner of winning disputes infallibly or of discovering all the truths accessible to reasoning.

#### BACKGROUND

Lully—who died in 1316—came much earlier than the Renaissance. Yet his system of logic is the origin of a tradition which contributed to art and figurative thought in the sixteen century, and the renewal of Lullism in the Renaissance explains in large part the new logic of the image (unless it is the new logic which explains the renewal). These reasons require that Lullism be taken into account here.

Lully's purpose was to codify "the hunt for the middle term," that is, the invention of links which lead, from general and evident premises, to the solution of any problem which is stated. Consequently, this was an "art" in the old sense of the word, and it would serve to prove the truth of Christianity against the infidels. The means resembled what Descartes would call his fourth rule: "in every case to make enumerations so complete, and reviews so general, that I might be assured that nothing was omitted." To do this, Lully prepared lists or tables giving an inventory of the principal categories of subjects, predicates, "instruments," and circumstances, as well as the methods of variation, combination, opposition, amplification, etc. As in games in which one guesses a word with the help of questions to which only "yes" or "no" answers are permitted, Lully prescribed that one should descend from

simple and general terms toward more complex and more precise determinations. The procedure was facilitated by matrixes and systems of concentric discs, which were revolved one within the other in order to exhaust the possible combinations of the symbols written on their circumferences. Consequently it was essentially a classification rather than a method; the verification of each judgment which was proposed by the combinatory game of the "art" was always intuitive. An acquired result never served, as in algebra, as a rule for acquiring the next result. With each step, one had to start from zero.

There is no logic which is so little abstract as this combinatory art of symbols. Intuition, or even visualization, intervenes everywhere and is served by Lully's matrixes and discs. In the course of the operations, it is the only criterion of truth; and the philosophic background, presiding over the choice and the ordering of the elements, is a *speculum mundi* rather than a doctrine. It is a logic of the individual case and of quasispatial representation. It calls for an "art" of the image.

The dialectic of the humanists, the second source of figurative logic in the sixteenth century, intervenes less directly in its genesis. The great antischolastic reaction has often been described—a reaction which caused the subtleties of terminism, today returned to high esteem, to be long forgotten. Humanism brought about, if not the discredit, at least the relative forgetting of the more technical parts of Aristotle's science-logic, in favor of the logic-art constituted by the Topics, the Rhetoric, and the Poetics. Begun by Petrarch, this reversal of direction reaches, toward the end of the century, the positions of the school of Ramus, at the extreme point of "rhetorization." In this context the immense humanistic vogue of the Topics, the discipline of "commonplaces," was decisive for the fate of the image as an instrument of the intellect. This book formed the transition in Artistotle between the treatises on formal logic and the Rhetoric, and it was almost the only book in the Organon which had a classificatory character. In that sense it was related to Lullism and indeed, along with it, was regularly invoked or understood in the systems of figurative thought.

IMAGE AND IMAGINATION<sup>1</sup>

In principle, any attempt at a logic of the image ought to have con-

1. See esp. M. W. Bundy, The Theory of Imagination in Classical and Mediaeval Thought (Urbana: University of Illinois Press, 1927); G. Verbeke, L'Évolution de la

flicted with the traditional psychology and physiology, because the "interior senses," the faculties of representation, were considered to be radically distinct from the reason and the intellect, the faculties of the universal. The usual doctrine on this question, derived from Aristotle (On the Soul II. 3), was developed by Avicenna, was naturalized in the Christian world by Albertus Magnus, and was related by physicians since Galen to the theory of the animal spirits. It held that these "spirits," vehicles of the sensations, underwent in the three ventricles of the brain, a kind of step-by-step distillation during which the impression received in the organ was intellectualized by degrees and was finally deposited in the memory, in the depths of the third ventricle. These "semi-material" operations, which always concern the images of singular things, prepare the ground for the intervention of intellect or of reason, faculties entirely foreign to matter and which deal with pure universals. Authors did not agree on the number and the names of the intermediate faculties, which ranged from the "common sense" (synthesis of the sensations coming from different organs, but relative to the same object) to the memory. However, the schema of the three ventricles had a very long life, since we find it again even in a youthful sketch by Leonardo. The idea of a ladder of the operations of "refinement" of the image also survived long after the physiology which supplied it. Taken together, these faculties were often designated under the term "imagination."

The aspect which interests us here, and which has interested many inventive metaphysicians, is semi-materiality. The image is midway between the material object and the pure concept; the imagination, formed of the matter of the animal spirits, is midway between the body and the intellect. Lully suggested the existence of an imaginative soul between the sensitive soul and the rational soul; the Neoplatonists had supposed that a semi-material "vehicle" (analogous to the astral body of the occultists) received influxes from the planets, spoke with the gods during dreams, was modified during our lifetime, according to the character of our thoughts and desires, and thus gave to the soul an imprint which might possibly carry it to hell after death. (The

doctrine du pneuma (Paris and Louvain, 1945); Marian Heitzman, "L'agostinismo avicennizzante di Marsilio Ficino," Giorn. critico della filosofia ital., Vols. XVI and XVII (N.S. III and IV); R. Klein, "L'Imagination comme vêtement de l'âme," Revue de métaphysique et morale, 1956.

influence of Origen and of Avicenna produced in the Christian Occident several variants or partial resumptions of these theses, particularly in John Scotus Erigena, Hugh of Saint-Victor, Marsiglio Ficino, and Bruno.)

From this we may deduce that the logic of images could be only a "semi-logic." Two possibilities remain open to it: either to imitate the operations of the intellect with this imperfect material (the visual representation of the singular) or to establish in the service of the intellect an "art" of applied thought. Logic-art is indeed impossible without the imagination—for just as this faculty had to intervene for the "ascent" from sensation to intellect, it is necessary for causing the "descent" or for applying the concept to the sensible object. Giordano Bruno called this particular function of the descending imagination scrutinium; it corresponds almost exactly to Kant's Urteilskraft ("Judgment").<sup>2</sup>

Each time that the image, in the Renaissance, tends to be substituted for the concept, for one reason or another (in mnemonic systems, in the philosophy of art, in emblematics, in the "thinking machines" of Giulio Camillo or Bruno), it can be seen that figurative thought is set up as a logic by two methods at the same time; the (imperfect) imitation of the "science" of universals, and the establishment of an "art" parallel to the logic of concepts.

#### ARTS OF MEMORY<sup>3</sup>

As early as the practical manuals of antiquity intended for the use of orators, it was apparently admitted that the best way to memorize ideas or words was to associate them with images. Starting with this idea, Cicero, Quintilian, and especially the anonymous author of the Rhetorica ad Heren nium described the fundamental principles of

- 2. The idea of an imagination-discrimination is at the origin of all theories of taste in the seventeenth and eighteenth centuries, and it may be said that through this intermediary Kant's *Critique of Judgment* is related to the psychology of Renaissance Platonism.
- 3. L. Volkmann, "Ars memorativa," Jahrbuch der kunsthist. Sammlungen in Wien, N.F. III (1929); Frances A. Yates, "The Cicieronian Art of Memory," in Medioevo e Rinascimento: Studi in onore di Bruno Nardi (Florence, 1955), II, 871-903; P. Rossi, "La costruzione delle immagini nei trattati de memoria artificiale del Rinascimento," in Umanesimo e simbolismo: Atti del IV Convegno di studi umanistici (Padua, 1958), pp. 161-78.

mnemonics, which were still applied in the same way in the sixteenth century, with a remarkable persistency. For each point or sentence of his speech the orator imagined a visual symbol attached to the objects or places he could see from his rostrum, arranged in an easily retained order. When he spoke, he would "read" his text by running his eyes over the scene before him. More experienced speakers could give up this support furnished by the locale where they performed and would choose other "places" which they knew by heart and which they were sure they could evoke at the desired moment, after having linked them mentally to arbitrary "images."

The literature of the Artes Memoriae, which flourished in the fifteenth and sixteenth centuries (Peter of Ravenna, Romberch, Rosselli), multiplied infinitely the subsidiary rules and the more or less convenient processes, using homonyms or the Aristotelian laws of association of ideas, introducing the rebus, etc.—but the essential element was always the principle of creating a "place" and situating the "images" in it. The series of places recalled the order, and the images evoked the objects.

In theory, memory is assimilated here to imagination, as with the psychologists; but on the other hand, this mnemonics certainly imitates logic, though perhaps in a less evident manner. First of all, the evoking image differs little from the universal or from the word as sign of the universal. This imagined design is a kind of symbol, or as it was called, a "hieroglyph." Vico will even talk of a "universal of the imagination" which he distinguishes from the universal of reason. In addition, the necessary intervention of the place of the images—a characteristic and distinctive feature of ancient mnemonic systemsgives to the evoking element a binomial structure, analogous to that of the logical judgment. The place-image relationship reproduces the subject-predicate relationship. By the same means, the memory can visualize the order or the arrangement, without reifying it; the analogy with the realm of speech is thereby so close and was so well perceived that a mnemonics expert of 1610, J. H. Alsted, wrote: "Therefore, if order is the mother of memory, logic is an art of memory."4

Alsted was influenced by Lully and Renaissance mnemonics naturally

<sup>4.</sup> Systema mnemicum duplex (Frankfurt, 1610), quoted by P. Rossi, op. cit., p. 174, n. 32.

reminds us of Lully. Fundamentally it posed the same problems as logic—the problems of combination of elements, and particularly those of classification for the system. Both also have as their primary task the creating, by symbols, a unitary and complete representation of the world. "The tree of sciences" is apparently one of Lully's inventions, quickly adopted, and with good reason, by the arts of memory. Inversely, any mnemonic device could also serve the Lullians, in order to shorten the tiresome consulting of tables. Rapidly the merger became total-Lully's art was used as an art of memory, and the symbolism of pure mnemonic arts was carried over into expositions of the "arts of inventing." This extension is all the more explainable because, according to Augustine's famous analysis (Confessions X. 8, 27), the memory was much more than a depository of representations. Both the container and the content of the mind, memory was the proof of its autogeneration, its productive faculty par excellence. "The art of inventing" naturally found a place here.

### DESIGNS AND CONCEPTS<sup>5</sup>

In establishing his parallel between science and art, Aristotle had prepared the way for the theoreticians of figurative thought. Indeed, he discovered a profound analogy of structure between these two activities of the mind. According to him, art always proceeded by distinct stages: first, "conception," then "execution." (Their fusion today, even outside the influence of Alain, is a common truth, although a recent one, going back three centuries at most.) Conception, or "creation of the concept," belonged to the order of science, and for many theoreticians of letters and the plastic arts, it was the only thing which counted. According to them, a Raphael without hands would still have been a great artist; Francisco de Hollanda even said, about 1545, that a painter who "imagines" well cannot be a bad painter. If a master left a work unfinished because he was unable to attain the ideal "conceived" in his mind, that did not appear to be a defect, but a merit,

<sup>5.</sup> See esp. E. Panofsky, *Idea* ("Vorträge der Bibl. Warburg," Vol. V [Leipzig, 1924]); also L. Volkmann, *Bilderschriften der Renaissance* (Leipzig, 1923); K. Giehlow, "Die Hieroglyphenkunde des Humanismus," *Jahrbuch der kunsthist. Samml. d. allerh. Kaiserhauses*, Vol. XXXII (1915); E. Gombrich, "Icones symbolicae," *Journal of the Warburg Inst.*, Vol. XI (1948).

<sup>6.</sup> Francisco de Hollanda, Four Dialogues on Painting, trans. Aubrey Bell (Oxford University Press, 1928), p. 64.

a proof of the excellence of the concept. (It was by this turn that the sixteenth century became accustomed to enjoying the unfinished in art.)<sup>7</sup> Since this completely interior creation is, in principle, indifferent to the manner in which it is "expressed"—in colors, volumes, or words—it follows that a man who possesses the essence of any art possesses all the others, at least virtually. Here again we find one of the Renaissance axioms which leaves today's aesthetician or art critic perplexed, though in its time often stated and illustrated triumphantly by the example of Michelangelo. Francisco de Hollanda said: "Indeed I sometimes think and imagine that I can find among men but one art or science, that of drawing or painting. . . ." Sixty years later, another painter, Federico Zuccaro, wrote a very curious book to defend this thesis.

The "concept," which is the core of all art, is most often assimilated to a kind of interior design. The ambiguity of the Italian disegno (English "design") has long been noted. Its two meanings were rendered in French by the related words dessin and dessein ("design" in the sense of "sketch" and "design" in the sense of "scheme"); the sketch or dessin exists only to "designate," operating as a function of the mind's intention. In general, for the Renaissance, to think is to project, and to project is to spatialize: devise ("project") is of the same family as deviser ("to discuss," "to speak") and devis ("plan" or "specification"; compare Italian divisare, English "to devise")terms which presuppose that the time (that is the future) and the action to be executed (that is the idea) may be cut into pieces or "divided" like a cake. After 1500, artists noted proudly that in Greek graphein meant both to sketch (dessin) and to write, and about the same time the rebus (one of Leonardo's favorite pastimes) and hieroglyphic pictography were assiduously cultivated.

The assimilation of the concept to an interior design or sketch is not entirely new in the sixteenth century. In particular we may cite John Scotus Erigena, for whom every "definition" traces the contour of a universal, and who considers the category of *place* in Aristotle as applying solely to the quasi-extension in which ideas are "sketched."

<sup>7.</sup> A. Chastel, Art et humanisme à Florence au temps de Laurent le Magnifique (Paris, 1960), pp. 327-34.

<sup>8.</sup> Francisco de Hollanda, op. cit., p. 36.

In the Middle Age, Platonic ideas are often presented as little images, the true models of the things which participate in them. But the Renaissance, particularly in its theory of art, exploits the analogy with inexorable tenacity. Vassari, in the introduction to his famous Lives of the painters (1550), defined design by using as his sources a sentence in which Aristotle described the formation of the abstract concept, starting from the sensation.9 The image-type of a thing, retained by the memory when one has seen many objects of the same kind, is already a kind of plastic abstraction. There is no distinction between the man of learning and the painter who "possesses" the design of the human body, that is, who knows how to reproduce it without a model. Any difference between the mnemonic image and the universal is simply ignored by J. Huarte: "Now it is necessary to know that the arts and sciences studied by men are only images and figures which their minds have produced in their memories, and which represent vividly the condition and natural composition of the subject considered by the science which man wants to learn."10 This resembles the dream of an entirely intuitive science, with no universals other than image-types.

Similar examples can be found everywhere. Scaliger, in his *Poetics* (1581), the basic manual for a whole century, defined, as John Scotus Erigena did, the figures of style by the "contours" which words design

9. "For the design, which proceeds from the intellect, extracts from several objects a universal judgment, similar to a form or an idea of all the objects of nature, which is quite regular; from this it results that it recognizes . . . the proportion of the whole with the parts, and of the parts among themselves and with the whole. And of this knowledge is born a certain judgment formed about this thing in the mind; and, when expressed by the hands, this judgment is called design" (Vite, ed. Milanesi, I, 168 ff.; English based on the author's French translation of the passage. Cf. Aristotle, Posterior Analytics II. 19. 100a 4-13: "So out of sense-perception comes to be what we call memory, and out of frequently repeated memories of the same thing develops experience; for a number of memories constituted a single experience. From experience again-i.e., from the universal now stabilized in its entirety within the soul, the one beside the many which is a nigh identity with them all-originate the skill of the craftsman and the knowledge of the man of science, skill in the sphere of coming to be and science in the sphere of being" (G. R. G. Mure [trans.]), Basic Works of Aristotle, ed. Richard McKeon [New York: Random House, 1941], p. 185.). Also Metaphysics I. 1.981a 5-7: "Now art arises when from many notions gained by experience one universal judgment about a class of objects is produced" (W. D. Ross [trans.], Basic Works, p. 689).

10. Examen de ingenios (1578). English from the French Examen des esprits pour les sciences (1645), pp. 7-8.

(III, 30). On the walls of the City of the Sun, Campanella imagined paintings which would teach all the sciences, without commentaries. In 1607 the painter-theoretician Federico Zuccaro developed a complete epistemology of design (disegno), conceived according to the Thomistic doctrine of universals but adorned with Platonic elements. Here, the internal design (disegno interno) replaces the pure concept, and the imagination, mother of concetti, is substituted for the possible intellect of the scholastics. Giordano Bruno is representative here as he often is elsewhere of the final step of the evolution-according to him, to think is at the same time to paint and to invent, like the poets. Notions are images and fictions. But in his statement, emphasis is changed: "The first and principal painter is the faculty of Phantasia [imagination], and the first and principal poet is the impulsion or the effort of the fresh enthusiasm of meditation which drives us by a divine or seemingly divine inspiration to express suitably something we have conceived. Both have the same immediate source—thus philosophers are, after a fashion, painters and poets, poets are painters and philosophers, and painters are philosophers and poets . . . for a man who does not know how to paint and feign is no philosopher."11 The pure notion belongs to the philosopher, the disegno-project (the conception, the "plan") to the painter, the expression to the poet; but the essential element of the classic thesis, the distinction between conceiving and expressing, is formally rejected here.

If the image can thus be a universal—the first condition of a logic of figurative thought—this is, in the eyes of the Neoplatonists, by virtue of a more general psychological background: belief in the possibility of an intellectual intuition. Renaissance symbols are often supra-intelligible mysteries, reduced to an image.<sup>12</sup> The religious respect with which hieroglyphs were regarded is one proof of this (they were considered to be a symbolic pictography which summed up all the "poetic theology" of the ancient wise men). Sixteenth century Lullism became "modern" by adopting occult symbols, particularly astrological ones; and, under the guise of an apocryphal writing, Lully was related to the

<sup>11.</sup> G. Bruno, Opera latina (Ediz. Nazionale), II, No. 2, 133-34.

<sup>12.</sup> E. Wind, Pagan Mysteries in the Renaissance (New Haven, 1958). It is true that the writer denies any link between intellectual intuition and the visualization in the symbolism; cf. however, the quotation from Ficino in the lines below.

Christian cabalo. Figurative thought sometimes was held to be superior to speech. "The Egyptian priests, to signify the divine mysteries, did not use the alphabet's tiny characters but the complete figures of plants, trees, and animals, because God's knowledge of things is not like a discourse on them, but like the simple, stable form of the thing." <sup>13</sup>

### THE SYMBOL AS STATEMENT<sup>14</sup>

The theory of emblems and of similar forms of expression (reverse sides of medals, the language of flowers and colors, festival allegories, etc.) is another step in the direction of the complete model of logic. The image of the mnemonic art had been linked to the "interior senses"; the design ("sketch") was already, in principle, a concept and a universal, but the emblem is a declaration or judgment. Among the many variants of these speaking symbols, the most revealing is the impresa, the personal emblem of a gentleman or of a literary man. Generally it was an image associated with a short maxim in such a way that the two elements represented together by metaphor a characteristic or an intention of the bearer. The classic example is the *impresa* of the Emperor Charles V-the columns of Hercules with the motto Plus Oultre.15 (On the other hand, in a true emblem, a maxim was not necessarily tied to the image, and the sense expressed was a general truth of a philosophic or moral order. Consequently the structure of the symbol was much simpler.)

According to an undoubtedly rather simplified account by Giovio in 1550, the fashion of the *impresa* probably spread in Italy after the first French invasion in 1494. It had a double root—military or chevaleresque and worldly or poetic. Later, around 1570, after Giovio and his many imitators, the rules of the game became complicated and the

- 13. Marsilius Ficinus, Comment. Plotinus, on Enneade V. 8,6.
- 14. In addition to the works by Volkmann, Giehlow, and Gombrich, cited in n. 5 above, see esp. Mario Praz, Studies in Seventeenth Century Imagery (2 vols.; London: Warburg Institute, 1939–1947); and R. Klein, "L'Expression figurée et les imprese," Bibl. d'humanisme et Renaissance, Vol. XIX (1957).
- 15. M. Bataillon has recently shown that the meaning of this symbol was originally purely moral: the Emperor "went farther" than Hercules, the hero who traditionally represented the virtues of rulers. The application to the possessions in America was added after the fact. It should be noted that an *impresa* which would have done no more than to express flatly a datum of political geography would have been felt to be defective, because it would have lacked the essential element, the metaphor.

custom grew academic and pedantic. In the early seventeenth century, the instrument was ready, the rules fixed, the classification of symbols determined. This preparatory phase ended with the two voluminous publications of Biralli and Hercole Tasso, and people could begin using the *impresa* for edification, political propaganda, or pedagogy, with a virtuosity which soon became quite brilliant. This development changed its character radically.

In the meantime, the prefaces of the collections of examples had furnished the elements of a logic. The imprese were means of expression and it was necessary first of all to define them as such, classifying them along with the gestures, with words and with alphabetical or pictographical writing. In this way their distinctive feature was discovered: they are neither conventional signs nor more or less schematic imitations of the designated object, but "indications," which translate one idea by means of another: figures, "veils." Their structure was itself complex and veiled: first there was the message, the idea in the raw state-for example, "I have chosen the love which kills me." Next the metaphor ("comparison" or "concept"), which might be rendered either by a drawing, by words, or by composite forms; in our example, this could be the moth flying toward the flame. Finally comes the "covering," that is, the design and the maxim, which had to be associated in such a way that neither of the two elements was completely clear without the other. When this is done, the insect and the candle will be shown, accompanied by the words, "I know it well."

On this practically constant structural canvas, theoreticians embroidered with remarkable subtlety. The different definitions and rules of the *impresa* (each writer proposed his own system) very nearly permit us, today, to distinguish currents and schools. We might say, in a general way, that on the one hand were the "logicians," who made the art of the *impresa* a copy of the forms of demonstrative thought, while on the other hand are the "artists," who discover in the *impresa* the structure of the work of art as conceived by Aristotle. Among the "logicians" the prevailing tendency was sometimes toward an assimilation of the whole to a simple universal; then the essential role of the comparison was juggled into the definition, and the comparison was reduced to the rank of a simple instrument (Bargali, Montalto) and the discursive character of the metaphor was attentuated as much as possible: for example, the use of a verb in a personal form was not allowed in the

maxim. Other logicians, however, related the *impresa* to the judgment (example: a yoke with the motto *soave*, "patiently"). For them, the initial element is not the statement of the bearer, the bare idea, but the "resemblance" between this idea and the image which expresses it (Contile). There were also *imprese* treated as syllogisms (an empty escutcheon with the maxim: "What I desire is not mortal." A number of writers at the end of the century even furnish the outline of a Topics of an "art of inventing" the *imprese* (especially Caburacci). All of Aristotle's Organon was provided with an emblematic duplicate.

On the other hand, the artists of the *impresa* were particularly interested in the relationship between the two perceptible elements, the design and the maxim. For these "artists," the definitions themselves may often contain a compendium of rules, in order to emphasize that the essence of the *impresa* lies solely in its construction. They refine freely upon an organicist analogy; according to Alessandro Farra, the *impresa* had an intellect, a rational soul, a fantastic spirit or body, a temperament or sensitive quality, and matter—which is, according to the Neoplatonic philosophy of Florence, the whole structure of man.

In reality there was a wide area of agreement here between the "artists" and the "logicians." For both, the *impresa* was the "embodiment" of a concept, and both admitted that this embodiment could take place only by virtue of "veils." It matters little where the emphasis is placed. For the former, it is on form and means; for the latter, on the meaning conveyed. Theoreticians of the century always considered the conception-expression duality as the common essence of discourse and of art, which are two variants of an identical function of mind—the conception and translation of an idea. Art is always discourse, because the work must be wholly conceived before being realized; and discourse is always art, because it is always addressed to a task which is singular, and because the imagination is the necessary intermediary between the universal which has been thought and the singular to which it applies. Precisely like the significant design, word and discourse are only image, metaphor, and veil.

## THE SYSTEMS<sup>16</sup>

All these elements of a new logic come together in the sixteenth cen16. We are using the excellent work by Cesare Vasoli, "Umanesimo e simbologia nei
primi scritti lulliani e mnemotechnici del Bruno," in *Umanesimo e simbolismo*, op. cis.,
pp. 250-304. Other material in our article is referred to in n. 1 above.

tury in the common background of a transformed Lullism. The first syntheses were developed around 1530. Lavinheta turned Lullism into a non-visual mnemonics; Cornelius Agrippa brought it close to the topic-rhetoric of the humanists; Giulio Camillo, also starting from topics, grafted on it an emblematics of his own invention and finally made of it a quasi-Lullian *speculum mundi*. Later, at the end of the century, Bruno published his disturbing series of Latin writings, which have been described as emblematized memory arts, serving as a support for a Lullism endowed with an entirely new metaphysical import. In 1615 Nostitz, a German writer, cited as his authorities Lully, Ramus, and Bruno.<sup>17</sup>

The possibility of these syntheses rests on at least two tacit methodological postulates: the existence of key-images for the explanation of the world, and the parallelism between the physical or metaphysical structure of the cosmos and the systematic inventory of the arguments or knowledge of an "art" of the Lullian type. These convenient hypotheses become evident in Giulio Camillo's Teatro, a virtual panorama of all that can be known. It was a sort of imaginary Coliseum filled with symbolic representations, divided according to an astrological scheme of the seven planets and their "domains" of influence, and ordered with as much care, although with more pedantry, than the Divine Comedy; at each intersection or nodal point, it showed a mythological figure or image whose symbol-value was more or less fixed in advance by the current Neoplatonic exegesis. Camillo, originally a professor of rhetoric, had first intended only to facilitate the exercise of memory. To his "artificial brain" (mens quaedam fabrefacta) he attributed extraordinary pedagogical powers, and his charlatan ways gave him a certain measure of success, especially at the court of Francis I.

Fundamentally, the postulates of the new Lullists resulted in a conception of the world which long operated as a counterweight to the mechanistic view of the seventeenth-century physicists. This "realism" of symbols (in the sense in which people talked of the "realism" of universals) required a metaphysics and a psychology, both developed by Giordano Bruno, on a base which was really older.

Its central theme is the active power of forms as forms, in nature and in the mind. "Idea, imitation, representation, designation, notation—

<sup>17.</sup> Vasoli, op. cit., p. 269, n. 50.

there is the whole action of God, of nature, and of the mind," said Bruno. 18 God creates or conceives the Platonistic Ideas in his mind; nature "imitates" them in producing its forms; the human mind takes the representations and uses them to rise to things by "designation" and to Ideas by "notation." Outside this influx of one image on another, of this "imitation" of one image by another, nothing exists, and nothing happens. There is no action whatsoever which has a different character. "Forms, effigies, signs, are like the vehicles and chains by virtue of which the gifts of the upper world emanate, proceed, introduce themselves (into matter) and are conceived, contained, and preserved (in the mind)." 19

Commentary is easy: the "forms" are the Ideas of Plato, the "effigies" are Nature, and the "signs" are the tools of the mind; in ensemble, they constitute a chain of figures bound together, almost magically, and imitating each other. From the world of Ideas (the Intellect of God) "emanate" and "proceed" images "to introduce themselves" into matter; the mind welcomes them in order to "conceive" them by forming the figured universal; it "contains" them in interior operations and "conserves" them in memory, according to the traditional psychophysiology.

The background of this physics and this gnosiology is quite evidently sympathetic magic, that is, the postulate that the resemblance or the affinity between forms and figures can be an active force. Bruno and his predecessors or immediate models on this point, Marsiglio Ficino and Roger Bacon, were interested in magic and in the adjacent areas; the connection was strengthened by the fact that Raymond Lully had been credited by tradition and legend with an advanced interest in magic. And it was also through the intermediary of magic that the transition from metaphysics to the psychology of figurative thought was worked. The infrequently cited but very important little book, in which Bruno founded at the same time a psychology of magic and a magical interpretation of art and rhetoric, bore the title, *On Chains in General*, and contained a classification of the sympathetic relations of form to form.

The usual theories of art, of symbol, and of discussion all asserted that the essential or even unique activity of the mind was to conceive ideas in order to realize them or express them later. As long as these two

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18. Opera latina, II, 3, 89.
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<sup>19.</sup> Ibid., pp. 101-2.

phases remained separate, there could be no true philosophy of figurative thought, expression—whether an arbitrary convention or a mechanical reproduction—being essentially foreign to the idea. The hypothesis permitted only the discovery that any expression is always veiled, because there is no means of communicating pure thought, of "showing" ideas directly. But the postulates of the renewed Lullian systems required one more step: the image-symbol, with its double physical and logical function, could no longer be arbitrary. It was therefore necessary to redefine the imagination itself, according to the necessities of a spiritualistic and magical cosmology. For Bruno, this faculty became synonymous with the creative power of the mind; thus mathematical infinity, which traditionally was held to be a product of reason, appeared to him as a discovery of the imaginative power.

The various more or less Lullian "machines" which Bruno proposes to his readers to strengthen their memories and to let them reason on anything at all are much less interesting than the explanations of method with he gives along with them. Often, these little treatises are only collections of methodological aphorisms or commentated symbols—it is up to the learner to figure them out in order to make good use of them. Most of these figures serve to illustrate the anthropology and psychology of the system to which they are integrated. The first sign, the "field," signifies the imagination and corresponds to the "place" in which, according to the mnemonics experts, the figures are inscribed. But the metaphor of the field is an improper one, because it presents the imagination as passive, whereas on the contrary it is the very principle of the mind's fertility; and Bruno corrects himself by defining it as a matrix, as an "inexhaustible womb" of form-ideas.

The book of the *Thirty Signs* adds other images which have to do with the very foundation of the thinking machine: the Tree (derivation or ramification of concepts and science); the Chain (the ladder of images or forms between the Idea and the representation in the memory); Zeuxis or the Painter (visual imagination which frees the archetype or universal from the experience of the multiple;<sup>20</sup> Phidias or the Sculptor (creative imagination which removes the accidental and thus

<sup>20.</sup> The name of the sign is justified by an anecdote of Cicero and Pliny: Zeuxis, unable to find a beautiful enough model for Venus, combined the perfections of the five most beautiful girls of Crotona. It was customary to use this story to illustrate the idealizing power of art "which surpasses nature."

rises from the raw datum, similar to the block of marble, to the Idea, which is the Model); Daedalus or the Craftsman (invention of technical processes of the Lullian art, the artifices of the investigator). This borrowing of symbols from the fine arts was not fortuitous. Bruno carried further than anyone else the assimilation of thought to artistic activity. Fundamentally in his system, reasoning reason is inclosed in the imagination. It should be repeated that this artistic activity is at the same time, and almost for the first time, conceived by him in terms acceptable to us, as a fusion of thinking and doing. Thus the Sign of Signs enumerates the "objects" of the imagination: light, that is, the Intellect-Sun, at the same time the supernatural source and "matter" of knowledge ("the eye which sees itself" according to the well-known formula); color or extended light, that is, nature; figure or contour, signifying, as with the precursors cited above, the science of universals; finally, relief or volume, the synthesis of lighting, color, and design. This is philosophy as a realization of learning. Nothing is more revealing than this passage, which Vasoli has correctly emphasized. For Bruno, the whole ensemble of the mind's activity is, in the final analysis, the creation of a picture: light, color, contour, and relief. One could go no further in striving to justify figurative thought in terms of figurative thought. Forty years later, Cartesianism and physical mechanism will have changed everything. With equal strictness and temerity, it will have formulated a diametrically opposed conception of intellectual activity.