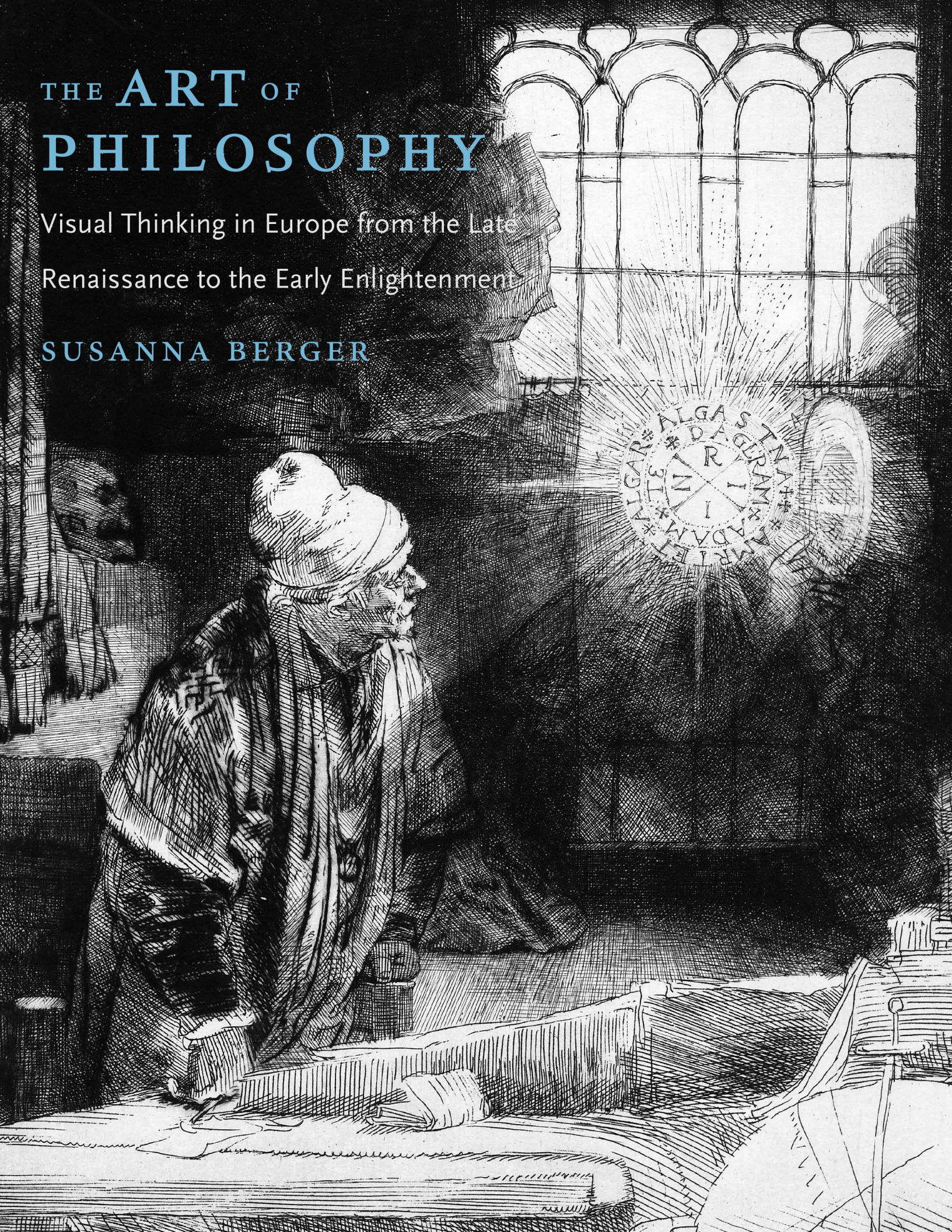# THE ART of PHILOSOPHY

Visual Thinking in Europe from the Late Renaissance to the Early Enlightenment

SUSANNA BERGER

THE ART OF PHILOSOPHY

PHIA DIVIDITVR IN 4 SPES GNALES SIT IN

Mathematica · Theologia · Philia · Ego? · Physica · Ethica

Praxis est illetius · Praxis est ...

Baco · Scotus

Rara concordia

SAPIENTIA AEDIFICAVIT SIBI DOMVM

Beatus qui vigilat ad fores meas

Et locus illigentie · Quis ...

Viam ignoravit avis

In thesauris sapie illius

I Causa Inveniendae Phie ...

Intellectus semitas domus tuas

2 Causa inveniendae Phie qui deberato

Errare fecit ignorao logica

Summa mileria est nescire qua tendas

Mare ait nõ est necu.

Apud improbos lacessita est periculis sapia

Redarguio · Falsum · Paradoxu · Sophistica · Vergit in errorem

Voluntas nõ pot impedire assensu cochiris

Voluntas · Maior · Minor · Consequentia

Barbara · Celarent · Darij · Ferio

E. Ancilla DEMON... · Facio · Intellectus

Erravimus a via veritatis

Ocs vias eius illigere noluerunt

Non faciunt scire nisi vi silogismy narij

Enthymema · Inductio

Silmus est obiectum logice

Loci argumentorum · Loci argumentoru · Extrinseci

Ab accident · A Subiecto · A Descriptioe · A Diffia · A Genere · A Definitioe · A Proprio · A Toto · A Partib · fej finubi

Ab authorita te humana · Ab opposito · A Dissimilj · Ab authoritate Divina · A Majori · A Disparatis · Ab effec...

Vtina saperent et intelligerent

DIVIO 2ª ANCILLA SAPIAE

Totu in partes logicu

Bruta non loquuntur

Ave Caesar victor

a operao simples nectit terminos

Propoum de futuro contingenti neutra est determinate via vel

The Art of Philosophy

visual thinking in europe from the late renaissance
to the early enlightenment

SUSANNA BERGER

For my parents, with love

CONTENTS

Without an image thinking is impossible.

—ARISTOTLE, ON MEMORY

IL
LICEO
DELLA
PITTVRA

...per se stessa cieca; ma chi in età
...poi auanzandosi ad imitare
...et intende le arti della Mathe,
...con felice accoppiamento dall'
...pregi di virtu.

All'Ill.mo e R.mo Sig.
Se la Pittura da colori uar
fortuna stabilimento ho
mente al Tempio delle
gratitudine; et hum
dedico. Roma. 1

ACKNOWLEDGMENTS

detail of figure 5

ABBREVIATIONS

BM   British Museum

BnF   Bibliothèque nationale de France

BRB   Bibliothèque royale de Belgique

HAB   Herzog August Bibliothek Wolfenbüttel

KU   Katholieke Universiteit Leuven

THE ART OF PHILOSOPHY

AVGVSTVS
GVSTVS
ODORATVS
TACTVS

IMAGINATIVA
PHANTASIA
EXTIMATIVA
MEMORIA

SENSVM AGERE Quodammodo dicitur. Quia ex Visibile, & Vidente fit quædam Actio, & dum uidês iudicat de colore, iudicare est quoddã Agere. VIRTVS Intentionalis Intelligentiæ Mouentis dat Sensibilibus ut Agant.

NON PER SE
SENSIBILE PROPRIVM
Q.a.S. ab uno Sensu cogno.

SENSIBILE COMMVNE
Q.a.S. a duabus uel pluribus Sensibus cognoscitur.

COLOR
SONVS
SAPOR
ODOR
TANGIBILE

MOTVS QVIES
MAGNITVDO
NVMERVS
FIGVRA

SIGNA COELESTIA. XII. Tria in qualibet anni quarta. Quolibet autem XXX habet gradus in longit. XII latitud. GRADVS, & in Zodiaco, ac toto Orbis ambitu sit CCCLX.

MERI

OMNIS VIRTVS A COELO INFLVIT

SENSVS cum datis sit cæteris Animantibus ad acquirenda uitæ necessaria: HOMO præterea erecta ad coelum fronte est, ac exquisitis dotatus sensibus, & ad necessitatem uitæ & ad scientiæ acquisitione.

HOMO QVI AD VNIVERSI
ORDINEM CONFORMATVS DR
MIKPOKOΣMOΣ

PLANETÆ Mouentur contra, ex occidente in orientem, singuli motu suo. Per XII. Signa figurata in Zodiaco.

VISIBILE
LVX VISVS
ET
COLOR

SENSVS
COMMVNIS
IMAGINATIVA
PHANTASIA
COGITATIVA
A B C D

MEMORIA VIRTVS MOTIVA
E F

VIRTVS SENSVS COIS

SATVRNVS

Et quia ex his componitur COLORVM innumeræ differentiæ.

NIGER extraneum.

Potentia Olfactiua fundatur in duabus carunculis, anterioris partis Cerebri, similibus capitibus mammillæ, ut similitudines Odorum possit apprehendere.

IVPITER

Odoratus sit per medium extraneum

MARS

Differentiæ Odor, quia sunt nobis incognitæ.

SENSVS
AD
SCIENTIAS

POTENTIA MOTIVA

ADNATANDV AD DILATAN
AD VOLAND. AD REPTAN.
AD AMBVLAN
ET SERPEN.

MOTIVA

SOL LVMEN

Potentia Gustatiua situatur in neruo extenso super linguam.

per linguam.

Auditus sit per medium extraneum.

Potentia Auditiua situatur in quodam neruo.

APPETITVS EST INCLINATIO NATVRALIS
AD ALIQVAM FORMAM
VEL PERFEC
ACQVIRENDA

POTENTIA
APPETITIVA

MOTIVA

VENVS

Potentia Tactiua situatur in quadam carnis sensitiua parte.

NATVRALIS
Inanimatis etiam communis est. Vt grauium tendere deorsum, & leuium sursum.

SENSITIVVS APPETI
Vt Naturalis communis est cum Plantis, & inanimatis.

RATIONALIS
Quo anima inclinatur ad aliquod bonum apprehensum per Intellectum.

VOLVNTAS

Tactus sit per medium no extraneum.

POTENTIA
VEGETATIVA

ER OMNES POT
acet Imperio
Sed sponte.
NVTRIRE
AVGVMENTARE
SIBI SIMILE GENERARE

CONCVPISCIBILIS
Qua Animal inclinatur ad bonum prosequendum, & malum fugiendum simpliciter.
AC SEX SVNT EIVS PAS.

IRASCIBILIS
Qua Animal inclinatur uel ad bonum, uel ad malum sub ratione Ardui.
AC QVINQVE EI PASSIO

MERCVRIVS

VIA Sensus cum prima sit Lanis ad Scientiarum acquisitionem, ex quibus omnes obtinet HOMO.

NATVRALIS hæc Virtus in Animantibus fundatur in stomacho.
ATTRACTIVA CONCOCTRIX RETENT EXPVLSI

QVÆ POTENTIÆ ET PASSIONES ANIMÆ SVNT ET VOLVNTATI SVBIACENT CVIVS DVPLEX ACTVS

VITA AETERNA

LVNA

TRES
GENERATIONIS
VIRTVTES

INTELLECTVALIS

HABITVS SVNT

CORPORALIS
Sanitas, Quam conseruat MEDICINA

GENERATRIX

AQVISITVS
INTELLE

INFVSVS
Gratia
Fides
Spes
Charitas

VITIOS
Superbia
Ira Inuidia
Gula Luxuria
Accidia
Auaritia

VIRTVOSVS
Iustitia
Temperantia
Fortitudo
Prudentia
Scientia
Ars. &c.

IGNIS
Calidus & Siccus

AER
Humidus & Calid

ELEMEN

FORMATRIX

Introduction

I N 1619 MARTIN MEURISSE (1584–1644), a Franciscan professor of philosophy at the Grand Couvent des Cordeliers in Paris, became embroiled in a debate with the Protestant pastor François Oyseau (1545–1625) about the significance of the rituals of the mass.[1] In the course of this dialogue, Oyseau repeatedly criticized Meurisse's use of engraved allegories for the teaching of philosophy. When Meurisse attacked Oyseau as a poor logician, Oyseau replied that the friar was not competent to judge his knowledge of logic because he was "a logician only in picturing and copperplate engraving."[2] Oyseau then asked, "Are these [faulty conclusions] the consequences of the logic of copperplate engraving?"[3] He was alluding to a series of illustrated thesis prints, or pedagogical broadsides incorporating both texts and images, that Meurisse had designed for his philosophy students to use at oral examinations called disputations.[4] He condemned Meurisse's use of "frivolous allegories" (*ses Allegories frivolles*) in philosophical explications, stating that "arguments founded on allegories are not demonstrations from which one can draw consequences and necessary conclusions."[5] In disparaging these broadsides, Oyseau reached beyond the topic of religious ritual, seemingly aiming to demean the friar by suggesting that his experience of engaging in academic logic was inadequate because it relied on visual materials.

Oyseau's derogatory remarks draw our attention to the vital and controversial role of "visual thinking" in the early modern era.[6] Through the study of late sixteenth- to early eighteenth-century visual representations of philosophy, this book shows that not only were philosophical definitions understood as contained "in" images, but, more important, their creation and reworking enabled teachers and their students to think through spatial constructs and visual commentaries as a way of articulating ideas. With the increased production of paper across Europe and with the refinement of printing technologies,[7] it became increasingly common for philosophers and pedagogues to create, to study, and to disseminate drawings and prints, in order to grasp ideas and to transmit them to colleagues and students. Artists, in turn, drew inspiration from the writings and methods of philosophers in their works and collaborated with scholars or worked independently to

1

represent theoretical subjects. I am particularly interested in the interpretive role visual representation played in both conveying and challenging the ideas of Aristotle and his scholastic commentators. I focus on shifts in early modern accounts of perception, cognition, and the soul's relationship to the body. I also devote attention to the enduring influence of Aristotle's logic throughout this period.

The central thesis of this study is that in early modern Europe the viewing and creation of imagery functioned as important instruments of philosophical thought and teaching. Visual representations acted as essential tools for the generation of knowledge. Philosophers understood the viewing and making of visual representations as cognitive processes, and images often articulated ideas that could not quite be communicated in verbal language. Vision developed into the model of intelligibility, while drawings, prints, and the processes of looking at and designing visual representations became dominant metaphors for understanding human perception and characterizing the manner in which an observer gains and retains knowledge about the world. At the same time, the intense engagement with visual representations was accompanied by lingering doubts about their role in the creation and transmission of philosophical theories; the nature of these doubts, too, is my subject.

In recent years, the disciplines of art history and visual studies have grown increasingly preoccupied with the question of how artists utilize the mechanisms of image making and the pictorial space to think.[8] Studies of the role of the image in early modern thought have often focused on theological and spiritual questions.[9] Work on the "cerebral picturing" of Leonardo da Vinci (1492–1519) has been crucial for its delineation of the interconnections among the acts of drawing, thinking, and knowing in secular contexts.[10] Scholars writing on Nicolas Poussin (1594–1665) have also studied the repeated references to the thoughts of his images.[11] This book aims to broaden our understanding of visual thought in the early modern era by discussing its operation in previously unexplored, philosophical arenas. The issue of the relationship between image making and thinking has remained a matter of acute importance through the twentieth century and to the present day.[12] Here I am thinking in particular of the debate on visual thinking in contemporary philosophy and the related developments in contemporary art that present art practice as a form of visual thinking.[13] This study of early modern visual modes of thinking through philosophical ideas introduces precedents to more recent practices of visual thinking.

There are two particularly important mechanisms by which the making and study of imagery function as a mode of philosophical thought at this time. First, artists and philosophers use the space of the page to map theoretical relationships. Consequently, I argue that in creating and viewing these diagrams, students and teachers were thinking through the mechanism of spatial constructs. Second, in examining figurative images, I contend that these representations function through the mechanism of visual commentary. Both spatial constructs and visual commentaries are part of a common project of philosophical thinking through visual representation.

What is a "visual commentary"? In his *Dictionnaire universel* of 1690 Antoine Furetière (1619–1688) offers the following account of commentary:

> An interpretation, gloss, addition that one makes to an obscure or difficult author to render it more intelligible, to supplement to that which he has not explained well, or which he assumed was known.[14]

The Académie française dictionary of 1694 defines a commentary as "an explanation, clarification, observations, and remarks on some author to explain and illustrate his work."[15] It is in these senses that I am employing the notion of visual exegesis.[16] I am interested in uncovering the interpretations, explanations, and observations that visual commentaries provide on philosophy. I believe that in the switch from the discursive to the visual, there inevitably is some sort of shift or interpretation of meaning. I refer to these early modern philosophical pictures as "visual commentaries" in order to emphasize that they are not solely illustrating already-extant concepts; rather, they are offering new and enriching "additions" to philosophical ideas.

VISUAL ORDER

Historians of the early modern era have argued that Europeans experienced an "information explosion" between 1550 and 1750, related to a set of factors that included the rising production of printed books, travel and the discovery of new lands, the retrieval of ancient texts, and a passionate interest in gathering information.[17] Over the last two to three decades, a new area of cultural history has developed that focuses on institutions of knowledge and seeks to understand how information has been organized and managed in the past.[18] Scholars have studied a range of collections and learning aids including reference books, cabinets of curiosities, botanical gardens, archives, and encyclopedias that were employed during the early modern period and earlier to manage an overabundance of information.[19] This book introduces visual counterparts to the textual strategies of selection, encapsulation, and recombination employed by Aristotelian and anti-Aristotelian scholars and students in this period.[20] Many early modern philosophical images were the products of a particular moment in European history, when a method of transmitting knowledge aimed at optimizing efficiency through the clear presentation of information began to flourish. Although these visual representations helped to organize and transmit ever-expanding fields of knowledge, it is necessary to emphasize that they are not reductive in character. One of the aims of my study is to demonstrate that these images, rather than merely simplifying preexisting philosophical concepts, enrich theoretical knowledge by bringing it into visual form both in combination with words and independently of texts.

THE DOCUMENTS

The documents that are the subject of this study include prints and drawings from student lecture notebooks, *alba amicorum* (friendship albums), printed books, and broadsides. Most of the works that I discuss were produced in Paris, though I also present materials created in Rome, London, Leuven, Leiden, Halle, Speyer, Braunschweig, Mexico, and elsewhere, and I introduce scholars and artists who visited many of these

places. As prints and drawings were frequently exchanged across and beyond the European continent, I have found it fruitful to write a transnational study of philosophical visual representations.

The thesis prints produced between 1614 and 1618 by Meurisse in collaboration with the engraver Léonard Gaultier (1560/61–1635) are among the most important early modern images of philosophy, and in the chapters that follow I show how their inventive iconography inspired new visualizations of thought in a range of drawn and printed sources.[21] These broadsides are annotated with quotations from the writings of classical and scholastic philosophers; they depict natural entities, landscapes, and architectural structures adorned with figures, animals, and objects. The first, a summary of logic entitled *Artificiosa totius logices descriptio* (Artful description of logic in its entirety), hereafter *Descriptio*, appeared in 1614 (see plate 1).[22] The following year, Meurisse and Gaultier produced the *Clara totius physiologiae synopsis* (Clear synopsis of physics in its entirety), hereafter *Synopsis*, which visualizes Aristotelian natural philosophy (fig. 1).[23] Their third philosophical broadside, the *Laurus metaphysica* (Laurel of metaphysics) of 1616, represents metaphysics; their fourth, *Tableau industrieux de toute la philosophie morale* (Artful table of moral philosophy in its entirety), hereafter *Tableau*, which appeared in 1618, depicts moral philosophy (figs. 2 and 3).[24] In addition, this study devotes considerable attention to a fifth thesis print, entitled *Typus necessitatis logicae ad alias scientias capessendas* (Scheme of the necessity of logic for grasping the other branches of knowledge), hereafter *Typus*, that—as I show in chapter 2—was inspired by the *Descriptio* (see plate 2).[25] Gaultier also engraved this broadside, which appeared in 1622 and was designed by the Carmelite philosophy professor Jean Chéron (1596–1673). Jean Messager (1572–1649) published the thesis prints of Meurisse, Chéron, and Gaultier.[26]

Appendix 1 provides precise measurements of these and other philosophical broadsides, which are all impressive in scale; in fact, many consist of two large sheets of paper that have been glued together. I have included a photograph of the *Typus*, which measures 29.1 × 18.5 in. (74 × 47 cm), juxtaposed with a hand, measuring 7 × 4.3 in. (18 × 11 cm), to convey the monumental dimensions of these prints (fig. 4). Producing these extravagant engravings required a tremendous amount of work and close collaboration among Meurisse/Chéron, Gaultier, anonymous engravers of lettering, Messager, and patrons.[27] The effort and significant cost expended to create these and other philosophical images attest to how highly prints were valued in the study and transmission of philosophy.[28]

The broadsides of Meurisse, Chéron, and Gaultier had a relatively small-scale but international impact on the teaching of philosophy throughout the seventeenth and eighteenth centuries. The *Descriptio*, *Laurus metaphysica*, and *Tableau* were reproduced and translated into English by Richard Dey, a graduate of the University of Cambridge, in mid-seventeenth-century London, while a copy of Meurisse's *Synopsis* was displayed at the anatomy theater of the University of Leiden by Ottho van Heurne (1577–1652), professor of medicine.[29] Meurisse's acclaim as a designer of illustrated broadsides was also reported by the Hungarian traveler Márton Szepsi Csombor (1594–1623) in his *Europica varietas* (1620), written, despite the Latin title, in his native language. In May

1618 Csombor arrived in France and soon reached Paris, where he immediately searched for Meurisse: "I was anxious above all else to become acquainted with the celebrated, renowned, and highly intelligent friar, who with great mastery put the entire philosophy course on a[n engraver's] plate."[30]

Even though these philosophical visualizations had an international reputation in the early modern period, the broadsides of Meurisse, Chéron, and Gaultier have been largely forgotten, and although there is great interest among intellectual historians today in challenges to Aristotelian orthodoxies during the so-called scientific revolution, no major study has focused on the visual documents integral to this epistemic shift. Some intellectual historians have claimed that visual representation was rarely used in Aristotelian scholastic philosophy education and thought,[31] aligning the rise of image making in pedagogy and scholarship with the emergence of the new philosophies in the seventeenth and eighteenth centuries. In recent years, a newly emerging and rich body of scholarship has started to explore the frescoes, oil paintings, prints, and drawings relating to the works of anti-Aristotelian philosophers such as Galileo Galilei (1564–1642) and Thomas Hobbes (1588–1679).[32] In this book I argue that these studies consider only part of a larger story, and that artworks and the production of visual materials were, in fact, vital in the early modern intellectual movements that embraced and developed Aristotelian thought, as evidenced by the multiplicity of visual representations found among pedagogical and scholarly materials from the period.

It is appropriate that not only the "new" philosophers but also Aristotelian scholastic thinkers made use of pedagogical images, since Aristotle himself employed visual representations when giving his lectures. He mentions a diagram exhibiting contrary vices and virtues in the *Nicomachean Ethics* (2.7, 1107a32–33). Tables are included in the *Eudemian Ethics* (2.3, 1220b36–1221a) and in *On Interpretation* (13, 22a22–31). His biology lectures imply that he made use of anatomical diagrams; and from his other writings it is clear that he employed maps and star charts.[33] He also speaks of the manifold uses of drawing in the *Politics* (8.3, 1337b23) and even suggests that it might be included among the standard fields of education: reading, writing, gymnastic exercises, and music. Furthermore, he argues that our primary mode of apprehending the world is through our senses. In *On the Soul* he states, "No one can learn or understand anything in the absence of sense."[34] And he holds that no thought is possible without a mental image, or what he refers to as a *phantasma*; in his treatise *On Memory* he likens the *phantasma* to a painting or wax impression.[35] He asserts that mental images are indispensable to the formation and arrangement of ideas: "When the mind is actively aware of anything it is necessarily aware of it with an image."[36] *Phantasmata*, Aristotle argues, play an important role in furnishing us with the raw materials that are necessary for us eventually to grasp the universals that are the starting point for genuine knowledge. It is therefore fitting that not only the anti-Aristotelian avant-garde but also the traditional university-based scholastics made ample use of visual materials.

figure 1

Meurisse and Gaultier, *Synopsis*, 1615. Engraving printed on paper, 25.5 × 18.5 in. (64.8 × 47 cm). BnF, Cabinet des Estampes, Paris [AA4].

CORPVS NATVRALE

FORMA

MATERIA

PRIVATIO

Natura caufas (Iuuenes) duce difce Scoto,
Quo fpreto fophiam nullus adire poteft.

Naturæ vires fubitò degenerate pauefo.
Me fequitur, verum qui docet, atque colit.

Vacuum,
natural
vir.

Angelica
lumb: ad
na, in quo
fieri poteft
quam
Iunius.

Frater Maurituus Maurolÿ...
Baccalaureus Parifienfis, et
Phyfiarum regens, licentia...
[fuperiorum egregiè, difti...]
[...intulerit in Inven...]

Terra et aqua ghiadunt vim quibus fphærica figura

M.D.C.XV.

L. Gaultier
incid. 1615

figure 2

Meurisse and Gaultier, *Laurus metaphysica*, 1616. Engraving printed on paper, 21.9 × 15.8 in. (55.8 × 40.2 cm). BnF, Cabinet des Estampes, Paris [AA4].
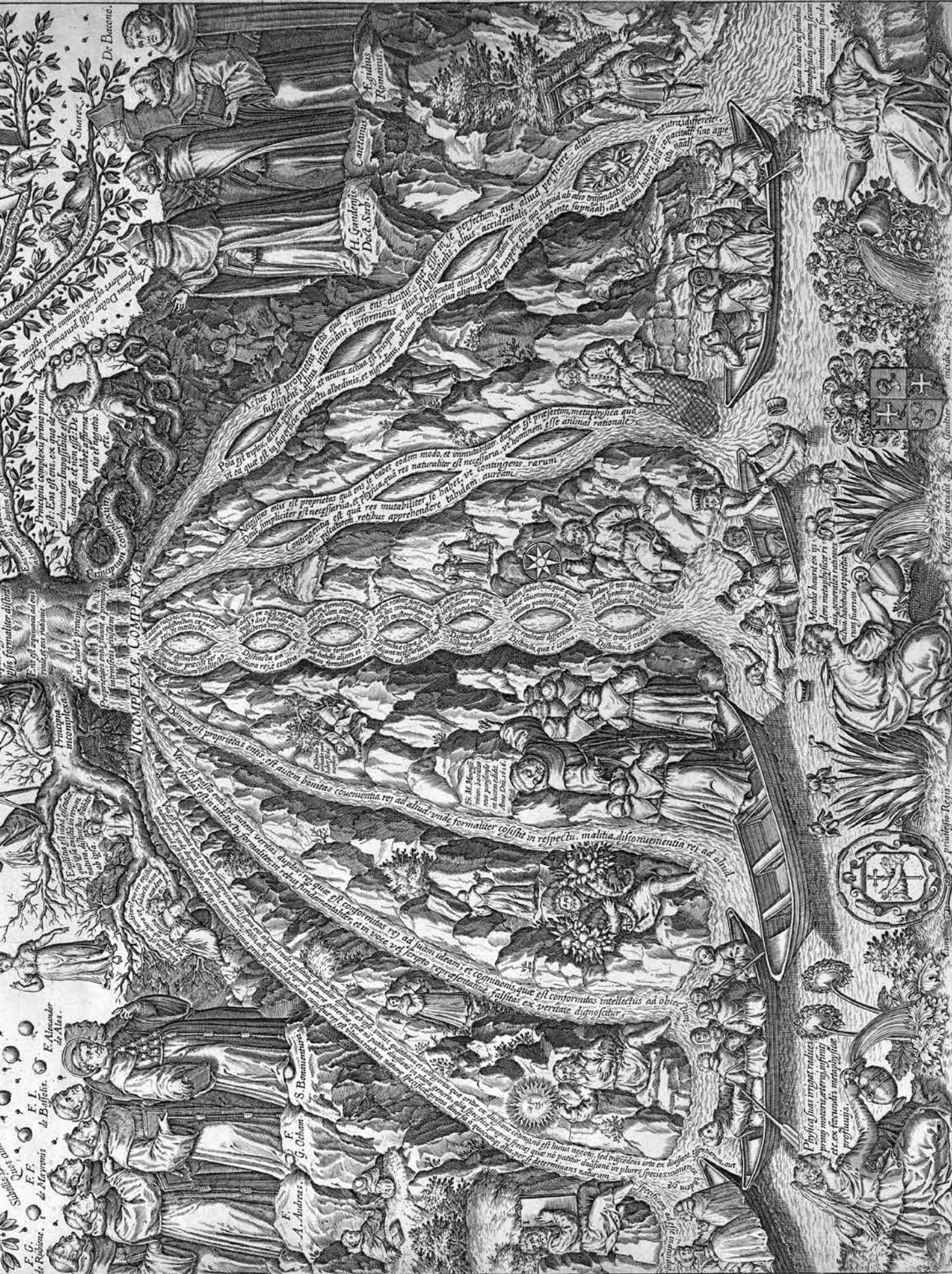
LAVRVS METAPHYSICA.

Illustriss. nobilissimoq; viro D.D. Nicolao de Verdun Equiti, amplissimiq; ordinis principi sacrata.

Arborum principe, sacentiari principem adumbratam supremi senatus principi dico et offero: et vere quidem inestam, quia non ere, nec marmore soli, nec effigie Gallorum, et perpetua totius orbis memoria, semper honos, nomenq; suum, laudesq; manebunt.

Names (left): Suarez · De Bacconia · Caietanus · Ægidius Romanus · H. Gandensis Doct. Scot. · F. Alexander de Ales · S. Bonaventura · F. G. Ochami · A. Andreas · F. G. de Rubione · de Mayronis · de Bassolis

Branch labels: INCOMPLEX E COMPLEXE · Principium incomplexum · Ens habet Principia · Principium complexum

Actus est proprietas entis quâ vnum ens dicitur, aut esse in se perfectum, aut aliud perficere: aliud subsistens, aliud informans.

Necessitas entis est proprietas quâ ens se habet, vt res naturaliter est necessaria, vt contingens rarum: simpliciter est necessaria, et Physica, quâ res mutabiliter se habet, vt Deus.

Contingentia est quâ res mutabiliter se habet, vt contingens rarum.

Bonum est proprietas entis, est autem bonitas convenientia rei ad aliud, vnde formaliter consistit in respectu; malitia, disconvenientia rei ad aliud.

Verum est proprietas entis, est autem veritas, quæ est conformitas rei ad aliud, vnde formaliter consistit in respectu.

falsitas est conformitas intellectûs ad obiectum, vt veritate dignoscitur.

A LA ROYNE,

MADAME. Ce tableau represente l'empire de tre volonté; et cest empire porte l'image de vostre sacré Majesté: sur volonté eclairee des rayons de son soleil eclairee des vertus, regle les passions de son appetit, que vous vveux, les enchaînes, l'empire le vice represente par ces animaux escrasez, peut vaincre ignorance est toujours en possession de sa liberté party les efforts de la crainte, et de la concupiscence ces mostres figurez, de la violence, et de la concupiscence ces mostres figurez par ca chœurs de Nymphes, vers ça louïerant bien, seul obiect de ses vertueux. Ce sont les actions, Madame, outre l'empire que vous avez sur vostre France, que ie n'ay peu faire graver en ce tableau, vous l'ayant bien plus parfaitement graué sur nos cœurs. Ces Couronnes vous portent de degre en degre, à d'autres que Dieu vous reserue au ciel, attendant celles-là iouïssez heureusement de celles-cy. Ce sont les souhaits que font tous les iours   De vostre sacré Majesté

Le tres-humble, et tres-obeïssant subiect, frere Marin Mersenne, de l'Ordre des freres minims

TYPVS NECESSITATIS LOGICÆ AD ALIAS SCIENTIAS CAPESSENDAS,

SERENISSIMO ILLVSTRISSIMOQVE PRINCIPI HENRICO DE BOVRBON EPISCOPO METENSI.

S.R.I. PRINCIPI. FRATER IOANNES CHERON CARMELITA BVRDIGALENSIS. D.D.D.

Circumeunt hic homines (PRINCEPS ILLVSTRISSIME) et philosophandi desideria, quod à natura ipsa exhaustum est et expressum quippe satisfacere cupit: et excluditur mentibus iter, eminent prominentia rupes, sonant horrendia circum, arcaudet Logica, scientiarum Ienitrix quarentibus pandere viam, Ingenium celsitudinis tuæ, se superiūs perrectione elausa celsita: sisinuitur ergo tibi (SERENISSIME PRINCEPS) et scientiarum domicilium, quis, et scientias istas, si te fautorem invenerint, se inuecissē credunt. Vince, fruere, Vale.

One of the primary reasons that the engravings of Meurisse, Chéron, and Gaultier have been neglected is that their specialized subject matter is not the sort that art historians generally tend to be interested in. Additionally, it is likely that historians of art have ignored these works, along with some of the other early modern philosophical visual representations that I introduce in this study, because, as prints, many of these images are not in the most elevated of media.[37] The Roman painter and writer Giovanni Battista Passeri (1610/16–1679) remarked that Pietro Testa (1612–1650) would have been significantly more celebrated had his etching *Il Liceo della Pittura* (c. 1638) been a painting (fig. 5).[38] This work visualizes a program of study for painters that resembled the curricula of university courses on Aristotelian scholastic philosophy. Indeed, those same philosophy curricula also appear in large-format philosophical broadsides, as in the illustrated thesis prints of Meurisse, Chéron, and Gaultier. *Il Liceo della Pittura* testifies to the close connections among the teaching and practice of art and philosophy in this period.

In the seventeenth century French engravers and etchers hovered between the realm of the lowly craftsmen and that of the respected fine artists. This fluctuation can be explained in part by the relative novelty of their profession: it was only with the influx of Flemish engravers in the late sixteenth and early seventeenth centuries that a class of intaglio engravers developed in France. Initially, printmakers were not admitted into the Académie royale de peinture et de sculpture, though some of the academy's painters also created etchings. The printmaker and writer on art Abraham Bosse (1602/4–1676)—an important figure in chapter 5—was, however, granted an honorary membership. He lectured on perspective at the academy from its founding in 1648 until May 1661, when he was expelled after a quarrel with Charles Le Brun (1619–1690). Three years later, in June 1664, printmakers were permitted to become academicians. François Chauveau (1613–1676) and Gilles Rousselet (1610–1686) were the first engravers to enter the academy in April 1663; that August they were joined by Grégoire Huret (1606–1670) and Pierre Louis van Schuppen (1627–1702). The art of printing by intaglio was officially elevated to the status of a fine art by the Edict of Saint-Jean-de-Luz of May 1660. The decree states that because this medium "depends on the imagination of its authors and cannot be subjected to other laws than those of their genius . . . it has nothing in common with the trades and manufactures."[39] The king goes on to argue, "To reduce this art to a guild would be to subordinate its nobility to the discretion of individuals insufficiently acquainted with it."[40] In France, in the seventeenth century, engraving came to be valued as a liberal art, yet it did not attain the level of prestige associated with painting, sculpture, and architecture. These circumstances help explain why these prints have received such scant attention from art historians today.

Early modern philosophical prints and drawings often display a high level of technical sophistication; they were created by noted artists, including Albrecht Dürer (1471–1528), Jacques Callot (1592–1635), Jacob van der Heyden (1573–1645), and Rembrandt (1606–1669). The importance of acknowledging the skill of the artists involved in the creation of philosophical visual representations in this period becomes apparent if one examines a pirated edition of the *Descriptio* held by the Graphic Art Collection of

opposite **figure 4**
Chéron and Gaultier, *Typus* juxtaposed with hand to show scale. Engraving on paper, 29.1 × 18.5 in. (74 × 47 cm). Author's hand, 7 × 4.3 in. (18 × 11 cm). Rare Book Division, Department of Rare Books and Special Collections, Princeton University Library.

above **figure 5**
Testa, *Il Liceo della Pittura*, c. 1638.
Etching printed on paper, 18.5 ×
28.5 in. (47 × 72.5 cm). BM,
London.

above left **figure 6**
Meurisse and Gaultier, detail of
Descriptio, 1614. BRB, Cabinet des
Estampes, Brussels [S. IV 86231].

above right **figure 7**
Anonymous engraver and
Meurisse, detail of *Descriptio*.
Engraving printed on paper. Rare
Book Division, Department of
Rare Books and Special Collections,
Princeton University Library.

Princeton University.[41] Neither the engraver's nor the publisher's name is identified in this copy, which appears, because of its lower quality, not to have been executed by Gaultier. The images on the original BRB's impression of the *Descriptio* show greater artistic skill than those in the Princeton University copy (compare, for example, the illustrations of men wearing loincloths, figs. 6 and 7). The *Descriptio* would not have been so effective if Meurisse had collaborated with a less talented engraver. Michel de Marolles (1600–1681), abbé de Villeloin, whose print collection formed the basis of the Cabinet des Estampes of the BnF, describes the diversity of Gaultier's artistic output in his 1674 publication *Le livre des peintres et des graveurs*, recalling the positive reaction inspired by his and Meurisse's thesis prints:

Léonard Gaultier's somewhat hard style

Nevertheless has its beauty, especially in his portraits;

In his book's frontispieces, enriched by fine lines,

In the thesis prints of Meurisse, he pleased by means of their form.

He rendered Psyche, the Kings and the Prophets;

In their little frames, his illustrations so beautiful.[42]

De Marolles's reference to the thesis prints reveals that well after both designer and engraver had died, their prints were still regarded as among the engraver's most important artistic achievements.

ALLEGORY

This study focuses on works that are at once delightful for their technical sophistication and functional, rooted in very specific scholarly and pedagogical contexts. Their beauty and artistry also tends to serve a purpose: they give pleasure in order to inspire students and scholars to engage with philosophical ideas and questions. Many of these images, like the broadsides of Meurisse, Chéron, and Gaultier, are allegories. Cicero and Quintilian define allegory as an extended or sustained metaphor.[43] Cicero writes, "When there have been more metaphors in a continuous stream, another kind of speech clearly arises: and the Greeks call this 'allegory.' "[44] To make sense of this confusing definition, we might turn to some standard accounts of metaphor. In the *Poetics* Aristotle describes this figure of speech as consisting "in giving the thing a name that belongs to something else."[45] Elsewhere he characterizes metaphor as a simile with "like" or "as" suppressed (*Rhetoric*, 3.4, 1406b20–1406b23). Homer's "rosy-fingered dawn," for instance, could be transformed into the simile "dawn is like rosy fingers." An allegory, like a metaphor, leads us to comprehend one (or several) thing(s), typically abstract notions or qualities, in terms of another (or others). In the early modern period it was common to apply this notion to visual representations as well as textual ones.[46] For example, the image of a blindfolded woman holding scales and a sword is an allegory of justice, because this image consists of several metaphors. Justice is (like) a blindfolded woman, because she is impartial; she holds scales, because she weighs two sides of a legal dispute; and she has a sword, because she punishes. In short, allegory compounds several metaphors. A visual allegory is a concrete image or set of images standing for an abstract meaning, which by its nature cannot be perfectly visualized. Does this mean that allegorical visual representations can only lead us into error in philosophical discourse, as Oyseau proclaimed? Or is this precisely why they are so enriching?

Before the eighteenth century, across all forms of art this genre was considered to be one of the most effective modes of representation, because of its capacity to transmit notions of central importance to large audiences.[47] It was valued precisely because of its utility. Counter-Reformation propaganda was one of the most important forces that gave allegory its vitality. Speaking in very general terms, with the demise of a commonly accepted set of fundamental beliefs and myths and the associated rise of scientific

empiricism, allegory and functional art were condemned as relics of a medieval world. Denis Diderot (1713–1784), in his *Salon of 1767*, for instance, vehemently criticizes allegory as an outdated mode of representation:

> I'll never change my mind, I'll never cease to regard allegory as the expedient of a weak, sterile mind, one that's incapable of turning reality to account and so calls allegory to the rescue; the result being a jumble of real and imaginary beings that offends me, and compositions suitable for Gothic times rather than our own.[48]

Despite these pronouncements, his *Encyclopédie* greets readers with an elaborate allegorical frontispiece.[49] In *Truth and Method* (1960) Hans-Georg Gadamer remarks on the demise of allegory and functional art: "From the moment art freed itself from all dogmatic bonds and could be defined as the unconscious production of genius, allegory inevitably became aesthetically suspect."[50] This suspicion is manifest to a certain extent in the *Lectures on Fine Art* of the 1820s, in which Hegel (1770–1831) describes "cold and frosty allegories . . . in which we cannot believe," because they are lacking in "concrete individuality."[51] Eighteenth- and nineteenth-century attacks on allegorical art promoted the notion that art should meet sensory, as opposed to didactic, criteria.

There was a renewed interest in the rehabilitation of allegory in the early twentieth century among thinkers like Walter Benjamin (1892–1940) and Erwin Panofsky (1892–1968). In his attempt to restore the original power to this aesthetic category, Benjamin writes, "Allegory . . . is not a playful illustrative technique, but a form of expression, just as speech is expression, and indeed, just as writing is."[52] In appreciating artworks produced before the 1800s, we would do well to be aware of the ways in which our understandings of the criteria that art should satisfy have shifted over time. Allegory must be taken seriously if we wish to understand important developments in intellectual and aesthetic thought in the early stages of the "scientific revolution."

THE PLURAL IMAGE

I will now say something about the formal arrangements of early modern visualizations of philosophy, since the structures of these images are closely related to their allegorical and didactic operations. In order to grasp the formal syntax of the philosophical visual representations at the core of this book, we must note a few basic features of the organization of diagrams. Although they are less artistically sophisticated than the images that are the focus of this study, medieval and early modern diagrams can help us to understand the laws governing the form of early modern philosophical images. First, diagrams often employ geometrical idioms to express concepts pictorially. Second, they tend to combine visual representations with letters or text. A cursory glance at the broadsides of Meurisse, Chéron, and Gaultier allows us to discern both of these features. All five broadsides juxtapose word and image, and in the *Descriptio*, for instance, the fountain in the bottom half of the print recalls the shape of a circle; as is explained in chapter 2, it presents viewers with a sequence of notions that are conceptually linked, without being shown in a hierarchical arrangement. The broadside also makes repeated use of rectangles to order