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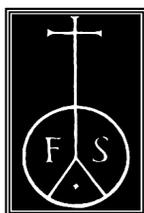
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EMBLEMATICS  
IN THE EARLY  
MODERN AGE

CASE STUDIES ON THE INTERACTION  
BETWEEN PHILOSOPHY, ART  
AND LITERATURE

EDITED BY  
EUGENIO CANONE AND LEEN SPRUIT



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# EMBLEMS, SCIENCE AND PHILOSOPHY. SOME METHODOLOGICAL REFLECTIONS

LEEN SPRUIT

GENERALLY, accounts about the sources of the emblematic tradition include the Greek Anthology, ancient Latin literature, hieroglyphics, the Bible, the works of the Fathers, and proverbs. There are also several types of intersection between the emblematic tradition, on the one hand, and science and philosophy, on the other. Most of the authors of emblem books were scholarly trained, while some of them were outstanding scientists, such as Nicolaus Taurellus<sup>1</sup> and Joachim Camerarius.<sup>2</sup> Furthermore, many emblems are linked to motifs of the 'mind' and 'rationality' of man.<sup>3</sup> Thus, emblem books contain a myriad of explicit and implicit references to philosophers and scientists, as well as to theoretical views and questions. The scientific and philosophical aspects of the emblematic tradition are of various kind and present themselves on different levels. By consequence, they raise several methodological issues: (1) the individuation and selection of possible scientific and philosophical sources; (2) the kind of impact that science and philosophy had on outlook, nature, and content of emblem books; (3) the reception and interpretation of emblems, in particular as to the perception and apprehension of this particular compound of text and image. Now, the variegated doctrinal (i.e. scientific and philosophical) strands that shaped content and nature of emblems, did not occur in 'isolation', but were often intimately linked one to another. More precisely, they were the expression of a specific spiritual and broader cultural milieu in which ancient and medieval sources of different kinds intermingled and generated a coherent, widely shared world view. Then, the possible impact of scientific and philosophical views and doctrines is an extremely intricate question, as large parts of sixteenth-century science, in particular natural history, and emblem books, are manifestations of the same mentality, according to which nature was seen as a book or as a mirror. The third issue, in a certain sense related to the question what the emblematic illustration exactly 'is', mainly regards the sensory and intellectual elaboration of the emblem, and its interpretation by contemporary readers.

Without any pretension to be exhaustive or original, the first section presents an outline of the scientific and philosophical disciplines that determined the spiritual

<sup>1</sup> For discussion, see H. HOMANN, *Studien zur Emblematik des 16. Jahrhunderts*, Utrecht, 1971, pp. 105-22.

<sup>2</sup> For discussion, see the introduction to JOACHIM CAMERARIUS, *Symbola et emblemata. Reprint of the four volumes of the first edition (1590-1604)*, Graz, 1986, and W. HARMS, *On natural history and emblematics in the sixteenth century*, in *The Natural Sciences and the Arts: Aspects of Interaction from Renaissance to the 20th Century*, ed. A. Ellenius, Stockholm, 1985, pp. 67-83, in particular pp. 75-77.

<sup>3</sup> For discussion, see A. MARANINI, «*Col senno e con la mano*»: *Eyes, reason and hand in symbolic transmission*, in *The Italian Emblem. A Collection of Essays*, ed. D. Mansueto in collaboration with E. L. Calogero, Glasgow, 2007, pp. 115-156.

milieu in which emblem books were composed, with particular attention for the specific status of these disciplines in scholarly education.

Section two focuses on two specific disciplinary fields, that is, natural history and alchemy. Natural history, as usually heavily and imaginatively moralised in the medieval bestiaries and lapidaries, contributed to a large proportion of symbols, and in turn, it has been defined in some studies as characterized an 'emblematic' view of natural reality. Also alchemy contributed to the composition of many emblematic themes; in turn, later seventeenth-century alchemical works used emblems as illustrations.

Finally, section three analyzes some aspects of the knowledge transmission in emblems, discussing the relation between *res significans* and *res significata* as well as the role of prior knowledge in the (contemporary) interpretation of the symbolic (and thus often veiled) contents of emblems.

### 1. THE SIXTEENTH-CENTURY BUILDING OF LEARNING

The emblematic tradition arises in the sixteenth century when the Aristotelian-Scholastic view of science and philosophy still dominated the world of learning and scholarly education. Roughly speaking, three groups of disciplines can be distinguished. The major disciplinary fields, including physics (or natural philosophy), metaphysics, logic, psychology, and biology, were directly derived from Aristotle's works and therefore they were viewed as core sciences. They had a bookish character as they consisted mainly of commenting upon authoritative texts. A second group, originating in Hellenistic culture, consisted of mathematical sciences, among which optics, astronomy, geography, statics. They had a loose connection with Aristotelian philosophy and by consequence were considered as inferior to the afore-mentioned disciplines. Finally, there was a group of influential but controversial disciplines, that is, astrology, magic, and alchemy.

Science and natural philosophy had an intricate and multifaceted relationship. First, Aristotelian philosophy had a clear overall structure, but a fairly chaotic substructure, which had become utterly complicated since the introduction of the scholastic method, that articulated in *disputationes* and *quaestiones*. Second, Aristotelian physics and metaphysics were intimately linked to (natural) theology and therefore dominated the pyramid of the scholastic building of learning. This entailed not only that the conceptual frame of individual sciences should not contradict the (Aristotelian) 'principles of nature', but also that the other sciences were presumed to be deducible from the Aristotelian *episteme*. Actually, this alleged subalternity had far-reaching implications. In general, empirical and practical sciences such as medicine and other disciplines originating in medicine (like physiology and natural history), but which had by now started to assume a relatively autonomous status, had a more direct link with Aristotelian issues and concepts. By contrast, mathematical disciplines, such as astronomy, hydrostatics and optics, had relatively more tenuous links with Peripatetic philosophy, and by consequence these disciplines had a somewhat uncertain place as *scientiae mediae* between the theoretical and the practical sciences.

During the Renaissance several complex philosophical movements and currents developed that had repercussions on contemporary scientific culture. Cases in point are Platonism, naturalism, and Paracelsism. This situation could lead to frictions and

eventually to open or veiled conflicts between 'science' – when considered as designating a body of views based tendentially on a direct examination of narrowly defined sections of phenomena – and philosophy, that is a complex of ontological concepts and general categories for the analysis of reality, and some 'physical' assertions deduced from them. As Galen's physiology did not fit entirely with Aristotle's element theory, that of Paracelsus plainly contradicted it, while Archimedean statics was fairly independent of the Peripatetic view of gravity. Ptolemaic mathematical astronomy employed a great variety of sophisticated technical devices, such as, eccentric circles, equants and epicycles, needed merely to save the appearance, irrespective of the real path of a planet. This was clearly at odds with the physical approach of Aristotelian cosmology. Definitely uncertain was the position of chronology, as it was a meeting-point of biblical exegesis, humanist interpretation of ancient texts, theory of the calendar and a reconstruction of datation systems. The specific position of disciplines now considered as unscientific will be discussed below.

The hierarchy between Aristotelian natural philosophy and the sciences entailed more or less strict lines of demarcation between those which may be called descriptive sciences, based on a restricted number of assumptions and which did not require scrutiny into 'underlying' causes, on the one hand, and explanatory sciences, on the other. This hierarchy had particular effects, as is clearly exemplified in the early reception of Copernicanism. Traditionally, astronomy established and predicted the positions of celestial bodies, while the study of their nature and dynamics was a prerogative of (academic) philosophers. In medieval and Renaissance university curricula, astronomy was regarded as a propedeutic discipline, since it belonged to the quadrivium of the liberal arts.<sup>1</sup> This explains why Wittenberg astronomers could appreciate Copernicus' work as a useful set of auxiliary mathematical hypotheses, convinced that there was no urgency on the issue of a cosmological choice. Several sixteenth-century authors, such as Girolamo Fracastoro and Giovanni Battista Amico, attempted to formulate a physical basis for mathematical astronomy that was compatible with Aristotelian philosophy (based on homocentric spheres), but it was not until Francesco Patrizi and Giordano Bruno, who ventured into territories traditionally reserved for mathematical astronomers, that the distinction between astronomy and physics lost its force. Subsequently, the traditional relation between natural philosophy and mathematical sciences came under scrutiny, a new sort of realism developed, and finally, Kepler and Galilei saw how urgent was the need to integrate mathematical astronomy into a new physics.

Astrology, magic and alchemy had a different academical and scholarly status. Until the mid-seventeenth century no neat distinction between astronomy and astrology existed. The distinction drawn by Ptolemy at the outset of his *Tetrabiblos* did not regard separate subject-matters, but different functions, because it was based upon a distinction between a general mathematical frame and its possible 'physical' applications. Furthermore, chairs in mathematics and astronomy, established in the European universities since the fourteenth century, guaranteed the teaching of basic astrology for its use in medicine.

<sup>1</sup> N. JARDINE, *Scepticism in Renaissance astronomy: A preliminary study*, in *Scepticism from the Renaissance to the Enlightenment*, eds. R.H. Popkin and Ch. B. Schmitt, Wiesbaden, 1987, pp. 83-102, on p. 85.

At first sight the case of magic is similar to that of astrology: also magic had a link with contemporary scientific research (in particular, physical, chemical and technological investigations). However, there are also important differences. During the Middle Ages, magic was rooted mainly in folk traditions, and thus theoretically unsophisticated and essentially practical in intention.<sup>1</sup> During the Renaissance, by contrast, a type of magic developed which depended on a complex theory of the world, in which astrological and alchemical notions were mingled. The early modern Hermetic magician, propagated by Giovanni Pico della Mirandola and Marsilio Ficino, believed that the occult virtues, most noticeably the stream of influences emitted by stars and planets, could be exploited to produce results on Earth by certain kinds of ceremonies and incantations. Popular magic at the same time continued to thrive as it has always done, seemingly little indebted to the writings of the learned, though more or less garbled echoes of the thought of Pico or Agrippa occasionally appeared in (manuscript) manuals of practical magic.<sup>2</sup> Magical 'knowledge' did not assume any institutional form, lacked a generally shared theoretical foundation, and was within the reach of analphabets too.

Alchemy was a similar case. It did not attain an academic status because many of its basic views contradicted Aristotelian natural philosophy. It was also considered suspect by the Church as it attempted to overthrow the (divine) natural order. This was because it tended to induce research that contradicted Christian ethics (such as the search for the philosophical stone) and because it was also frequently mingled with magical and astrological elements. From a modern point of view, alchemy can hardly be viewed as a science, as it displays a secret vocabulary and methodology, it lacks a clearcut conceptual framework, and it is largely based on arbitrary procedures.<sup>3</sup> However, alchemy was a depositary of ancient practical knowledge on the properties of several material substances and on ways to produce or combine them. Furthermore, beyond arbitrary and vain views, alchemy was the cradle of ideas that modern post-1650 chemistry would have worked out and confirmed.

## 2. ON NATURAL HISTORY AND ALCHEMY

As to the emblematic tradition, the most important characteristic of the worldview expressed by contemporary philosophy and science (including alchemy, astrology and magic) is without doubt the idea of a hierarchically layered reality. Higher and lower levels are structurally connected by a «*similitudo dissimilis*»: inferior levels reflect superior levels, but not perfectly so. Thus, an intricated network of analogies,

<sup>1</sup> Hermetic magical texts circulated and were studied and commented on; however, Medieval Hermeticism did not have outstanding spokesmen comparable to Pico or Ficino.

<sup>2</sup> F. BARBIERATO, *Nella stanza dei circoli. Clavicula Salomonis e libri di magia a Venezia nei secoli XVII e XVIII*, Milano, 2002.

<sup>3</sup> Recall that medicine and alchemy intersected in various ways, for alchemy as it developed in the Western world in late Medieval times was a science of life as well as of matter. However, an early established, enduring, and significant difference between the two disciplines lay in their levels of institutionalization. That alchemy was practised outside the university and had potentially illicit aspects perhaps constrained its developments in certain ways, but it may also have fostered conceptual freedom.

resemblances, and influences between properties of celestial bodies, herbs, stones, beasts, and human somatic and psychological traits can be traced and exploited.<sup>1</sup> This is particularly clear in natural history and alchemy. Between these disciplines and emblem books exist multifaceted relations, as there may be individuated bi-directional flows of influence and information. Natural history not only furnished information and images to emblem books, it also organized the natural world in a way most similar to that of the emblematic tradition. Also alchemy was among the major inspirations in emblem books; in turn, during the seventeenth century alchemical works started to use emblems as illustrations.

Recent studies have shown that sixteenth-century compendia of natural history and emblem books with their combination of graphic and verbal elements of description and interpretation went hand in hand.<sup>2</sup> Several emblem authors, among whom Nicolaus Taurellus and Joachim Camerarius jr., had a scientific background. As regards Camerarius, one may note a clear alliance of the description and interpretation of nature in his emblem books and his empirical field of research. Thus, the boundaries between natural history and emblem books were fluid. In this construction, zoology occupies a special position, as animals are one aspect of an intricate language of metaphors, symbols, and emblems.<sup>3</sup> Recently, Ashworth has shown that the idea of emblem fitted perfectly with the Renaissance spirit that treasured symbolic meanings and hidden truth. *A fortiori*, the emblematic world view characterized contemporary natural history, as every kind of thing in nature is presumed of having occult meanings. Ashworth illustrates this view with Konrad Gessner's discussion of the peacock, revealing a network of associations based on the cultural matrix made of hieroglyphics, antiquarian interests (in particular for ancient coins and medals), Aesopic fables, mythology, adagial and emblematic tradition. He even argues that the emblematic world view is the single most important factor in determining late Renaissance attitude towards the natural world. Every kind of thing in nature has a myriad of hidden meanings and knowledge of natural reality consists of the attempt to comprehend this web of resemblances. The works of Konrad Gessner and Ulisse Aldrovandi are largely construed on this premiss, and it was not until the seventeenth century, that modern naturalists, such as, Thomas Browne and John Jonston started to dismantle the emblematic world view dispersed with sympathies and correspondences.

Analogously, alchemical representation, like the emblem, is characteristically a fusion of the verbal and the visual, word and picture, and if the formal emblematic

<sup>1</sup> A significant example is the doctrine of *signaturae* in Paracelsus and followers. For discussion, see M.L. BIANCHI, *Signatura rerum. Segni, magia e conoscenza da Paracelso a Leibniz*, Roma, 1987.

<sup>2</sup> W. HARMS, *On natural history and emblematics in the sixteenth century*, in *The Natural Sciences and the Arts: Aspects of Interaction from Renaissance to the 20th Century*, ed. A. Ellenius, Stockholm, 1985, pp. 67-83; W. B. ASHWORTH, *Natural history and the emblematic world view*, in *Reappraisals of the Scientific Revolution*, eds. D. C. Lindberg and R. S. Westman, Cambridge, 1990, pp. 303-32; W. B. ASHWORTH, *Emblematic natural history of the Renaissance*, in *Cultures of Natural History*, eds. N. Jardine, J. A. Secord, E. C. Spary, Cambridge, 1996, pp. 17-37.

<sup>3</sup> The zoological world was seen as a compendium of behavioural models to be imitated or eschewed. For discussion, see J. J. GARCÍA ARRANZ, *Image and moral teaching through emblematic animals*, in *Aspects of Renaissance and Baroque Symbol Theory 1500-1700*, eds. P. M. Daly and J. Manning, New York, 1999, pp. 93-142.

divisions of *inscriptio*, *pictura* and *subscriptio* are not always present, nonetheless alchemical authors and illustrators often draw upon both of the sister arts to enrich, allegorize, or mystify their discourse.<sup>1</sup> For example, in *Atalanta fugiens* (1618), Michael Maier used mythological emblematics to talk about the deep secrets of Hermetic alchemy.<sup>2</sup> The contrast between the naturalism of the emblems and the abstraction in their meaning produces, as it were, an ambiguous space, and thus, the emblems of this book show a variety of hybrid signs that oscillate between different signifiatory orders. In a 1997 paper, Bernard Scholz has convincingly shown that the re-use of emblems in an alchemical context may have implications for the way in which we read both emblems and alchemical texts.<sup>3</sup>

In his study on emblems in Renaissance French culture, Daniel Russell underscored the polysemous potential of the emblematic image, defining it as an «empty iconographical form» and suggesting the possibility that in some uses the relation between the image and its metaphorical or allegorical meaning might become quite tenuous.<sup>4</sup> Now, as Scholz notes, Renaissance emblem writers already considered different uses of emblematic images, and furthermore, an emblematic image with no thought of any application of anysort would be a downright *contradictio in terminis*. The concept of emblematic image needs to be constructed as a pragmatically rather than a semantically based concept. Then it appears that it is an essential feature of the manner in which the emblem possesses its signifying capacity that it retains what one might call an aura of interpretability. Indeed, the treatises of Goossen van Vreeswijck, a Dutch alchemist, miner and metallurgist, illustrate the claim that emblematic images retain an aura of interpretability even after they have been lifted out of their original contexts.<sup>5</sup> In his works, Vreeswijck used the figures published in Jacob Cats's *Silenus Alcibiadis, sive Proteus* (first edition 1618), adapted from the versions contained in the 1659-61 edition of Cats' complete works. Apparently, the use of emblematic pictures brings van Vreeswijck's texts back into the field of the traditional view of nature as a book, including the doctrine of correspondences, resemblances and signatures. However, in his specific case the pictures can also be viewed as mnemonic devices which were meant to fasten the abstract discussion of alchemical processes in the memory of the reader.<sup>6</sup>

<sup>1</sup> *Emblems and Alchemy*, eds. A. Adams and St. J. Linden, Glasgow, 1998, pp. v-vi.

<sup>2</sup> For discussion, see F. MCKEE, *The golden medicine of Michael Maier*, in *The Emblem in Renaissance and Baroque Europe. Tradition and Variety*. Selected Papers of the Glasgow International Emblem Conference 13-17 August, 1990, eds. A. Adams and A. J. Harper, Leiden, 1992, pp. 169-74; G. E. SZONYI, *Occult semiotics and iconology: Michael Maier's alchemical emblems*, in *Mundus emblematicus. Studies in Neo-Latin Emblem Books*, eds. K. A. E. Enekel and A. S. Q. Visser, Turnhout, 2003, pp. 301-323; F. HARZER, *Arcana arcanissima. Emblematik und Mytho-chemie bei Michael Maier*, in *Polyvalenz und Multifunktionalität der Emblematik. Multivalence and Multifunctionality of the Emblem*, eds. W. Harms and D. Peil, 2 vols., Frankfurt a. M., 2002, pp. 319-332

<sup>3</sup> B. SCHOLZ, *Alchemy, metallurgy and emblematics in the works of the seventeenth-century Dutch 'Bergmeester' Goossen van Vreeswijck (1626-after 1689)*, in *Emblematic Perceptions. Essays in Honor of William S. Heckscher*, eds. P. M. Daly and D. S. Russell, Baden-Baden, 1997; here cited from the edition in *Emblems and Alchemy*, cit., pp. 3-23.

<sup>4</sup> D.S. RUSSELL, *Emblematic Structures in Renaissance French Culture*, Toronto, 1996, pp. 238-239, quoted in B. SCHOLZ, *Alchemy, metallurgy and emblematics*, cit., p. 4.

<sup>5</sup> B. SCHOLZ, op. cit., pp. 4-6.

<sup>6</sup> *Ibidem*, p. 22.

## 3. PERCEPTION, APPERCEPTION, AND INTERPRETATION OF EMBLEMS

The emblem is mixed medium and its mode of signification is essentially that of allegory, which derived from medieval Biblical exegesis, from the notion of the Egyptian hieroglyph as an ideogram, and from contemporary Neoplatonism. The intellectual attitude of Renaissance emblem-writers to the hieroglyph was similar to their attitude to nature and Scripture in that the materials from all these traditions are treated as bearing inherent significance.<sup>1</sup> Renaissance Neoplatonists postulated the existence of a natural language in which sign and referent coincided. Therefore, they viewed hieroglyphs as a divine language which transcended arbitrary nature of language through a visual embodiment of a thing signified.<sup>2</sup> In this sense, hieroglyphic writing was an attempt to overcome the fragmentation of language by resacralizing it. Marsilio Ficino, for example, viewed the hieroglyphs of Horapollo as visual Platonic ideas, or as abstract thoughts in visual form.<sup>3</sup> Many Renaissance Neoplatonics searched for a visual embodiment of symbols that was not arbitrary, as they believed symbols to be essential and not conventional. This search can be related to the emblem – defined by Moseley as a pseudo-descendant of the hieroglyph<sup>4</sup> – as a combination of text and illustration.

Indeed, the emblematic tradition presupposed a resemblance between the visible and the invisible. Now, according to Foucault, positing resemblance as a link between signs and what they indicate, the sixteenth-century world of learning condemned itself to never knowing anything but the same thing and to knowing that thing only at the unattainable end of an endless journey.<sup>5</sup> This harsh conclusion has been challenged, however. Richard Cavell has pointed out an important distinction between hieroglyphs and emblems. Hieroglyphs signify directly in a one-to-one relation between word and image, while the emblem in general may have several meanings.<sup>6</sup> According to this scholar, theories of the emblem hinge on the question of arbitrariness: does the emblem function as a unity, or do its components represent an arbitrary arrangement? Inspired to contemporary linguistics and post-structuralist theory, Cavell argues that the emblem in its verbal and visual representation enacts the paradox of language itself, which names through difference, rather than identity. Also other contemporary disrursive practices, such as hieroglyphics, universal language schemes, occult and scientific modes of discourse provide evidence, in the organizing principles governing them, of a radical shift from resemblance to difference, a shift in which the emblem was deeply implicated.<sup>7</sup> In order, to assess this thesis, a brief overview of the rise of modern science may be helpful.

<sup>1</sup> P. M. DALY, *Emblem Theory. Recent German Contributions to the Characterization of the Emblem Genre*, Nendeln-Liechtenstein, 1979, p. 80.

<sup>2</sup> F. A. YATES, *The Emblematic Conceit in Giordano Bruno's «De gli eroici furori» and in the Elizabethan Sonnet Sequences*, «Journal of the Warburg and Courtauld Institutes», vi, 1943, pp. 101-121, on p. 181; R. CAVELL, *Representing writing: the emblem as (hiero)glyph*, in *The European Emblem*, cit., pp. 167-185, on pp. 168-170.

<sup>3</sup> E. DE JONGH, *Zinne- en minnebeelden in de schilderkunst van de zeventiende eeuw*, Amsterdam, 1967, p. 16.

<sup>4</sup> CH. MOSELEY, *A Century of Emblems. An Introductory Anthology*, Aldershot, 1989, p. 6.

<sup>5</sup> M. FOUCAULT, *The Order of Things*, New York, 1970, p. 30.

<sup>6</sup> R. CAVELL, *Representing writing: the emblem as (hiero)glyph*, cit., p. 176.

<sup>7</sup> See *ibidem*, p. 167.

Natural science and history and other non-mathematical scientific disciplines underwent crucial transformations in the fifteenth and sixteenth centuries. Salient developments of the Renaissance – including attention to description and depiction, both verbal and visual; the accumulation of fresh data (geographical, anthropological, zoological, botanical, anatomical); and the emergence of new social structures and environments in which the study of nature was pursued (botanic gardens, anatomy theaters, courts, museums, collecting, and artistic endeavors) – clearly transformed the study of the natural world.<sup>1</sup> Modern mathematical physics emerged from the beginning of the seventeenth century, when quantitative method and language were extended to phenomena previously investigated only ‘philosophically’, originating physical optics and a new theory of motion.

The new physics which arose in contrast with Aristotelian natural philosophy, rejected the traditional view of natural reality as characterized by chains of resemblances. This also led to the confutation of this view in specific sections of traditional natural philosophy, such as psychology. For example, Descartes distinguished between two ways in which resemblance in perception is lacking. First, between the properties of external objects and the motions and patterns in the brain: here there is at most a minimal similarity in a structural sense of the word. Descartes emphasized that the important point here is that corporeal representations in the brain should be able to capture the complexity of the information conveyed. Secondly, between the ideas and the motions that cause them to be produced there is no resemblance at all. The physiology of sensation, conceived as a chain of motions, entails that information is registered in the brain in the form of signs or symbols, rather than as something like a perfect resemblance with the object from which the sensation arises.

In my view, the emblem is still deeply rooted in the traditional worldview which presupposed several types of resemblance between the different layers of reality and thus an intricate network of analogies between celestial bodies, herbs, stones, animals, and parts of the human body. Emblem books (early as well as later ones) are largely unaffected by the scientific revolution which replaced Aristotelian qualitative natural philosophy and the Neoplatonic kosmos with mathematical physics and a mechanist view of natural reality. This cultural embedding has consequences for the interpretation of emblems.

Some emblem pictures were designed in special ways for an audience from an oral, or at least no more than a semi-literate, culture, but other ones surely appealed at sophisticated fore-knowledge and a much richer culture. Thus, in his *Emblemes and Hieroglyphikes*, Francis Quarles translated theoretical concepts of the origin of soul, whose verbal explanation would be too difficult, into visual symbols.<sup>2</sup> The same holds for Bocchi’s emblematic collection, whose encyclopedic eclecticism reflects a garden variety of literary and philosophical sources, featuring fifteenth-century Florentine

<sup>1</sup> See *Natural Particulars. Nature and the Disciplines in Renaissance Europe*, eds. A. Grafton, N. Siraisi, Cambridge Ma., London, 1999, Introduction, for discussion of the appropriation, manipulation, and reworking of older traditions of knowledge, the role of observation and description in natural history and medicine, the changing map of the disciplines, and the material and practical means for the dissemination of knowledge.

<sup>2</sup> K. J. HÖLTGEN, *Quarles’s Emblemes and Hieroglyphikes*, in *The Telling Image. Explorations in the Emblem*, eds. A. L. Bagley, E. M. Griffin, A. J. McLean, New York, 1996, pp. 1-15, on p. 13.

Neoplatonism.<sup>1</sup> The emblems evoke philosophical notions, which the text explains. However, there is no theoretical a priori of text over image, or vice versa. They structurally serve each other. Graphic and text are a concert for exposing peculiarities of a philosophical system. For example, in his *Symbolon* 28, figure, epigram and text integrate one another and furnish the reader with sufficient elements to capture the cosmology of Plato's *Timaeus*, as it were, in nuce.<sup>2</sup>

Furthermore, the engraver's art is a particular tactile one, and as such the woodcut is attached to oral culture rather than literate culture. In this culture one does not take in all elements of a scene simultaneously because one scans a field rather than viewing it in perspective in such a way as to put the entire scene with all its component elements in focus. The viewer moves from one scene to another, connecting them to each other by a variety of linking strategies, including narration and analogy. The whole range of possible relationships does not come into play simultaneously, as the text guides the reader's scanning of the picture, and steers him or her away from relations and conditions of no interest to the symbolic diagram that is being sketched out in the picture.<sup>3</sup> In the emblematic art of reading the picture comes first. However, it is in the text that meaning originates, and thanks to the text the symbol comes into being.<sup>4</sup>

In order to further scrutinize the nature of emblems and the issue of how they were perceived and interpreted, it may be helpful to take into consideration a contemporary discussion on the very nature of perception.

Debates on visual perception in today's cognitive science reveal the surprising persistence of a traditional philosophical problem, that is, whether perception is to be seen as being based on a largely passive reception of information provided by the sense organs or as an active selection and elaboration of external stimuli. Since the rise of cognitive science in the 1960s, this issue is often phrased in terms of the dilemma between a 'bottom-up' and a 'top-down' approach in the explanation of perception. Bottom-up theories stress the neurophysiological aspects of perception, while top-down views argue for the cognitive control of information processing. Until the late 1980s, cognitive scientists mostly viewed perception as informationally encapsulated, that is cognitively impenetrable, and thus relatively independent of subsequent information processing in the brain or the mind.<sup>5</sup> It is now, however, fairly generally

<sup>1</sup> A. BOCCHI, *Quaestiones Symbolicae*, Bologna, 1555.

<sup>2</sup> See A. ROLET, *De l'explicite à l'indicible: jeu littéraire et discours philosophique dans le Symbolon 28 des «Quaestiones symbolicae» d'Achille Bocchi (1555)*, in *Emblems from Alciato to the Tattoo. Selected Papers of the Leuven International Emblem Conference 18-23 August, 1996*, eds. P. M. Daly, J. Manning and M. van Vaeck, Turnhout, 2001, pp. 53-80, on p. 70: «Gravure et texte oeuvrent donc de concert pour exposer les rouages de ce système complexe et suggérer ce qui ne peut être dit explicitement. [...] Aussi l'image s'engouffret-elle dans les silences du texte épigrammatique: elle appuie ce qui est à peine suggéré (le motif de la naissance de Vénus par exemple), glose sur ce qui est allusif (le verbe 'tenet' matérialisé par le 'vinculum') et élucidé ce qui est énigmatique (notha par exemple redu par la bipartition du personnage)».

<sup>3</sup> D. S. RUSSELL, *Perceiving, seeing and meaning: emblems and some approaches to reading early modern culture*, in *Aspects of Renaissance and Baroque Symbol Theory 1500-1700*, cit., pp. 77-92, on pp. 80-83.

<sup>4</sup> K. PORTEMAN, *The earliest reception of the ars emblematica Dutch: an investigation into preliminary matters*, in *The European Emblem. Selected Papers from the Glasgow Conference 11-14 August, 1987*, eds. B.F. Scholz, M. Bath and D. Weston, Leiden, 1990, pp. 33-53, in particular pp. 39, and 46-47.

<sup>5</sup> See, for example, J. A. FODOR, *The Modularity of Mind*, Cambridge Ma., 1983, and IDEM, *A Theory of Content and Other Essays*, Cambridge Ma., 1990, ch. 8.

accepted that stored knowledge and assumptions actively affect even the simplest perception. Consequently, the question of the importance of passive bottom-up processes to active top-down processes has become controversial. Indeed, perceptual activity theory (as developed especially in active vision robotics), instead of viewing perception as a matter of the inflow of information into the brain, regards perception as a continual process of active interrogation of the environment.<sup>1</sup> With due caveats, the mirror-lamp metaphor developed by Abrams to distinguish the eighteenth-century philosophical attitude to perception from that of the Romantics seems appropriate here: the bottom-up information processing approach to perception is a *mirror* theory, whereas perceptual activity theory, where experience rather arises from the activity of a mind reaching out into the world, falls under the *lamp* metaphor.<sup>2</sup>

Now, surely in order to be 'perceived' adequately emblems presume an encapsulated and active perception is. In other words, emblems cannot be understood without any prior knowledge. Mechanisms of organizing perception into meaningful patterns differ for oral and literate cultures. Any scene is conventional, and requires a specially conditioned response to be meaningful. A perceived image is translated into a 'seen', meaningful, image at least partially through the intermediary of language, which is essentially unstable and changeable. Emblems provide a means of access to the way Renaissance man 'saw' nature and the world around because these works attempted to describe plant, animals, and other realia. These descriptions were not naturalistic or zoological, but symbolic. Thus, the emblems must not be considered in isolation. Only viewed as a telling sign it can tell us about the perception of nature and the reception of art at the time.<sup>3</sup>

An emblem may resist interpretive closure, and its meaning is not inherently embedded in the picture or text. Rather it is generated in the dialogical space between the work and the addressee. Thus, in order to decipher the wired-in program of emblematics one needs to gather information about the use of these works through available contextual clues. Readers of emblem books were most probably constantly alert to paradigmatic analogies that recalled and illuminated the moral and psychological wisdom of a proverbial formulary of guidelines for conduct. That's why the Dutch translator of Sambucus's collection explicitly encouraged the readers to create different emblems from the pictures presented.<sup>4</sup>

The readers of Renaissance emblem books lived in a world where nature was seen as a book of lessons in morality and human psychology, where the experience of everyday life was peopled with paradigms of human types and conditions. Human beings and nature were inextricably bound in a matrix of metaphorical macrocosm-microcosm relationships. It was not until the early seventeenth century that modern science was beginning to supplant symbolization as a function of the image in Renaissance society.

<sup>1</sup> See, for example, N. J. T. THOMAS, *Are theories of imagery theories of imagination? An active perception approach to conscious mental content*, «Cognitive Science», xxiii, 1999, pp. 207-245. Cf. S. HURLEY, *Perception and action: alternative views*, «Synthese», xxix, 2001, pp. 3-40.

<sup>2</sup> M. H. ABRAMS, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition*, Oxford, 1953.

<sup>3</sup> D. S. RUSSELL, *Perceiving, seeing and meaning*, cit., pp. 88-89.

<sup>4</sup> K. PORTEMAN, *Early reception*, cit., p. 46.