THE VIRTU OF ARCHITECTURAL INVENTION:

RHETORIC, *INGEGNO*, AND IMAGINATION IN FILARETE'S *LIBRO ARCHITETTONICO*

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A thesis submitted to McGill University in partial fulfillment of the requirements of the degree of Doctor of Philosophy

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All human creation occurs through the offices of love.

This dissertation came to be under the aegis of the generosity, compassion, and encouragement of my wife, Heather Lee Mitchell Powers.

I dedicate this work to her.

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ABSTRACT

This dissertation attempts to clarify the view of architecture set forth by the Florentine sculptor and architect Antonio di Piero Averlino (1400 – c. 1469), known as "Filarete," in the long ignored *Libro architettonico* that he wrote c. 1460. Filarete's *Libro* aims to teach its reader how to be a better patron of architecture. Formally, the *Libro* is a dialogical fiction in which a nameless narrator recounts mainly the invention, planning, and management of a great number of building projects. Filarete thus portrays architecture not as a mechanical art, but as an art of invention. An admirer of the humanist revival of antique letters, Filarete argues that the production of excellent architecture is best achieved by reviving antique building practice. Following Filarete's lead, this dissertation reconstructs his conception of architectural invention using terms and instruments drawn from the more ancient and authoritative tradition of *literary* invention. The tradition of *rhetoric* in particular teaches invention as the elementary competence of finding arguments, which are proposed connections between otherwise distinct matters. In the classical tradition, the art of rhetorical invention reduces to the so-called *topoi* of invention, which are practical heuristics that help the rhetor to find arguments. Broadly, Filarete construes architecture as analogous to literature on two grounds: (1) both are *practices*, and (2) the essence of both is *invention*. Filarete holds that a single human faculty—which he calls *ingegno* underlies inventiveness in all practical arts. *Ingegno* turns out to be an Italianized version of the Greek term *mêtis* (the Latin equivalent of which is *sollertia*)—the faculty of "cunning

intelligence." Filarete can thus argue that excellence in the manual arts (of which architecture is the epitome) merits the same recognition as excellence in martial and literary arts, because all are practices and all depend upon *ingegno*. The unsystematic assortment of notions that Filarete discusses in connection with architecture (such as decorum, variety, human proportion, and drawing) thus turn out to be heuristics for architectural invention, or *architectural topoi*.

ABRÉGÉ

Cette dissertation vise à clarifier la conception de l'architecture présentée par le sculpteur et architecte florentin Antonio di Piero Averlino (1400 – c. 1469), connu comme « le Filarète », dans le Libro architettonico, longtemps ignoré, qu'il a écrit c. 1460. Le Libro de Filarète tente d'enseigner le lecteur comment être un meilleur patron de l'architecture. En forme, le *Libro* est une fiction dialogique dans lequel un narrateur anonyme raconte principalement l'invention, la planification et la gestion d'un grand nombre de projets de construction. Filarète dépeint ainsi l'architecture pas comme art mécanique, mais comme art de l'invention. Grand admirateur de la renaissance humaniste de lettres classiques, Filarète soutient que la production d'architecture excellente est mieux réalisé par la relance de la pratique de la construction antique. Suivant à l'exemple de Filarète, cette dissertation reconstruit sa conception de l'invention architecturale en utilisant des termes et instruments tirés de la tradition plus ancienne et autoritaire de l'invention littéraire. La tradition de la *rhétorique* en particulier enseigne l'invention comme la compétence élémentaire de trouver des arguments, ceux qui sont les connexions proposés entre les matières autrement distinctes. Dans la tradition classique, l'art de l'invention rhétorique réduit aux soidisant topoi d'invention, qui sont les heuristiques pratiques qui aident le rhéteur de trouver des arguments. En gros, Filarète interprète l'architecture comme analogue à la littérature pour deux raisons: (1) les deux sont les pratiques et (2) l'essence des deux est l'invention. Filarète détient qu'une seule faculté humaine—qu'il appelle l'ingegno—sous-tend l'inventivité dans tous les arts pratiques. *Ingegno* s'avère être une version italianisée du terme grec *métis* (l'équivalent en latin duquel est *sollertia*)—la faculté de « l'intelligence rusée ». Filarète peut donc faire valoir que l'excellence dans les arts manuels (dont l'architecture est la épitomé) mérite la même reconnaissance que l'excellence dans les arts martiaux et littéraires, parce que tous sont pratiques et tous dépendent de l'*ingegno*. L'assortiment peu systématique des notions que Filarète discute dans le cadre de l'architecture (comme le décorum, la variété, la proportion humaine et le dessin) se révèlent ainsi être heuristiques d'invention architecturale ou *topoi* architecturales.

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ACKNOWLEDGEMENTS

Notwithstanding the advances in information technology in recent years, it remains a naked fact that no worthwhile academic work could ever be accomplished through the efforts of a single person. The name of an author invariably stands proxy for a group of persons whose knowledge and perspicacity undwerwrite the lion's share of a work's value. If it is convenient in many ways that such praise or blame as accrue to a work of scholarship bears principally on the author's reputation, it is decidedly unfortunate that the prominence of the author's name occludes the crucial contributions of benevolent advisers, charitable librarians, the works of other scholars, incisive interlocutors, hawk-eyed readers, and indulgent spouses. Among the surest, if most modest, testaments to the integrity of our intellectual tradition is the firm expectation that our scholars conform to the gracious custom of acknowledging formally the many debts they incur in producing a substantial written work.

It is an honor and a pleasure to offer my gratitude to the following individuals, groups, and institutions. To my supervisor, Alberto Pérez-Gómez, I am indebted for wise and gentle counsel, generosity in making available to me the fruits of a vast erudition, and unfailing confidence in my ability to bring this project to completion. From Martin Bressani I received invaluable strategic advice, earnest and honest criticism of my ideas, and emotional support from his humbling faith in my abilities as a scholar. My thanks to Matteo Soranzo for his willingness to lend his reputation and energy to my project. I am immensely grateful to all of my colleagues

in the McGill School of Architecture's History & Theory program for their sharp appetite for conversation on all subjects related to history, architecture, and the processes of research and writing. I would be remiss if I did not single out Edward Houle and Keith Ragsdale for special mention for their highly constructive comments and criticisms on the text of this dissertation. Keith in particular focused his ample and supple intelligence on several of the more challenging chapters of the manuscript. In a humbling display of loyalty, my friend and colleague Gabriel Shapiro, who works in an entirely different academic discipline, read with sedulous attention every single word of the text that follows—including footnotes in languages he does not read fluently. Despite my best efforts, the immensity of my gratitude to him has been exceeded, I fear, by the immensity of the improvement my text has seen as a result of his having lavished his attention upon it. I circulated a précis of the overall argument of the dissertation early in my writing process, and the incisive feedback that I received from Bill Shapiro and Gabriel Rosenberg was instrumental in determining the final structure of the work. The study that follows is also certainly better for the insights of Louis Brilliant and Gregory Caicco, each of whom listened patiently to my half-baked rambles on Filarete, rhetoric, and the imagination. Gregory also reviewed several drafts of chapters, always managing to tease out connections and significances I would never would have seen on my own. I am deeply grateful to Nathaniel Coleman for his stalwart friendship and his willingness to spend his valuable time on several early chapter drafts.

The road upon which I have traveled during the long maturation of this dissertation has been paved almost entirely with durable insights prized from the works of other scholars. My access to these treasures was eased by the hard and careful work of many able administrators and librarians. The staff at the School of Architecture at McGill was uniformly supportive and

encouraging. In particular, I would like to thank Luciana Adoyo, Wambui Kinyanjui, Mary Lanni-Campoli, David Krawitz, and above all the ever-optimistic Marcia King. At my home library at McGill University, I had all too many thoroughly professional interactions with librarians whose names I never got to learn. I am grateful to all of them. I am hopeful that in naming the following names, I will be understood as showing appreciation as I am able, and not as it is deserved. In McGill's Rare Books reading room, Dr. Richard Virr, Ann Marie Holland, Sharon Rankin, and Raynald Lepage all made me feel welcome. Across the pond, at the Biblioteca Nazionale Centrale di Firenze, I was granted the rare privilege of handling one of the very few manuscript copies of Filarete's *Libro* currently in existence. My encounter with this priceless object was made possible by Dr. Carla Pinzauti and in particular Dr. Piero Scapecchi, who were more than merely courteous as they helped me. I thank them for their professionalism and warmth. I also want to thank Olga Novoseltseva for her generous help in securing permission to use an image from the collection of The State Heritage Museum in St. Petersburg.

Of all the contributions that make a scholarly project possible, by far the most invisible and most important are the sacrifices made by the author's personal friends and close family, for whom a project like a dissertation typically manifests as a little more than a source of distraction and frustration. I am acutely aware that I have been blessed with remarkably generous friends and family, and I am grateful to all of them. I would like to take this opportunity, nonetheless, to express effusive thanks to my parents, Nancy and Bob Powers, whose great love of books and learning sparked my own. To my brother Ben and my sister-in-law Aly, I would like to give thanks for their confidence in me, the knowledge of which buoyed my spirits in heavy moments. I am grateful to my sons, Mitchell and William, for their complete and utter indifference to this project. It is strange but true that I worked all the harder knowing that the success of this project

meant nothing in their eyes. And for my wife, Heather, I know that it will ultimately be enough that this project is now done, and has been done well. Even so, I must insist that this dissertation would not have been possible without her. The mind is empty when the heart does not fill it with sentiments worthy of expression and intentions worthy of enactment. There is more love, and therefore more of Heather, in these pages than anyone—least of all she—might suspect. Most of what is good in this work is due to her, and most of the good that remains is due to the others mentioned above. All inconsistencies, inelegancies, and other faults are the responsibility of the author alone.

ABBREVIATIONS

Because I cite two editions of my primary source each time I refer to it, I use highly abbreviated forms. Full, formal references are, of course, included in the bibliography. I cite Anna Maria Finoli and Liliana Grassi's authoritative critical edition as:

• Filarete, *Trattato* (Finoli and Grassi, eds.)

And I cite John R. Spencer's widely available modern English translation as:

• Filarete, *Treatise* (Spencer, trans. and ed.)

For figures, I refer to folios in the Magliabechiana manuscript copy of the *Libro*, held in the Biblioteca Nazionale Centrale di Firenze (MSS. II. I. 140). I abbreviate the reference simply as:

• Magl.

I also use the following abbreviations for journals and reference works:

•	AL	Arte Lombarda
•	JAE	Journal of Architectural Education
•	JSAH	Journal of the Society of Architectural Historians
•	JWCI	Journal of the Warburg and Courtauld Institutes
•	LSJ	The <i>Liddell–Scott–Jones</i> Greek–English Lexicon

INTRODUCTION:

ARCHITECTURAL EXCELLENCE

Better Architecture through Better Patronage

The following study takes as its primary historical subject a book on architecture composed between approximately 1460 and 1464 by the Florentine sculptor and architect Antonio di Piero Averlino (1400 – c. 1469), whose nickname "Filarete" can be translated as "lover" or "friend" of "excellence" or "virtuosity." Filarete's nickname came to him late in his life, during the period where he was employed as the court architect of Duke Francesco Sforza (1401 – 1466; reigned 1450 – 1466) in Milan. Having begun his career as a sculptor—turning to architecture during his professional maturity—Filarete's self-identification as an *architeto* developed at around the same time that he adopted his nickname. As a prefatory supposition, which the following study will complicate, we may begin by positing Filarete's concern with *architectural excellence*. Since architecture may be understood both as a practice and as a product, I am deliberately suggesting that Filarete's *architettonico libro* (as he calls it) articulates his mature opinions and insights about excellence in the practice of making buildings as well as what contributes to the excellence of a given building. By explicating the various ways that Filarete folds the cognate notions of *excellence* and *virtuosity* (*arête* in Greek, *virtus* in Latin,

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¹ See Ulrich Pfisterer, "Ingenium und Invention bei Filarete," in *Nobilis arte manus. Festschrift zum 70. Geburtstag von Antje Middeldorf Kosegarten*, eds. Bruno Klein and Harald Wolter-von dem Knesebeck (Dresden: Kassel, 2002), 274 and n. 41, whose position derives substantially from Maria Beltramini, "Filarete e Filelfo: nuovi contributi alla *storia* dell'amicizia tra il letterato e l'artista nella Milano Sforzesca," *Annali della Scuola Normale di Pisa. Classe di lettere e Filosofia* serie IV, vol. I, fascicolo Quad. 1-2 (1996), esp. n. 20.

and *virtù* in Italian) into his conception of architecture, this study aims to contribute to an historical orientation and theoretical ground capable of supporting a robust and renewable commitment to architectural excellence in the present day.

The notion of architectural excellence probably does not at first glance seem a particularly promising starting point. There is nowadays little meaningful public consensus on how to judge architectural practice and its products beyond the banalities of legal indemnifications and building codes. Contemporary debates among academic theorists and historians and practicing architects often exhibit great energy, but they rarely weigh heavily in the public's estimation of what makes for good or bad buildings. And it is, after all, from the universe of persons who have no professional stake in or intellectual passion for architecture that the overwhelming majority of architectural clients emerge. If the architect is the pilot of a project, the client is the captain, and ultimate authority and responsibility repose in the latter. As much influence as architects may have exerted on the current form of our built environment, they have as a rule exercised only such *authority* as has been delegated to them. While the current lack of consensus among architects, theorists, and historians as to the contours of architectural excellence might be cited as evidence of healthy academic debate, the lack of consensus among the *public* that buys and uses architecture suggests that such academic debate has borne no civically useful fruit. Until the public—understood in this instance as the universe of potential clients—has at its disposal a usefully oversimplified account of architectural excellence, it will be all but impossible to take any meaningful steps toward its realization.

Following the examples set by Marcus Vitruvius Pollio (c. 80 – 70 B.C.E. – after 15 B.C.E.) with his *De architectura* (c. 15 B.C.E.) and Leon Battista Alberti (1404 – 1472) with his *De re aedificatoria* (1452), Filarete composed his *Libro* not for an audience of practicing

architects, but rather for patrons.² This obvious fact has hardly escaped the notice of commentators, but it has not, I believe, received its proper emphasis in connection with the equally obvious fact that effective means are more essential to the making of buildings than bold concepts and elegant plans. Although Filarete to a certain extent overstates his case—as any serious arguer should—the *Libro* may be characterized as an extended defense and working out of the conviction that "good patronage can overcome all other obstacles." As often as Filarete's Libro has been compared unfavorably to Alberti's De re aedificatoria (usually on the basis of verbal grace), no scholar that I know of situates this comparison vis-à-vis the fact that the universe of potential patrons of architecture was—in Filarete's day as in our own—considerably larger than the universe of readers able to appreciate a refined style of written Latin. Indeed, while Filarete somewhat theatrically laments that the *Libro* was not composed in Latin, as would befit the dignity of its noble recipient, he immediately thereafter points out that one of the virtues of a book written in the vernacular is that it "will be understood by more [persons]." Insofar as we can fathom Filarete's personal character (which is admittedly not very far), and insofar as we can reckon the textual and material qualities of the known manuscript copies of the *Libro*, it seems clear that he meant the work to commend his insights, advice, and exhortations as much to

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² Alberti manifestly intends his readers to set his work alongside Vitruvius's, but *De re aedificatoria* is not primarily an updating, recasting, or critique of *De architectura*. For a meticulous exegesis of the several literary traditions—most consequentially the traditions of the rhetorical handbook and the isagogic craft treatise—upon which Alberti bases his work, see Caroline van Eck, "The Structure of *De re aedificatoria* Reconsidered," *JSAH* 57, 3 (1998) and "Architecture, Language, and Rhetoric in Alberti's *De re aedificatoria*," in *Architecture and Language: Constructing Identity in European Architecture, c.1000 - c.1650*, eds. Georgia Clarke and Paul Crossley (Cambridge, U.K.: Cambridge University Press, 2000).

³ Mia Genoni, "Filarete in Word and Image: Persuasion and Invention in the 'Architettonico Libro'" (Ph.D. diss., New York University, 2007), 114.

⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 4 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] da' più essere intesa.

It has been noted that the preface in the codex Palatinus (dedicated to Francesco Sforza) does not address the issue of Latinity, while the preface in the codex Magliabechiana (dedicated to Piero d' Medici) highlights the issue. See Ayse Sevil Enginsoy, "The Visuality/Orality/Aurality of Filarete's Treatise on Architecture" (Ph.D. diss., Cornell University, 2002), 16 n. 48. This difference indicates that while Filarete thought it important to adduce the argument explicitly for his second dedicatee, he felt secure leaving it implicit for his first.

posterity as to his princely dedicatees. Among Filarete's several hopes for his *Libro*, in other words, was that it should contribute to the realization of architectural excellence by improving the overall quality of architectural patronage.

Architecture as an Art of Invention

Filarete's accounts of architectural practice and production—which this dissertation aims to elucidate—owe a profound debt to the semi-theoretical lexica that the artisans in the workshops of late medieval and early modern Italy used when discussing the subtleties of their craft. Modern readers are in general quite at ease with verbal accounts of artistic practice—even the artistic practices of distant geographies and epochs. Such comfort results in large part from the suppleness and coherence of the artistic lexica developed in the Renaissance, particularly in Italy. But as David Summers cautions us in one of his characteristically penetrating asides,

[a] Renaissance artist interested in discussing his aims in psychological terms did not simply have recourse to the reality of his own mind; rather, he had the possibility of access to a varied and culturally definite language about the reality of his own mind. The historical emergence of the articulation of art in such terms is significant in itself, indicating both a reorientation of the preceding language of art and a magnification of the significance of art, its definition as a new mode of thought and investigation.⁷

A verbal account of cognition—even an account that the cogitator composes for himself—is not the cognition itself, just as a map is not the world. The gap between lived thought and the representation of that cognitive experience in language imposes itself most forcefully in pedagogical situations. To teach an apprentice how to paint or carve marble or cast bronze, it is

Describing: Dutch Art in the Seventeenth Century (Chicago: University of Chicago Press, 1983).

⁵ For a stirring manifesto on the importance for the early modern formulation of the visual arts of those "traditions of meaning" that are not properly "theoretical," see the introductory remarks in David Summers, *The Judgment of Sense: Renaissance Naturalism and the Rise of Aesthetics* (Cambridge, U.K.: Cambridge University Press, 1987). ⁶ Scholarship in recent decades has made it clear that the explanatory and critical lexica first developed in early modern Italian contexts (which form the nucleus of our art historical tradition) are not altogether adequate to grasping the semantic complexities of art made in other contexts. See, e.g., Michael Baxandall, *The Limewood Sculptors of Renaissance Germany* (New Haven: Yale University Press, 1980) and Svetlana Alpers, *The Art of*

⁷ Summers, *The Judgment of Sense*, 15.

not enough either merely to tell him what to do or assign him a series of tasks. Explanations, demonstrations of techniques, discussions of exemplary finished works, and so on are all certainly useful, but at bottom what distinguishes the master from the apprentice is a facility with that peculiar form of *thinking* that accompanies making. A master who cannot use his hands due to, say, arthritis is still a master. While the apprentice learns to think what he is doing in large part by doing it repeatedly, a balanced lexicon of psychological and technical terms can make the appropriate connections between hand and mind far more conspicuous.

Early in the *Libro*, Filarete identifies his exegetical focus as the "modes and *misure* ['measures'] of building," which are for him two of the main concepts that the architect uses to *think* and to *communicate* the development of an intention as it gradually petrifies into an edifice. Now, the role of a patron is not to perform, or even to supervise, the manual work that actually materializes the building. Accordingly, the *Libro* offers no detailed instructions on how to quarry and cut stones, how to devise or chisel carpentry joints, how to forge ironwork. Rather, according to Filarete, a good patron possesses sound judgment as to architectural quality; he can articulate his desires so that his architect can satisfy them; and he knows how to distinguish authentically competent architects from "those who, knowing how to put a stone in lime and daub it with mortar, seem to themselves to be great masters of architecture." While an especially intuitive patron might need no help acquiring these, Filarete nevertheless recommends the practice of *disegno* ("drawing") as an aid to acquiring all three. As we will see, *disegno* relates intimately to the "modes and *misure* of building," which largely explains Filarete's intense focus on it in the *Libro*. Three of the *Libro's* twenty-five chapters (XXII-XXIV), in fact, constitute a

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⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 12 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] modi e misure dello edificare.

⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 13 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6: «[...] questi, come sanno mettere una pietra in calcina e imbrattarla di malta, pare loro essere ottimi maestri d'architettura.»

kind of mini-treatise on the technicalities of *disegno*. Further, Filarete depicts one of his characters—namely, the unnamed Lord's Son (manifestly a cipher for Duke Sforza's eldest son and heir)—as undertaking to learn *disegno* at the feet of the narrator (manifestly a cipher for the author) in order to indulge more fully his burgeoning passion for architecture. I will undertake to show in Chapter 5 that Filarete understands *disegno* as actuating and giving expression to precisely that form of cognition that we might today call *creative* or *inventive*. Filarete intends his *Libro*, in sum, to serve as the centerpiece of a coordinated curriculum that teaches potential patrons precisely that portion of architectural practice wherein they might reasonably expect to exert the greatest influence—namely, the craft of *architectural invention*.

In modern colloquial usage the term *invention*, with its connotations of *imaginativeness* and *innovation*, is cognate with *creativity*, a term closely associated with the fine arts and integral to post-Romantic accounts of selfhood, education, and ethics. ¹⁰ But *invention* also connotes *ingenuity*—a word related etymologically to *genius*, *engineering*, and *engine*. As an unmodified noun, an "invention" nowadays means a novel mechanical contrivance, usually attributable to the insight of an identifiable individual or group. *Invention* is thus cognate with (mechanistic) *technology* as well as (artistic) *creativity*. Few terms are so indifferent to the modern rift between technology and creativity, and so few terms are so promising as indices of where we might look to bridge—not to say heal—that rift. As one might expect from such a distinctive term, *invention* is only the latest scion of a venerable etymological tree. The modern English word *invention* derives from the Latin *inventio* ("invention," "finding," or "discovery"), which traditionally figured as the first, and most important, of the so-called five canons of

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¹⁰ Filarete's view of architecture has been linked to "philosophical Romanticism" precisely because he places imaginative invention at the center of the craft. See Peter Tigler, *Die Architekturtheorie des Filarete* (Berlin: Walter de Gruyter & Co., 1963), 39-40. But cf. Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, Mass.: MIT Press, 2004), 27-28.

rhetoric: after *Inventio* followed in order *Dispositio* ("disposition" or "arrangement"), *Elocutio* ("elocution," in the sense of verbal "style"), *Memoria* ("memory"), and *Actio* ("action," in the sense of "delivery"). ¹¹ (I will capitalize the five traditional canons of rhetoric to distinguish them from the Latin words used to name them.) Primarily a pedagogical device, the five canons of rhetoric lay out an itinerary, rigid enough to support a beginner's first fumbling efforts, that leads a rhetor from the assignation of a subject to the performance of a speech.

As the first canon, rhetorical *Inventio* entails the investigation of the subject matter of a speech, with the aim of finding or discovering relevant and persuasive arguments. In calling this process *Inventio*, the ancients meant to refer to a quite circumscribed sense of "finding" or "discovering." I will expound rhetorical *Inventio* and develop a richer interpretation of its significance in the arts and architecture in Chapter 6. The modern associations mentioned above—*creativity*, *ingenuity*, *imaginativeness*, and *innovation*—all coalesced during the late Middle Ages and early modernity as ramifications of the archaic, rhetorical meaning of *Inventio*. Fatefully, the cluster of modern meanings associated with artistic creativity—which developed out of late Medieval poetics¹²—as well as the cluster associated with mechanical technology—which developed in the context of late medieval and early modern craft practices¹³—all took up

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¹¹ The five canons of rhetoric received their clearest and most influential expression in the Ciceronian *De Inventione* (c. 84 B. C. E.) and the pseudo-Ciceronian *Rhetorica ad Herennium* (c. 90 B. C. E.), which were important pedagogical texts not only in antiquity, but throughout the Middle Ages, up through the Renaissance, and even unto the threshold of the Enlightenment. See Marcus Tullius Cicero, *De inventione*, trans. Harry Mortimer Hubbell, in *On Invention – The Best Kind of Orator – Topics* (Cambridge: Harvard University Press, 1949), 18-19 = I.vii.9 and Pseudo-Cicero, *Rhetorica ad Herennium*, trans. Harry Caplan (Cambridge: Harvard University Press, 1954), 6-7 = I.ii.3.

¹² See sections B and C of Heinrich F. Plett, *Rhetoric and Renaissance Culture* (New York: de Gruyter, 2004) as well as the first and fifth chapters of Douglas Kelly, *Medieval Imagination: Rhetoric and the Poetry of Courtly Love* (Madison: University of Wisconsin Press, 1978).

¹³ The infiltration of the rubric of *invention* into the mechanical arts remains understudied. For an intelligently constructed argument that mathematics constitutes the core of mechanical invention (though the study concentrates on the second half of the sixteenth century and thereafter), see Alexander Keller, "Mathematics, Mechanics and the Origins of the Culture of Mechanical Invention," *Minerva* 23, 3 (1986). Medieval conceptions of the mechanical arts recognize that their practice requires reason, though it is not usually specified which kind. See George Ovitt, Jr., "The Status of the Mechanical Arts in Medieval Classifications of Learning," *Viator* 14 (1983).

orbit together around Renaissance architect-engineers like Filarete and his peers. The polarization of mechanistic technology and artistic creativity that we nowadays consider entirely unremarkable appears historically striking when foiled by figures like Leonardo da Vinci (1452 – 1519)—one of Filarete's professional successors in Milan—who was famously as interested in devising machines as he was in composing paintings.

Given this backdrop, it is hardly surprising that a number of contemporary theorists interested in the articulation of a more coherent poetics of architecture have gestured toward rhetoric—if sometimes obliquely—as a source of useful insights. Dalibor Vesely, for example, explicitly builds up his account of a more humane architecture atop a notion of "communicative space," which notion he credits to classical poetics and contemporary hermeneutics.¹⁴ Analogously, Alberto Pérez-Gómez argues that architecture should be understood as inhabiting and modulating "erotic space," which he equates to Platonic *chora*—"properly human space[:] the space of human communication." Pérez-Gómez develops his notion of erotic space by turning—like Vesely—to classical and contemporary poetics and hermeneutics. Both Vesely and Pérez-Gómez invoke poetics in order to illuminate the semantic functions of architecture by comparing the making of buildings to the generation of meaning in language. Although obviously communicative, however, poetry trucks in the rather more abstract meanings that animate words, concepts, and images in the broadest sense. As I will consider more fulsomely in Chapter 3, the discipline concerned with the intractable concreteness of specific audiences, given occasions, and particular places is *rhetoric*. Indeed, for the greater part of its very long history rhetoric has been viewed as the art of effective communication. Schematically, we might say that

¹⁴ Vesely, Architecture in the Age of Divided Representation, 8.

¹⁵ On the notion of "erotic space," see Alberto Pérez-Gómez, *Built Upon Love: Architectural Longing After Ethics and Aesthetics* (Cambridge, Mass.: MIT Press, 2006), ch. 2, esp. 36 ff.

¹⁶ Pérez-Gómez, Built Upon Love, 46.

whereas the poet generates meaning using strategies of transference, the rhetor generates consent using strategies of persuasion. Whereas the poet is defined by the *source* of his discourse—the muse or divine furor—the rhetor is defined by his focus on *audience*—a good speech is one that moves the audience to decide and act. Whereas poets illuminate the horizon of human experience, rhetors enact the experience of human civility. As poetics and rhetoric have been, since the profusion of works on poetics composed during the twelfth century, construed as sister disciplines, ¹⁷ so Vesely's and Pérez-Gómez's insightful analyses of communicative space in poetic terms invite a complementary analysis in rhetorical terms. ¹⁸

In a similar vein, and closer to the preoccupations of this study, James McQuillan uses the notion of rhetorical invention to analyze the modern relationship between technology and creativity. Specifically, he asserts that modern industrial culture self-consciously views "creativity as the mainspring of its cultural hegemony." Paradoxically, however, modern technological culture has failed to exploit the full potential of human creativity. One reason why human creativity remains underappreciated and underemployed—especially in the domain of architecture—is that its basic character is neither artistic nor technical, but rather rhetorical:

[t]o identify how architecture can be rhetorical is the question that is still posed for us in a world dominated by technics and technology, whose dominance seems to be never questioned as an explanation of how things are. Yet creativity is the indispensable element in all production, just as technology must always be interpreted in terms of ontological considerations and temporal horizons.²⁰

¹⁷ For some brief and incisive remarks on the universal usage of rhetorical precepts as the foundations for various medieval literary arts—including poetics—see the introduction to James Jerome Murphy, ed., *Three Medieval Rhetorical Arts* (Berkeley: University of California Press, 1971).

¹⁸ For an engaging sextet of studies that interprets the visual arts—and most interstingly architecture—in early modern culture using the rhetorical canon of *Actio* as its primary interpretive lens, see Caroline van Eck, *Classical Rhetoric and the Visual Arts in Early Modern Europe* (New York: Cambridge University Press, 2007).

¹⁹ James McQuillan, "Beyond Logistics: Architectural Creativity as *Technê* and Rhetoric in the European Tradition," *Cloud-Cuckoo-Land: International Journal of Architectural Theory* 4, 1 (1999), electronic article, http://www.tu-cottbus.de/theoriederarchitektur/Wolke/eng/Subjects/991/McQuillan/mcquillan.html.

²⁰ McQuillan, "Beyond Logistics."

Citing Vitruvius, McQuillan explains that architecture may be qualified as rhetorical precisely because architect's job is to *invent* solutions that recuperate, articulate, and extend a culture's mythic, idealized view of itself.²¹ In line with tradition, McQuillan places *invention* at the heart of rhetoric, and he understands the former to mean more or less the process of finding connections or similarities among disunited things. In suggesting that the rhetorical understanding of invention may be used to illuminate contemporary issues in architecture, McQuillan foreshadows one of the central theses of this dissertation: architectural invention is, if not identical to, then at least cognate with rhetorical invention. Medieval poetics reinterpreted invention as a poetic capacity, but the origins of both the concept and the practice of invention remain thoroughly rhetorical. If invention—or the elemental form of cognition that animates it—is a basic human faculty, then those who have no practical experience with building can still be good patrons, because they can adapt the inventive capacities they have acquired in other disciplines to serve architectural ends.

Many other contemporary authors wrestle with the question of architectural creativity, and rhetorical terms and concepts turn up with surprising frequency in their reflections. My purpose here, however, is not to survey that literature exhaustively, but only to suggest that the time is ripe for further investigation into the profound linkages between rhetoric and architecture, most particularly vis-à-vis invention. Some of the authors in question will, in any case, appear in more specific, and therefore more propitious, contexts in the pages that follow. To the extent that this dissertation succeeds in providing a coherent account of the similarities and differences between rhetorical *Inventio* and Filarete's notion of architectural invention, I am hopeful that it

²¹ Although I will return to it in Chapter 6 in a more fortuitious context, it may be helpful here to adduce Vitruvius's definition of *architectural* invention: "Invention, nevertheless, is the explication and rationalization of obscure questions—the discovery, with adaptable vigor, of new things," which is my translation of Vitruvius, *Vitruvius: On Architecture*, trans. Frank Stephen Granger, originally composed c. 15 BCE (New York: Putnam, 1931-1934) I:26-27 = I.ii.2: Inventio autem est quaestionum obscurarum explicatio ratioque novae rei vigore mobili reperta.

will thereby hone today's urgent conversation on architectural creativity to a finer edge. A further motivation for this dissertation is my conviction that the discipline of architecture—the art of making apposite places for human practices and products—offers a privileged prospect onto all questions concerning human creativity. Those who make and study architecture cannot avoid struggling to think through the real exigencies of tangible making, and this gives them a uniquely valuable prospect onto the intricate linkages among our notions of technology, technique, practice, and production. Given the obviousness of such a proposition, it seems odd that writings drawn from the canon that the discipline of architecture curates for its practitioners and theorists have so rarely been drawn into our philosophical discourse on these subjects. I hope in this dissertation to give some indication of how the discipline of architecture might contribute to illuminating the general notion of creativity that now enjoys currency in our culture.

The Spirit of Polemic

The reader will undoubtedly suspect some of the points elaborated in this dissertation of having been born under the sign of polemic. As I fear that practicing architects and architectural academics might mistakenly presume that I have taken aim at *them*, I would like to insist up front that I have self-consciously aimed my criticisms at the *public image* (in the sense reserved for public relations) of architectural practice current in the industrialized West. That is, I am critical of the caricature that non-architects conjure for themselves when they discuss what architects are capable of doing, what it is architects actually do, and—perhaps most poignantly—what architects might be *hired* to do. If the profession of architecture is today in crisis (as many claim), I would submit that a significant part of the problem lies not with what architects actually can or cannot do, but with what *clients* believe they are buying when they hire architects. In the

public's mind, the architect is hired to generate and refine the basic idea for a building and to produce such drawings, models, and texts as might be necessary to fix this idea in the minds of others. He produces his basic ideas for buildings, it is vaguely supposed, by working alone at his drafting table. I am well aware that this image is not only incomplete, but in several crucial ways inaccurate—though of course the power of a public image does not pivot on completeness or accuracy, but rather on its perceived salience and utility.

Filarete forthrightly undertakes to persuade his patron to build great buildings, and in service of this end he construes the invention of architecture as a specifically *patronly* endeavor. In my view, the numerous shortcomings of Filarete's writing occlude, but do not ultimately vitiate, his achievement, which is the adumbration of an image of architectural practice that is as useful as it is salient—from the *patron's* point of view. As I will show (most especially in Chapters 2 and 3), Filarete assigns primary responsibility for the generation of buildings to the patron rather than to the architect. He also assumes the importance of other people in the conception and refinement of building designs no less than in their material realization. To sum up the essential points of his view of the architect, Filarete represents the characteristic aptitudes of an able architect as a broad competence in the manual arts, a genius for ideational catalysis, and a knack for effective communication. These aptitudes receive their orientation from the overriding imperative of the architect to serve human excellence. Filarete affirms that it is the architect's duty to catalyze human excellence in his patron, to embody it personally, and to memorialize it for posterity in the form of exemplary buildings and other works.

The foregoing exposition, which I have deliberately cast in terms meant to be more arresting than precise, is meant to show how certain aspects of Filarete's image of architectural practice might serve to illuminate and even to correct certain aspects of our own. It is no accident

that those aspects of Filarete's thinking that resonate with our current situation have attracted the attention of more than a few modern commentators. I would have the reader believe that I have not resurrected Filarete merely as a tool in a preconceived critical project. Nevertheless, I readily admit that this project received its generative impulse from the gap between the richness and consequentiality of my encounter with the Libro and the general opinion of the work as evidenced in its tradition of commentary. Any contribution to an ongoing conversation that is not either a rehearsal or a eulogy of points already made cannot avoid assuming the guise of criticism. The presumption of incompleteness or inaccuracy provides the initial impetus for criticism, yes, but also for investigation. Such presumptions are thus the primary—though hardly the only—marks of originality. I therefore in no way ask the reader to believe that my study is neutral. On the contrary, I aver my possession of the historian's most characteristic form of illumination: a sincere question. For all these reasons, the reader may find it helpful to know that the question that has driven my investigation might be thematized thusly: How is the full value of architecture most persuasively rendered perceptible to a potential client?

Overall Task, Principal Subject, and Primary Method

The following study attempts to draw close to Filarete's *Libro* by viewing it as its author might have, which is to say as an entirely contigent work that might have been composed and made otherwise. The author views his own work as fluid, not fixed. I presume that Filarete's authorial situation both enjoined certain authorial problems upon him and constrained his options in resolving those problems. And I presume that each of Filarete's authorial choices was made with respect to a more or less unified view of the sense of the work. Such presumptions align the following study in some ways with the methods and preoccupations of both history and literary

studies, and the alert reader will note my borrowings from both fields. The alert reader will also note, however, that I do not primarily treat the *Libro* as either an historical artifact or an ahistorical text. I rarely treat the *Libro*, in other words, as either a material residuum of its historical situation or a crystalline arrangement of words. Rather, I principally treat the *Libro* as a work of letters that articulates a complex thought, and it is that *thought*—or more correctly, that *thinking*—that the following study aims to illuminate and explicate. Historical and literary tools, as well as the insights derived from their use, therefore generally appear in the pages that follow as unembarrassed subordinates.

Like every other author, Filarete gives expression in his work to a thinking that is in most ways quite conventional. To be sure, he advances several notions that give every appearance of being both original and consequential, but—again, like every other author—even the most idiosyncratic thrusts of his thinking receive most of their momentum from the conventions of the epoch and culture that they participate. Illuminating and explicating Filarete's thinking thus entails, for the most part, showing the literary role, historical scale, and philosophical quality of *convention* in the *Libro*. The following study is thus not primarily concerned to measure the consequentiality of unique connections between the *Libro* and the historical situation of its author, although again, I do not scruple to enlist such connections as auxiliaries. Rather, the overall task of this dissertation is to clarify the *conditions for the possibility* of Filarete's thinking. Such an aim self-consciously aligns the following study in some ways with the methods and preoccupations of post-Kantian critical philosophy, and the alert reader will mark the philosophical bent of my approach and style of argumentation.

In inquring after the conditions for the possibility of Filarete's thinking, I am not taking aim at eternal or universal verities. Filarete's thinking was an historical event, as was the

composition of his *Libro*. Indeed, without a copy of the actual *Libro* in hand, it would be almost entirely fatuous to speak of the thinking to which it gives expression. The *Libro*, in this sense, is not merely incontrovertible evidence of its own possibility, but principally a material *symbol* of the conditions of that possibility. What I mean is that the material and historical particularity of the *Libro* provides a basis for intelligent conjecture as to why Filarete composed his *Libro* as he did. As the *Libro* is essentially (though not utterly) a work of letters, its potentialities and limitations are essentially (though not utterly) conditioned by the literary and linguistic conventions that its author inhabited as he wrote it. The two disciplines that therefore supply most of the working assumptions, concepts, distinctions, and methods that frame and enable the following study are *philology*—the study of linguistic (and literary) usage—and *rhetoric*—the supreme literary art of the Renaissance, and indeed of our culture generally since the time of Gorgias. I therefore urge any reader troubled by the relative dearth of fine-grained social and material details in this dissertation to consider as a potential counterbalance the adundance of fine-grained historical observations about *words*.

While I expect that my characterization of this dissertation as a philological study entails few, if any, difficulties for a modern reader, I believe my characterization of it as a *rhetorical* study requires careful clarification. By "rhetorical study" we often nowdays mean a technical analysis of the literary (or pictorial or performative) means by which works (or any of their parts or aspects) function persuasively in the contexts of their initial publications. In the case of the present study, such analyses would depend upon an intimate historical knowledge of Filarete's material, social, and political context, including everything from the social entertainments preferred at the Sforza court, the tools and techniques employed by Lombard masons, the precise legal arrangements that governed the inheritance of the Duchy, and so on. Several parts of this

study *do* amount to rhetorical analyses thusly defined, which means that these parts should be held to the appropriate historical and hermeneutic standards. In general, however, I value the results of these analyses mainly as markers of the frontier between Filarete's thinking and its conditions. (Thus, for example, Chapter 6 opens with a painstaking analysis of the persusive mechanism of one of Filarete's favorite literary conceits with the purpose of folding the results of that analysis into an account of his thinking about architectural invention.) In short, this study is intensely aware that the *Libro* operates as an instrument of persuasion, but is only concerned with demonstrating the mechanism of that operation when it clarifies Filarete's thinking about architecture and invention.

It also bears emphasizing that my overall goal is not to "explain" Filarete's *Libro* by showing how it reduces to a proposition or system of propositions. In other words, I am not undertaking to identify, to summarize, or to critique Filarete's "point." This is not to say that I view these tasks as impossible. On the contrary, I believe firmly that John Spencer has already astutely identified and concisely summarized the position that Filarete intends to advance. Quite simply, "[t]he exposition of the new architecture that Filarete advocates is the true core of the treatise." In his *Libro*, Filarete undertakes the exposition and advocacy of antique building practice as against the "modern" (read: Gothic) building practice then dominant in northern Italy. The work of identifying and summarizing Filarete's position has been done, and done well. And a *critique* of Filarete's position cannot amount to more than a technical exercise, since we are no longer invested in the debate that gives this position its sense—whether it is better to build in the spirit of ancient Rome (and Greece) or in the spirit of Gothic France and Germany. The dissertation that follows thus neither attacks nor defends Filarete, neither disagrees nor agrees with him in his explicit assertion of this or that proposition. We shall be interested, rather, in the

²² Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xix.

philosophical, literary, lexical, and factural *resources* that Filarete appropriates and activates in order to construct and defend his position.

Finally, it may be useful to recall that rhetoric recognizes two audiences for any given speech or text. Primary is the audience that actually hears the speech or constitutes the actual, initial readership of the text. Secondary, however, is the audience of real, flesh-and-blood persons who encounter the speech or text through reports, summaries, or copies—who encounter the work, in short, in contexts whose unique characters the author did not have in mind as he performed or composed it. This secondary audience is no less particular than the primary, and since it comprises *posterity*, it is in several important ways the more consequential of the two. To point out what I hope is obvious: we are members of Filarete's secondary audience, which means that the *Libro* addresses us quite directly. Another reason for the paucity of fine-grained historical details in this dissertation is that I have not endeavored primarily to clarify how the Libro functioned semantically for Filarete and his contemporaries, but rather to bring to light a novel understanding of how the *Libro* might function semantically for us. That is, I do not in this dissertation treat the *Libro* as an autonomous atom of literary production whose whose unity consists in its material embodiment, its instantiation of grammatical and literary norms, or its presumptive socio-political "effects" (according to the analyst's preferred method), and whose primary meaning belongs to a distant context. Rather, I have self-consciously treated the Libro as a "speech" in the ongoing conversation that we call tradition, in which we the living are the principle actors. The basic unity of a "speech" made by a participant in a conversation derives neither from the particular words uttered (or written) nor from the particular language used, but rather from the presumed unity of the author's thinking. And the primary meaning of such a "speech" belongs to the overall conversation its speaker participates, and it can only be

understood by entering into that conversation. The following study attempts to enact just such a conversation between Filarete's *Libro* and ourselves.

Notes on Rhetorical Terms

The choice to use *rhetoric* as an interpretive lens unfortunately encumbers the modern exegete with many more or less anachronistic technical terms. Rhetoric has not been widely taught as a self-standing discipline for decades, and it has not been valorized as the "Queen of the Liberal Arts" for centuries. Precisely because rhetoric constituted the backbone of our culture's pedagogy for millennia, however, many of its terms are still current in modern European languages, though they no longer possess the fine semantic edge that once made them suitable for technical uses. To the modern ear, rhetorical terms often sound dated when they do not sound awkward, or even arcane. I am in general sedulous about defining and discussing unfamiliar rhetorical terms as they arise in the text, but I believe the reader will find it useful to begin with a few basic definitions already in hand. Two potentially troublesome terms central to this dissertation are *invention* and *topic*.

Following the usage introduced above, I will use the capitalized, italicized, Latin term *Inventio* to refer specifically to the historical canon of rhetorical invention. At this point, it is only important to know that *Inventio* was viewed not only as a process, but also as a kind of cognitive faculty. Some persons were viewed as being naturally better at it than others. I will use the un-capitalized, un-italicized, English term "invention" to refer, with deliberate vagueness, to the cognitive process that produces insights. The main reason for such vagueness, which might seem inappropriate for a technical term, is precisely that the Latin word *inventio* and its descendents show up in such variegated contexts—in rhetoric and poetics certainly, but also in

discourses related to natural philosophy, the visual arts, and the mechanical arts, to name only some of the most prominent. I do not argue the point in this dissertation, but I think it a near certainty that rhetorical *Inventio*, which was traditionally viewed as the epitomic use of "connective" thinking, provided the primal conceptual template for interpreting and articulating *any* cognitive process that resulted in discovery. I will use the un-capitalized, italicized Italian term *invenzione* when speaking of Filarete's usages of the term, which are in general representative of Quattrocento usage in the context of the production and criticism of art objects.

The English word *topic* descends from the classical Greek word τόπος (plural, τόποι; Latinized respectively as *topos* and *topoi*), which meant very nearly the same thing as the modern English word *place*. The Latin equivalent is *locus* (plural, *loci*). In this dissertation I use the Greek terms *topos* and *topoi* to refer to the so-called *topoi* of invention, which the Italian philosopher Giambattista Vico (1668 –1744) provocatively summarizes as follows:

Traditional "topics" is the art of finding "the *medium*," i.e., the middle term: in the conventional language of scholasticism, "medium" indicates what the Latins call *argumentum*. Those who know all the *loci*, i.e., the lines of argument to be used, are able (by an operation not unlike reading the printed characters on a page) to grasp extemporaneously the elements of persuasion inherent in any question or case.²³

As will become clear from my more careful study in Chapter 6, Vico's post-Renaissance summary of the *topoi* of invention neatly (and in all likelihood deliberately) echoes Boethius's (c. 480 – 524/525) post-classical summary. Broadly speaking, the rhetorical tradition views the *topoi* of invention as intellectual "places" where dialecticians and rhetors mentally "go," as it were, to "find" or "invent" arguments. Arguments knit together facts and commonly held opinions in order to augment what the audience already believes and feels about the subject of a speech. In essence, faced with the task of developing a speech—which always presumes a

²³ Giambattista Vico, *On the Study Methods of Our Time*, trans. Elio Gianturco (Indianapolis: Bobbs-Merrill, 1965), 15.

situation in which one *might* say almost *anything*—an ensemble of *topoi* function together as a method that disciplines the search for things to say.²⁴ As the operative content of an "art of invention," the *topoi* do not substitute mechanically for a rhetor's inborn insight, but act rather as catalysts that stimulate, channel, and enhance it.

The goal in rhetorical *Inventio* has traditionally been the discovery of a "middle term" that knits together two other terms by establishing a semantic bridge—an argument—that persuasive force can traverse. This is how invention in general, which I will elaborate more fully in Chapters 6 and 7, may be seen as a kind of "connective" thinking. Just as memorizing a list of letters or words does not make one able to read, so memorizing a list of topoi does not enable one to "read" the structure of a discourse. Using several *topoi* in a given instance might improve the rhetor's chances of finding an apt argument, but using them continually so that they become familiar tools strengthens that ability over time. ²⁵ The *topoi*, that is, strengthen the capacity for inventive thinking even as they assist its operation in a given instance. I have chosen to use the Greek terms topos and topoi to refer to the "places" of invention in this dissertation in order to avoid burdening the reader with having to distinguish between technical and colloquial uses of the English word *topic*. To disburden the reader as fully as possible in this respect I have in fact eliminated the word topic from my text in favor of such convenient synonyms as subject, theme, focus, matter, and issue. Where necessary, I have used qualifiers to distinguish other technical meanings of the terms *locus* and *topos*—e.g., "geometric *locus*" and "literary *topos*."

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²⁴ Indeed, in his *Topics* Aristotle characterizes the *topoi* of invention collectively as a μέθοδος (Latinized as *methodus*). See Aristotle, "*Topica*," trans. E. S. Forster, in *Posterior Analytics – Topica* (Cambridge, Mass.: Harvard University Press, 1960), 272-73 = Li = 100a18. It was precisely this usage that provided an authoritative anchor for the characterization of a *method* as having to do with rationality and argumentation as such. For a penetrating analysis of the peculiarities of the appropriation and development of the notion of method in the Renaissance, see Neal Ward Gilbert, *Renaissance Concepts of Method* (New York: Columbia University Press, 1960).
²⁵ Cf. Eleonore Stump, "Dialectic and Aristotle's *Topics*," in *Boethius's De topicis differentiis*, ed. Eleonore Stump

²³ Cf. Eleonore Stump, "Dialectic and Aristotle's *Topics*," in *Boethius's De topicis differentiis*, ed. Eleonore Stump (Ithaca: Cornell University Press, 1978).

One more term that deserves comment is *idea*. As I will discuss in Chapter 1, most modern commentators gloss Filarete's *Libro* in the first instance as a fictional narrative that recounts the construction of an ideal city (named Sforzinda) and its port (named Plousiapolis). For his part, Filarete rarely uses the word *idea* or its cognates (they appear in aggregate no more than eight times throughout the $Libro^{26}$), and when he does, it is almost always in reference to painted or engraved images. Filarete, in short, nowhere characterizes Sforzinda and Plusiapolis as ideal—nor does his first and most influential critic, Giorgio Vasari (1511 – 1574), who offers only the most cursory summary of the contents of the Libro in his seminal Lives of the Most Excellent Painters, Sculptors, and Architects (1550 and 1568). 27 Still, the fact that Filarete does use the term *idea*, coupled with the Renaissance's well-known interest in debating the meaning of *imitation*—a concept rooted deeply in Platonic Idealism—together militate for treating the term with care. Whenever I do use the term *idea*, it is always advisedly, with the extended reflections of Chapters 3 and 4 in mind, and in general as a semi-technical term referring to a preconception of a building. Chapter 4 engages directly with Platonic Idealism, which has made it necessary to distinguish a Platonic Idea (or Form) as a discrete notion. The capitalized word "Idea" thus refers always to specifically Platonic Ideas. Wherever I have needed recourse to the vague, colloquial meaning of the word *idea*, I have preferred such serviceable alternatives as concept, notion, and insight. I have been equally circumspect with the adjective ideal, preferring instead synonyms such as best, optimal, and perfected.

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²⁶ All of the quantitative philological analyses of Filarete's text found in this study have been made possible by the digitalization project of the Centro di Ricerche Informatiche per i Beni Culturali (nicknamed "Signum") at the Scuola Normale Superiore di Pisa, which provides online a selection of important art historical texts, as well as a search engine capable of wildcard and proximity searches across those texts. Among Signum's offerings is a digital copy of Anna Maria Finoli and Liliana Grassi's redaction of Filarete's original text. Signum can be found online at http://fonti-sa.signum.sns.it/.

²⁷ Vasari, Giorgio, *Le vite de'più eccellenti pittori, scultori ed architettori. Con nuove annotazioni e commenti di Gaetano Milanesi*, ed. Gaetano Milanesi, 9 vols., originally published in 1550 (1st ed.) and 1568 (2nd ed.) (Florence: G.C. Sansoni, 1878.), II:453-63.

Notes on Texts and Translations

Every quotation from the *Libro* in this dissertation is my own translation of Filarete's original Italian text. Given that John R. Spencer's highly readable English translation remains perhaps the most widely referenced version of Filarete's work, the reader may justly ask why I have taken the trouble to prepare my own translations. The reason, quite simply, is my agreement with Spencer's academic reviewers, who have unanimously announced themselves dissatisfied with his translation. Marjorie Licht and Peter Tigler, for example, first note that Spencer's translation is "crammed with errors and inaccuracies of all sorts", before going on to document meticulously hundreds of them. Juergen Schulz's terse critique, while less exhaustive, is no less severe in its judgment. "[Spencer's] translation, furthermore, is poor. Every page contains one or more English renderings that are inexact, willfully changed from the original, or plainly wrong. The punctuation often changes the sense of the original, tenses are confused, and the lines of the dialogue are occasionally attributed to the wrong speakers." In short, Spencer's translation often misleadingly inflects—where it does not simply obscure—the sense of many passages in which the *Libro* 's key themes appear. He treats manifestly crucial terms, such as *fantasia*, invenzione, fantasticare, disegno, and even edificare, with cavalier laxity. He also seems entirely comfortable in using his position as a translator to impose a reading upon the text, even (somewhat inexplicably) when such an imposition does not bear on the main lines of his interpretation of the *Libro*.

²⁸ Marjorie Licht and Peter Tigler, rev. of *Treatise*, by Filarete (Spencer, trans. and ed.), *The Art Bulletin* 49, 4 (1967): 352.

²⁹ Juergen Schulz, rev. of *Treatise*, by Filarete (Spencer, trans. and ed.), *The Journal of Aesthetics and Art Criticism* 25, 4 (1967): 473.

Because so many of my arguments are philological, using Spencer's translation would have required that I develop—and that my readers master—an elaborate and invasive notation capable of tracking every rectification I would impose upon his text. To spare both myself and my readers such troubles, I have instead opted simply to prepare my own translations. Still, I have in all cases referred to Spencer's text as a foil, and I have not infrequently used it as a matrix for my own. Spencer's English is for the most part supple and urbane, and his translation evidences an enviable familiarity with rare and archaic terms for building materials, comestibles, and the like. Some of my translations are therefore more readable for having been modeled upon his, and I am grateful to his extensive vocabulary, which often saved me effort and worry. Much of what is good in my translations is to his credit; all errors and inelegancies are my responsibility alone.

My control over the historical and intertextual complexities of Filarete's work has been greatly enhanced by Spencer's explanatory notes, which are models of informed engagement with a text. If Spencer's philological precision often wants, his mastery of Filarete's contemporary and classical referents often daunts. I have also made considerable use of Anna Maria Finoli and Liliana Grassi's excellent critical edition of Filarete's fifteenth-century Italian text. Their notes have likewise been immeasurably valuable sources of information and guidance. Since Finoli and Grassi's edition is nowadays accepted as the standard text, but Spencer's translation has the widest currency, I have chosen to cite both versions. I am hopeful that this practice of double citation might augment the utility of my footnotes to at least the same measure that it has augmented their length.

In order to keep the whole text in a single language, I always use English translations of texts that were originally composed in another language. As many of my arguments are

philological, I have where practicable preferred to produce my own translations. Even in instances where I have found an available translation to be basically satisfactory, I have sometimes made such substantial emendations to it that I must assume full responsibility for it. In all cases where I take responsibility for the translation, I include in the footnote the original text in its original language so as to make my translations as vulnerable as possible to constructive criticism. One practical upshot of such a practice is that the reader may view the presence in the footnote of a text in its original language as a signal that I am assuming responsibility for the translation. Conversely, when I cite a translation directly and do not give the original text—which I generally do when the stakes are not philological—the reader may presume that I am not assuming responsibility for the translation per se. Advised of such usage, the reader will notice that although I work extensively with certain Greek terms, I never reproduce Greek texts in the footnotes. This is because, in keeping with my rule, my facility in classical Greek is too limited to criticize or emend the translations of others, let alone to propose my own with any confidence. For classical sources in general I have usually (though not always) cited the widely available—and usually quite good—Loeb editions, though I have very often felt it necessary to emend the English translations of Latin texts to a greater or lesser extent. Where possible, I have cited not only the page numbers of the edition I have used, but also the appropriate chapters and sections of the original. For works by Plato and Aristotle, I have additionally cited the appropriate Stephanus and Bekker numbers, respectively.

Roadmap through the Dissertation

Although I do not formally divide this dissertation into sections, the reader may find it useful to know that it was originally conceived as having two halves. The first half, which

comprises the first three chapters, lays the historical and theoretical groundwork for the latter half, which is intellectually more ambitious. The first chapter—mainly expository—sketches and briefly comments upon the historical and historiographical situation of both Filarete and his *Libro*. I begin with the history of the *Libro*, outlining its original reception, subsequent dismissal, and recent revival. I then provide a précis of the *Libro's* contents so that the reader will be familiar with the schematic itinerary of the work's narrative. Next follows a philological analysis of Filarete's nickname, coupled with a discussion of the terms *architteto* and *architettura*. The exposition closes with a brief biographical sketch of Filarete. The remainder of the chapter reviews and assesses the extant literature on Filarete and his *Libro* (almost all of which dates from the twentieth and twenty-first centuries). I frame my review as a pair of inquiries into the difficulties that commentators have had categorizing the *Libro*.

The second and third chapters discuss two of the essential conditions for building that Filarete represents as fundamental and universal in his *Libro*. Chapter 2 reconstructs and extends the argument initiated above in specifically Filaretean terms, contending that the characters in the *Libro* presume the primacy of the patron in architectural production. In contradistinction to our modern habit, Filarete credits the *patron* rather than the architect with the generation of buildings. Filarete nowhere in the *Libro* explicitly asserts the primacy of the patron over and against the architect, apparently holding it to be too obvious to need mentioning, let alone defending. After presenting the case for the tacit plenipotence of the patron's will, or *voluntà*, I explore a few important consequences of its primacy. Chapter 3 begins with the observation that the principal Quattrocento Italian verbs that might be translated as *to understand* appear approximately as often in the *Libro* as the verbs that might be translated as *to build*. Again, Filarete nowhere explicitly affirms the importance of communication, because the importance of

mutual understanding for the construction of civically consequential edifices is too obvious to need defending. Still, his choice to cast the narrative in the *Libro* as a dialogue seems curious given that his characters never seem to disagree with or misunderstand one another. I interpret Filarete's choice of form as an attempt to showcase the techniques and instruments by which understanding is shared. In short, Chapter 3 presents the core of my case for the appropriateness of *rhetoric* as an interpretive tool of the first order in the domain of architecture in general, and vis-à-vis the *Libro* especially.³⁰

In the second half of the dissertation, which comprises the fourth through seventh chapters, I attempt historically informed interpretations of some of the *Libro's* key concepts and themes. In Chapter 4 I tackle the philosophically challenging issue of architectural mimesis. Filarete uses three different lexical rubrics to refer to the product of a process of ideation in an architectural context: *invenzione* ("invention"), *fantasia* ("fantasy," "figment"), and *idea* ("idea"). The rubric of *invenzione* derives from the tradition of rhetoric. The rubric of *fantasia* derives from the tradition of faculty psychology, which owed allegiance in Filarete's day to medicine as well as to epistemology. The rubric of *idea*, obviously, derives from the tradition of Platonic Idealism. The overarching theme that dominates Quattrocento conceptions of artistic production is, as is well known, *imitation*. Within this lexical situation, I elaborate several intricate analyses of Filarete's comments on the limits and potentialities of architectural ideation.

In Chapter 5 I focus on the lexical rubrics of *misura* and *disegno*. Whereas Chapter 4 undertakes philosophical reflections on the products of architectural ideation, Chapter 5 addresses the practices that catalyze and constrain architectural ideation. I begin by commenting upon Filarete's basic notions of *misura* and *qualità*. I then fold these commentaries into a

³⁰ To be sure, the most characteristic instruments of architectural understanding are not verbal, but while rhetoric was traditionally viewed as *primarily* verbal, it was not viewed as *exclusively* verbal. The tradition of rhetorical pedagogy treats of gesture, intonation, and general comportment as well as logic and diction.

discussion of architectural invention by transitioning to a consideration of *disegno*. Filarete recognizes a spectrum of different kinds of tangible drawings, each of which corresponds to a different kind of drawing practice. These parallel spectrums—drawings and the practices that materialize them—run from scale wooden models, which are conceptually stable and highly refined, down to sketches, which are fluid and schematic. At the root of both spectrums lies *disegno nella mente* ("drawing in the mind"), in which the practitioner uses his *fantasia* ("imagination") to craft mental images. *Disegno nella mente* thus refers simultaneously to a cognitive practice and to the mental images produced thereby. Filarete holds that one becomes expert at *disegno nella mente* by practicing manual drawing. The artist, that is, becomes able to "reason" imaginatively through manual practice at the drafting table. Such a position obviously bears importantly on contemporary discussions as to the nature and importance of drawing in a professional architectural practice. I address these contemporary questions obliquely by using rhetorical terms and concepts to tease out a few important consequences that Filarete's position has for the necessity of *communicating* architectural ideas.

Chapter 6 opens with an analysis of those parts of the narrative in the *Libro* that do not seem to concern architecture directly. I argue that the fictional hunts, exploratory expeditions, and sylvan episodes related in the narrative make a substantive contribution to the didactic and hortatory purposes of the *Libro* by conjuring the guiding spirit appropriate for a good patron of architecture—namely, the inquisitive, questing spirit of the *hunter*. To support my analysis, I undertake a broad intellectual archeology of *venatic thinking*, which several modern scholars from different fields have identified as an important and identifiable notion of long standing. Marcel Detienne and Jean-Pierre Vernant in particular have famously shown that venatic thinking—which the Greeks called *mêtis*—was traditionally associated with craft knowledge,

and I scrutinize the reasons for this analogy between hunting and making.³¹ Concerned to interpret phenomenal signs in terms of a conjectured reality, venatic thinking turns out to be cognate with the discovery or *invention* of both technical knowledge and programs for composition.³² In order to make sense of this connection, I turn to rhetorical *Inventio* and its *topoi*, which were traditionally explained using venatic images. I survey the classical tradition of the *topoi* in order to demonstrate that the rhetorical notion of "place" has generally been understood as a "container." Using this finding, I interpret the *topoi* of invention as *constraints* upon the "search" entailed by *Inventio*. I then return to Filarete's *Libro*, showing how he nominates *fantasia* as the mental faculty that searches for architectural ideas. The manual practice of *disegno* improves the inventive capacity of *fantasia*, with the various other key concepts—*varietas*, *qualità*, *misura*, and the rest—serving as architectural *topoi*, as practical concepts that usefully *constrain* the scope of architectural invention.

Chapter 7 returns to the opening theme of architectural virtuosity. Both the Greek term $ar\hat{e}te$ and the Latin term used to translate it—*virtus*—originally possessed strong martial connotations. The Greeks and Romans used these terms, respectively, to indicate the sources of their cultural greatness. The underlying sense of both terms was not brutish bellicosity, but fitness for violent action sublated into a concern with the establishment and maintenance of a polity. Excellence in rhetoric was accorded the same honors that were reserved for military victory precisely due to its capacity to enact, and thereby ameliorate, the civility of a polity. The ethical meanings that were overlaid atop the bedrock senses of *arête* and *virtus* as martial excellence ramify a fundamentally civic bias. Filarete's highly plausible contribution to this line

³¹ Marcel Detienne and Jean-Pierre Vernant, *Les ruses de l'intelligence : la mètis des Grecs* (Paris: Flammarion, 1974).

³² See Carlo Ginzburg, "Clues: Roots of an Evidential Paradigm," trans. John Tedeschi and Anne C. Tedeschi, in *Clues, Myths, and the Historical Method* (Baltimore: Johns Hopkins University Press, 1992), 103 and William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture* (Princeton, N.J.: Princeton University Press, 1994), 271 and 292.

of development is the suggestion that artisans, too, contribute to civility—not insofar as they contribute to its material comfort, but insofar as their practices animate and literally materialize a polity worthy of citizenship. In order to build a bridge between craft excellence and its literary and martial analogues, Filarete uses the Italian term <code>ingegno</code>—whose Latin cognate <code>ingenium</code> referred to personal aptitude in rhetorical <code>Inventio</code>—to designate the cognitive basis of all practical competence. Excellent architecture reifies, both materially and morally, the bases of civic culture both by exercising <code>ingegno</code> and by memorializing its greatest attainments. As the form of thinking that underwrites all practical endeavor, <code>ingegno</code> turns out to be the Italianate doppelganger of <code>mêtis</code>. The dissertation concludes by sketching a deliberately oversimplified caricature of architectural excellence of the kind that I believe would render it both accessible and compelling to any potential architectural client who might be (or become) interested in contributing to a more beautiful and more humane built environment.

CHAPTER 1:

ANTONIO DI PIERO "IL FILARETE" AVERLINO (1400 – C. 1469)

AND HIS LIBRO ARCHITETTONICO

Four Centuries of Oblivion

While working under the patronage of Milan's parvenu Duke, Francesco Sforza, the Florentine sculptor and architect Antonio "il Filarete" di Piero Averlino composed a lengthy book about architecture. Near the end of his service in Milan—which coincided roughly with Galleazzo Maria Sforza's (1444 – 1476; reigned 1466 – 1476) inheritance of the dukedom upon his father's death—Filarete reworked his book, adding an extra chapter at the end, and rededicated it with perhaps more hope than expectation to a potential Florentine patron in the person of Piero di Cosimo de' Medici (1416 – 1469). It is Piero's manuscript copy, bound as a single codex, that is today the best extant manuscript copy of Filarete's book, constituting part of the Magliabechiana collection held at the Biblioteca Nazionale Centrale di Firenze. 33 (For the

³³ Biblioteca Nazionale Centrale di Firenze, MSS. II. I. 140. The manuscript tradition of Filarete's *Libro* has been studied thoroughly. Most recently, Enginsoy has situated the production and presentation of manuscript copies of Filarete's *Libro* within the context of the Renaissance practice of dedicating literary works to patrons (Enginsoy, "The Visuality/Orality/Aurality," 61-75). Genoni has reexamined all of the available archival evidence, as well as all of the scholarly commentary on that evidence, to formulate what is surely the definitive account of the manuscript tradition of Filarete's *Libro* (Genoni, "Filarete in Word and Image," 145-203).

After cataloguing the differences between the Magliabechiana manuscript and its cousins, Genoni asserts that the most significant differences between the various manuscripts concern the marginal images that accompany the text. These differences notwithstanding, Genoni argues convincingly that we are justified in presuming that the whole manuscript tradition is of a piece. So long as we do not depend too much on the details of any single one of the locutions or images in the Magliabechiana copy, we may accept it as an authoritative documentation of Filarete's thinking about architecture, even up to and including his complex thinking about the relationship between drawings and architecture.

remainder of this dissertation, all specific references to the text of Filarete's *Libro* should be taken as meaning that of the Magliabechiana copy unless otherwise indicated.) In his dedicatory preface to Piero, Filarete refers to his work as an "*architettonico libro*" ("architectural book").³⁴ For a variety of reasons that I will detail below, as well as simply to respect the usage of the author, his contemporaries, and his immediate successors, I will refer to Filarete's book as he did, as his *Libro architettonico*—or more succinctly, as his *Libro*.³⁵

Circumstantial evidence strongly suggests that Filarete's contemporaries found all of his works, including and perhaps especially his book on architecture, engaging and stimulating. The enlightened Hungarian king Matthias Corvinus (1443 – 1490; reigned 1458 – 1490) commissioned a Latin translation of Piero's copy near the end of the fifteenth century. ³⁶ Filarete's book founded a Milanese tradition of reflection on the nature and power of drawing as a support for creative endeavor, as evidenced by the writings of his professional successors in Milan—Francesco di Giorgio Martini (1439 – 1501) and Leonardo da Vinci—who both produced works that combined texts and drawings. ³⁷ And if some modern scholars have asserted that Filarete's opinions and innovations were largely ignored by his contemporaries and

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³⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 7 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3.

³⁵ Although Filarete's actual locution, "questo architettonico libro," places the adjective before the noun, contemporary Italian grammar almost always insists on the inverse. Since conforming to the standards of contemporary usage enhances the euphony of the phrase without in any way damaging its meaning, I shall refer to Filarete's book as his *Libro architettonico*.

³⁶ See Maria Beltramini, introduction to *La latinizzazione del Trattato d'architettura di Filarete*, ed. Maria Beltramini (Pisa: Scuola normale superiore, 2000). Beltramini provides evidence for the production of a manuscript copy of Filarete's book, which was delivered to Budapest in the 1480s. It was the presence of this copy that likely inspired Corvinus to commission a Latin translation. She observes that Corvinus's humanist translator, Antoni Bonfini, corrects and even improves upon Filarete's classical references, adding details not present in the original. Bonfini interestingly avoids using Alberti's Latin terms for architectural elements and ideas.

³⁷ See Martin Kemp, "From 'Mimesis' to 'Fantasia': The Quattrocento Vocabulary of Creation, Inspiration and Genius in the Visual Arts," *Viator* 8, 1 (1977); Kathryn Blair Moore, "Ficino's Idea of Architecture: The 'Mind'seye View' in Quattrocento Architectural Drawings," *Renaissance Studies* 24, 3 (2009); and Pari Riahi, "*Ars et Ingenium*: The Embodiment of Imagination in the Architectural Drawings of Francesco di Giorgio Martini" (Ph.D. diss., McGill University, 2010).

successors, ³⁸ many more have argued that his oeuvre as a whole constituted an important influence on thinking about both real buildings and ideal cities.³⁹ A not inconsiderable measure of scholarly effort has been expended tracking the movement of Filarete's sculptural and architectural ideas through European culture.

Concentrated interest in Filarete's *Libro*, however, seems not to have persisted long into the sixteenth century. The text was not printed, and it does not appear to have been copied, or even much referenced, for several centuries after 1500. During his own lifetime and until relatively recently, Filarete was most famous for the great bronze doors he designed for the central portal between the narthex and the interior of St. Peter's Basilica in the Vatican. 40 His

³⁸ For arguments that Filarete's architectural ideas exercised little to no influence, see Hanno-Walter Kruft, A History of Architectural Theory: From Vitruvius to the Present, trans. Ronald Taylor, Callander Elsie, and Antony Wood (New York: Princeton Architectural Press, 1994) and Luisa Giordano, "On Filarete's Libro Architettonico," in Paper Palaces: The Rise of the Renaissance Architectural Treatise, eds. Vaughan Hart and Peter Hicks (New Haven: Yale University Press, 1998).

³⁹ The titles alone of the following studies indicate the extent of scholarly inquiry into the influence of Filarete's ideas: Mario Salmi, "Antonio Averlino detto il Filarete e l'architettura lombarda del primo rinascimento," Atti del I Congresso nazionale di storia dell'architettura (1938); Fausto Franco, "L''interpolazione' del Filarete trattatista fra gli artefici del Rinascimento architettonico a Venezia," Atti del IV Congresso nazionale di storia dell'architettura (1938); S. Lang, "The Ideal City: From Plato to Howard," Architecural Review 112, 668 (1952); John R. Spencer, "Filarete and Central-Plan Architecture," JSAH 17, 3 (1958); Horst De la Croix, "Military Architecture and the Radial City Plan in Sixteenth Century Italy," The Art Bulletin 42, 4 (1960); Silvana Sinisi, Filarete nascosto (Salerno: Università degli Studi, 1971); Margherita Licht, "L'influsso dei disegni del Filarete sui progetti archtettonici per teatro e festa (1486-1513)," AL XVIII, 38/39 (1973); Giuseppina Dal Canton, "Architettura del Filarete ed architettura veneziana: analisi campione di un palazzo del « Trattato » filaretiano," AL XVIII, 38/39 (1973); Charles Seymour, "Some Reflection on Filarete's Use of Antique Visual Source," AL XVIII, 38/39 (1973); John R. Spencer, "Filarete, the Medallist of the Roman Emperors," The Art Bulletin 61, 4 (1979); Franco Ruffini, "L'Invenzione Umanistic del Teatro: Il Teatro del Filarete," Forum italicum 14, 3 (1980); Massimo Bray, "La 'Sovranité' del Pontefice. Le figure di Filarete nella porta di S. Pietro (Roma 1433-1445)," Nouvelles de la République des lettres 2 (1987); John F. Moffit, "Il Filarete and Inigo Jones: The House of Fame in Ben Jonson's 'The Masque of Queens,'" AL 90/91 (1989); Helmut Nickel, "The Emperor's New Saddle Cloth: The Ephippium of the Equestrian Statue of Marcus Aurelius," Metropolitan Museum Journal 24 (1989); Catherine King, "Filarete's Portrait Signature on the Bronze Doors of St. Peter's and the Dance of Bathykles and His Assistants," JWCI 53 (1990); Maria Beltramini, "Le illustrazioni del Trattato d'architettura di Filarete: storia, analisi e fortuna," Annali di architettura 13 (2001); Jessica Gritti, "Filarete e la chiesa degli eremiti di san Girolamo: «...nel modo ch'io ordinai a Bergamo, che era bella»," AL 155, 1 (2009); Jens Niebaum, "Filarete's Designs for Centrally Planned Churches in Milan and Sforzinda," AL 155, 1 (2009); and Alessandro Rovetta, "Estratti filaretiani di primo Ottocento," AL 155, 1 (2009).

⁴⁰ The literature on Filarete's doors for St. Peter's is reasonably compact and generally quite good. The interested reader may begin with Helen Roeder, "The Borders of Filarete's Bronze Doors to St. Peter's," JWCI 10 (1947); Carla Lord, "Solar Imagery in Filarete's Doors to St. Peter's," Gazette des Beaux Arts ser. 6, LXXXVII, 118 (1976); John R. Spencer, "Filarete's Bronze Doors at St. Peter's: A Cooperative Project with Complications of Chronology and Technique," in Collaboration in Italian Renaissance Art, eds. Wendy Stedman Sheard and John T. Paoletti

competent execution of one of his generation's most important sculptural commissions all but guaranteed his inclusion in Vasari's *Lives*. But Filarete does not have his own entry in the Lives—he shares one with Simone Ghini (1406/07 – 1491), who was his collaborator in designing, carving, and casting the bronze doors for St. Peter's. It thus appears that the St. Peter's project weighed more heavily in Vasari estimation than either artist's overall oeuvre. Although Vasari does not greatly admire Filarete's doors and makes only the barest mention of his other sculptural projects, he praises Filarete's architecture, in particular the design for Milan's Ospedale Maggiore. 41 As for Filarete's book on architecture, Vasari opines that "although there is something of the good to be found in it, it is nevertheless mostly ridiculous, and perhaps the most absurd book that could ever come to be."42 Vasari's comprehensive dismissal effectively sealed Filarete's book in an oubliette for almost four centuries, so that it appeared only in the meticulous inventory notes of bibliographers and librarians. 43 Indeed, it was not until 1838 that the first modern scholarly publication that included Filarete's name in the title saw the light of day, 44 and the second would not appear until more than forty years thereafter. 45

Between the first publication of Vasari's *Lives* in 1550 and the first complete translation and printing of Filarete's Libro in 1965, the consensus opinion as to the relative level of Filarete's levels of skill in various domains remained substantially identical to Vasari's: Filarete was considered an excellent architect, a competent sculptor, and an atrocious writer. Even as late

⁽New Haven: Yale University Press, 1978); King, "Filarete's Portrait Signature"; Niebaum, "Filarete's Designs"; and Robert Glass, "Filarete's Hilaritas: Claiming Authorship and Status on the Doors of St. Peter's," The Art Bulletin 94 (2012).

⁴¹ On the material and documentary history of the Ospedale, as well as its restoration, see Liliana Grassi, Lo 'Spedale di poveri' del Filarete : storia e restauro (Milano: Università degli Studi, 1972).

Vasari, Vite, II:457: [...] comecché alcuna cosa buona in essa si ritruovi, è nondimeno per lo più ridicola, e tanto sciocca, che per avventura è nulla più.

⁴³ See Tigler, *Die Architekturtheorie des Filarete*, 15-17.

⁴⁴ Carlo Promis, "Notizia del *Trattato* inedito di architettura scritto nel 1460 da Antonio Averlino Fiorentino detto il Filarete," Il Subalpino 2 (1838).

⁴⁵ Robert Dohme, "Filarete's Traktat von der Architektur. Mit einem Holzschnitt," Jahrbuch der Königlich Preußischen Kunstsammlungen 1 (1880).

as 1954 Luigi Firpo could comment that "[f]our centuries after [Vasari's criticism], contemporary [commentators] do not seem inclined to revise [his] merciless condemnation."⁴⁶ The representative sampling of early twentieth-century criticism that Firpo cites is, if anything, even harsher than Vasari: Filarete authored a text "neither erudite, nor balanced, nor practical, nor elegant"; and Filarete himself was "an eclectic, empirical and fickle and vain"—a "'play-it-by-ear' improviser, facile, chatty, author of a courtly, elementary, and puerile project."⁴⁷ One cannot help wondering why a book received positively (or at least quietly) upon its publication should, 90 years later and for 400 years thereafter, have occasioned such vituperation—and so much of it *ad hominem*.

In 1890, Wolfgang von Oettingen published an abridged and partially translated version of Filarete's *Libro*, in which approximately one third is left in Italian, one third translated into German, and one third either omitted or summarized. While von Oettingen's version is hardly adequate to the needs of serious scholars, its publication provided an important vector whereby Filarete's *Libro*—obscure in its unprinted state—might come to the attention of a larger readership. Since the *Libro's* debut in print, scholarly opinion of the architectural excellence and sculptural competence of Filarete's work has remained relatively stable even as scholars have taken an increasingly sympathetic interest in and nuanced position on his *Libro*, viewing it more and more as an important and original contribution to the history of architectural theory. This trend accelerated greatly after 1965, when Spencer published a facsimile of the Magliabechiana

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⁴⁶ Luigi Firpo, "La città ideale del Filarete," in *Studi in memoria di Gioele Solari dei discepoli*, ed. Felice Balbo (Torino: 1954), 57: A quattro secoli di distanza i contemporanei non sembrano inclini a rivedere questa spietata condanna.

⁴⁷ Firpo, "La città ideale del Filarete," 57: uno scritto « né erudito, né equilibrato, né practico, né elegante »; un « ecletico empirico e volubile e vanitoso »; un « orecchiante » improvvisatore, facilone, ciarliero, autore di un progetto cortigianesco, elementare e puerile.

⁴⁸ Wolfgang von Oettingen, *Antonio Averlino Filaretes Tractat über die Baukunst: nebst seinen Büchern von der*

⁴⁸ Wolfgang von Oettingen, *Antonio Averlino Filaretes Tractat über die Baukunst: nebst seinen Büchern von der Zeichenkunst und den Bauten der Medici* (Vienna: Carl Graeser, 1890), scanned book, http://books.google.ca/books?id=fqgnAAAMAAJ.

copy alongside an (often overfree) English translation. Between 1956 and 1979, Spencer also published a series of articles on Filarete and his works. ⁴⁹ The whole of Spencer's work on Filarete certainly marked, and probably instigated, a sea change in Filaretean studies, turning scholarly opinion from the course upon which Vasari's judgment had set it more than 400 years earlier. Indeed, until Spencer's work, modern scholars might have occasionally cited Filarete's architecture and sculpture with some respect, but they rarely cited his book as anything but a source of practical information on daily Renaissance life or as a kind of personal notebook of architectural ideas. In 1972, not long after the appearance of Spencer's two-volume translation and facsimile, Anna Maria Finoli and Liliana Grassi published an excellent critical edition of Filarete's *Libro*, adding copious notes and a superior introductory essay, but leaving the text of Filarete's fifteenth century Italian nearly untouched except for the disaggregation of articles and objective pronouns, which Filarete (or his copyist) had treated as enclitics, and the occasional regularization of spelling. The quality, depth, and breath of the literature on Filarete has increased rapidly ever since. More recently, in 1990, Pilar Pedraza published a translation of Filarete's *Libro* into modern Spanish, further improving the work's availability.⁵⁰

Summary of the Contents of Filarete's Libro Architettonico

Depending on the manuscript copy, Filarete's *Libro* comprises twenty-four or twenty-five books (or chapters). While the first twenty-four books appear in substantially the same form in all extant copies, the twenty-fifth, which lists and lauds the legacy of good buildings sponsored

⁴⁹ John R. Spencer, "La datazione del *Trattato* del Filarete desunta dal suo esame interno," *Rivista d'arte* 31 (1956); Spencer, "Filarete and Central-Plan Architecture"; Spencer, "The Dome of Sforzinda Cathedral," *The Art Bulletin* 41, 4 (1959); Spencer, "Filarete's Description of a Fifteenth Century Italian Iron Smelter at Ferriere," *Technology and Culture* 4, 2 (1963); Spencer, "Filarete and the Cà Del Duca," *JSAH* 35, 3 (1976); Spencer, "Filarete's Bronze Doors at St. Peter's"; and Spencer, "Filarete, the Medallist of the Roman Emperors."

⁵⁰ Antonio "Filarete" Averlino, *Tratado de Arquitectura*, trans. and ed. Pilar Pedraza (Vitoria-Gasteiz: EPHIALTE, Instituto de Estudios Iconograficos, 1990).

by the Medici family, appears only in the copy that was dedicated and presented to Piero di Cosimo de' Medici as well as in those copies subsequently based upon it. Since the bulk of the *Libro* concerns characters and places that Filarete names after Duke Sforza and members of his family and entourage, the twenty-fifth chapter's eccentric focus on the Medici is most easily explained by supposing that Filarete conceived and wrote the first twenty-four chapters as the entirety of his *Libro architettonico*. Once Filarete's position in Milan became untenable, he appended the twenty-fifth book to the finished work in order to repackage his *Libro* as part of an appeal for employment or recommendation from the Medici court in Florence.⁵¹

In the Magliabechiana copy, Filarete opens his dedication with praise for Piero and his family, who were widely recognized to be outstanding patrons of architecture. He then apologizes for the fact that he wrote his *Libro* not in Latin but in the vernacular, though he justifies his choice by suggesting that a work in the vernacular might "be understood by more [persons]" and by observing that "there are [already] enough [works] to be found in Latin by most worthy men." He next validates his position as an authority on architecture by providing a

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⁵¹ While it is only reasonable to assume that Filarete originally intended his *Libro* to comprise twenty-four books precisely, I have not been able either to find or formulate a satisfying reason for the number. John Onians has argued that Filarete's interest in ideal cities may have been strengthened by familiarty with Plato's *Laws*, and on that basis he has gone on to speculate that the fact that the *Laws* comprises twelve books inspired Filarete to organize his *Libro* as two groupings of twelve books. See Onians, "Alberti and ΦΙΛΑΡΕΤΗ: A Study in Their Sources," *JWCI* 34 (1971): 108-9. However, the fact that Filarete appended his panegyric to the Medici's building projects as a twenty-fifth book—as opposed to, say, a preface—implies that whatever his original motivation for dividing the work into twenty-four parts may have been, he did not regard the number as *essential* to the work's character.

⁵² Filarete, *Trattato* (Finoli and Grassi, eds.), 8 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] stimando io da' più essere intesa, e ancora perché in latino se ne truova da degnissimi uomini essere fatte, de le quali credo ne sia copioso.

Filarete's apology for his use of vernacular Italian rather than classical Latin aligns with the broadly held view of the humanists, who saw the vernacular as inferior to classical languages in the copiousness of its vocabulary and the rigor of its grammar, even as they viewed "the greater use and currency of the vernacular as an asset" (Sarah Stever Gravelle, "The Latin-Vernacular Question and Humanist Theory of Language and Culture," *Journal of the History of Ideas* 49, 3 (1988): 369). Filarete's position also echoes a point in Alberti's preface to his vernacular version of his treatise on painting, in which Brunelleschi's dome is made the explicit symbol of the creative power of present culture, which perforce requires an equally creative present language, as opposed to a revived classical language. On this latter point, see Heather A. Horton, "Equally unknown and unimaginable among the ancients': Brunelleschi's Dome and Alberti's *Lingua Toscana*," *California Italian Studies Journal* 2, 1 (2011), electronic article, http://www.escholarship.org/uc/item/9009k258.

résumé of his various artistic and architectural accomplishments. And he finishes his preface by summarizing the *Libro* 's contents:

If it does not displease you, read this *architettonico libro* or have it read to you. In it, as I have said, you will find various modes of construction. It contains as well various kinds of buildings. These things, I believe, will give a certain amount of pleasure to your ears. It contains proportions, *qualità*, *misure*, and their origins. [These] I will demonstrate by reason, authority, and example, and [also I will show how] they all derive from the figure and form of man. [It] also [contains] all the things that must be observed to maintain the building. Then it treats of the materials of the building and how one ought to use lime, sand, brick, stone, wood, iron, cordage, and other useful things. [It also treats] of foundations, according to the site, and their requirements. Finally, it contains what the architect ought to know as well as [what] he who commissions the building [ought to know]. Doing thus, I think that he will not go wrong in his building.⁵³

This summary offers a reasonably complete list of the matters discussed in the *Libro*, so long as such obviously important, but unmentioned, subjects as astrology and *disegno* are classed as part of "what the architect ought to know." While this list of subjects does not exhaust the matters discussed and described in the *Libro*, it successfully communicates the *essence* of what a potential reader—which is to say, a potential patron—might find most appealing about the *Libro*. The Magliabechiana preface promises, in sum, that the attentive reader will learn how to collaborate effectively with hired architects.

The *Libro* proper begins with the author speaking the first person: "I was in a place where a lord and many nobles were eating, and among many and varied [subjects of] conversation, they entered on building [edificare]." Since the preface also uses the first person, the text flows

⁵³ Filarete, *Trattato* (Finoli and Grassi, eds.), 7-8 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3-4: Sì che non ti rincresca alcuna volta leggere o fare leggere questo architettonico libro, nel quale, com'io ho detto, troverrai varii modi di edificare, e così varie ragioni di edifizii in esso si contiene. Per la qual cosa, credo, daranno alquanto di piacere a' tuoi orecchi, e perché in esso ancora si contengono proporzioni e qualità e misure, e donde dirivano i loro primi origine, e questi mosterrò per ragione e per auttorità e per essempro e come dalla figura e forma dello uomo tutte dirivano, e così tutte quelle cose che si deono osservare a conservare il difizio.

E poi si tratta delle materie pertinenti allo edificare, e come s'hanno a usare calcine e rene e pietre cotte e pietre vive, legnami e ferramenti, corderie e altre cose opportune; e così de' fondamenti secondo i luoghi e i loro bisogni; e poi quello che appartiene all'architetto di sapere e così a quello che fa edificare. E così faccendo credo che non piglierà errore nel suo edificare.

54 Filoreta Trattata (Fig. 1) and Coming to Signature.

⁵⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 8 = Filarete, *Treatise* (Spencer, trans. and ed.), I:4: Istando io una fiata in uno luogo dove uno signore con più altri mangiava, e intra molti e varii ragionamenti entrorono in sullo edificare.

seamlessly into the narrative that constitutes the *Libro* proper. The initial line, by continuing the first person point of view and setting the scene at a generic dinner party, signals Filarete's intention to use the fictional dialogue form for his discussion of buildings. The subject of building arises when one diner suggests that building has no need of geometry, drawing, or any other specialized knowledge. Another diner leaps to the defense of building, but laments that he does not know as much about it as he should like. The unnamed narrator of the *Libro*—manifestly a cipher for Filarete—then speaks up, presenting himself as an authority on the subject, and offering to teach the diners what he can. To distinguish between Filarete and his literary persona, I shall refer to the narrator of the *Libro* as "the Architect."

The Architect begins by suggesting a tripartite division of the contents of his disquisition that does not recapitulate, but rather complements, the summary offered in the preface:

The first [part] will recount the origin of *misure*; the building, its sources, how it ought to be maintained, and the things necessary to construct the building; what one should know about building to be a good architect; and what should be noted about him.

The second [part] will narrate the means and the construction for anyone who wants to build a city, its site, and how the buildings, squares, and streets ought to be located so that it will fine, beautiful, and perpetual according to the course of nature.

The third and final part will tell how to make various forms of buildings according to antique usage, together with things I have discovered or learned from the ancients that are almost lost and forgotten today. From this it will be understood that the ancients built more nobly than we do today. ⁵⁶

⁵⁵ During the Renaissance, the symposium—a festal meal during which the attendees discuss philosophical and literary matters—was not only a popular literary conceit but a popular form of entertainment. For a useful review of the academic literature on symposia during the Renaissance, as well as a consideration of the significance of Filarete's choice to set his discussion of architecture within a symposium, see Enginsoy, "The Visuality/Orality/Aurality," 97-105. Enginsoy somewhat diffusely suggests that Filarete's use of the symposiac framework should be read as a symptom of his intention to simultaneously educate and amuse his audience.

56 Filarete, *Trattato* (Finoli and Grassi, eds.), 12 = Filarete, *Treatise* (Spencer, trans. and ed.), I:5: La prima conterrà l'origine delle misure e così dello edifizio, e donde derivò, e come si debbe mantenere, e delle cose opportune per fare esso dificio; e così quello s'appartiene di sapere a chi vuole edificare per essere buono architetto, e quello ancora contro ad esso si dee osservare.

La seconda conterrà il modo e la edificazione a chi volesse fare una città, e in che sito e in che modo deono essere scompartiti gli edifizii e le piazze e le vie, a volere che fusse bella e buona e perpetua secondo il corso naturale.

The *Libro* conforms largely, though not exactly, to this schema. Filarete didactically surveys the theoretical rudiments of architecture—its origins, history, and essential concepts. With some remarkable additions and modifications (which will be treated at the appropriate moments in the pages that follow), Filarete offers a summary of architectural theory that rehearses many of the main points treated by Vitruvius and Alberti, interpreting everything in line with the zeitgeist of the Quattrocento. After concluding his theoretical overview, the Architect segues into a fictional narrative that describes how he, his Lord, and his Lord's Son (all unnamed) conceive and superintend the *ex novo* construction of a Renaissance city and its port—respectively named Sforzinda and Plousiapolis (a neologistic Greek portmanteau meaning "wealthy city")—focusing on those public buildings that would have been considered essential to the life of such a city.

After planning Sforzinda's walls, the Architect and his Lord consult an astrologer to determine the most propitious date to begin construction and perform several ceremonies. As part of the founding the city, the characters bury in the foundations a casket that contains several symbolic objects and a Bronze Book (a clever reference to both the Golden Book that will appear later in the narrative as well as the physical *Libro* itself), which comprises a history of the great men and deeds of the age as well as descriptions and drawings of all the building planned for Sforzinda. A number of curious events occur during the digging of the foundations—for example, the discovery of both a beehive in a hollow tree located near the planned site of Sforzinda's central piazza and a venomous snake in its den (who bites and kills a man after being disturbed)—which the Architect interprets as omens.⁵⁷ The walls, like all projects described in

Nella terza e ultima parte conterrà di fare varie forme d'edifizii secondo che anticamente s'usava, e ancora alcune cose da noi trovate e anche dalli antichi imparate, che oggi dì sono quasi perdute e abbandonate. E per ragioni s'intenderà che anticamente si facevano più degni edifizii che ora non si fanno.

s'intenderà che anticamente si facevano più degni edifizii che ora non si fanno.

The Most of these portentous events occur during a relatively compact section of the narrative: Filarete, *Trattato* (Finoli and Grassi, eds.), 109 ff = Filarete, *Treatise* (Spencer, trans. and ed.), I:47 ff. The Architect relates these events to a stranger, who interprets their significance; the Architect then relays these interpretations to the Lord: Filarete, *Trattato* (Finoli and Grassi, eds.), 174-75 = Filarete, *Treatise* (Spencer, trans. and ed.), I:78.

the *Libro*, are built with astounding speed and efficiency. The Architect, his Lord, and his Lord's Son thereafter go on to plan and build a wearying number of projects, many of which the Architect uses opportunistically as excuses to discourse upon this or that aspect of building practice in general.

It is important to note that Filarete does not systematically prescribe generic rules for the building of a beautiful city, nor does he describe an extant city; he *recounts* the fictional planning and construction of a fictional city. He similarly does not simply describe buildings; he *recounts* their planning and construction. And he does not simply report on the city's site or inhabitants; he *recounts* a variety of small adventures in which the Architect explores the valley in which the city is built, meets some of its inhabitants, discovers an iron works, wrestles with the ongoing tutelage of the Lord's Son in *disegno*, and so on. The majority of the adventures described in the *Libro* either involve trips through the surrounding forest or actually take place in the forest itself, and many of these episodes, which will figure crucially in Chapter 6, entail venatic-festal idylls that bind together two of the nobility's favorite pleasures: hunting and feasting. As the *Libro* constitutes a rambling dialogic narrative, the exegete must exercise caution whenever rehearsing the opinions expressed by the characters, since it is the whole work—and not any single character's opinion—that articulates Filarete's position.

While digging the foundations for the port city of Plousiapolis, in an episode that mirrors the placing of the Bronze Book in the foundations of Sforzinda, some workers discover a stone casket in which are found a number of evidently symbolic objects. Among the discoveries are two large urns containing mysterious powders and a large Golden Book (with its multiple references to the aforementioned Bronze Book, the physical *Libro* itself, and Plato's account, in his *Cratylus*, of the first golden race of humans) written in an unknown language. After the

Architect and the Lord's Son examine these objects, the Architect offers impressively compelling interpretations of them, and he identifies the language in which the Golden Book is written as Greek. The Lord's Son writes to his father, describing the discovery and requesting the aid of his father's humanist, "Iscofrance Notilento". (an anagram for Francesco da Tolentino most commony known as Filelfo—who was both Filarete's personal friend and perhaps the most renowned of Sforza's court humanists) in translating the Golden Book. The two mysterious powders from the urns turn out to have important alchemical properties that—presumably by making metallic transmutation possible—altogether obviate financial constraint. Iscofrance translates the Golden Book, which turns out to be an anterior analogue of the Bronze Book in that it contains descriptions and drawings of all the architectural projects built by a great, ancient king named Zogalia (a syllabic anagram of "Galeazzo," the first name of Francesco Sforza's oldest son and heir) along with his architect Onitoan Nolivera (whose family name is given in other places as Noliaver or Nolievra—all anagrams for "Antonio Averlino"). The descriptions of buildings in the Golden Book turn out to match those included in the Bronze Book, and the buildings that the Architect and his Lord have already built also turn out to be included in the Golden Book. The Golden Book also describes a number of buildings that the Architect and the Lord's Son, who by this time has become a zealous devotee of architecture, immediately recognize as the finely articulated forms of projects they had vaguely conceived, but had not yet planned in detail.

The discovery of the Golden Book marks with some exactitude the beginning of the "third and final" portion of the *Libro*, which the Architect had identified (during the prefatory symposium scene) as describing "how to make various forms of buildings according to antique practice." This part certainly contains many of the work's most striking and memorable

⁵⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 411 = Filarete, *Treatise* (Spencer, trans. and ed.), I:189.

buildings, such as a rotating tower (fig. 1),⁵⁹ a remarkably innovative school,⁶⁰ and the most famous of Filarete's projects, the astounding House of *Virtù* and Vice (figs. 2, 3, 4 and 5).⁶¹ In addition to his schemes for memorable buildings, Filarete describes a number of highly original pictorial conceits, including a proposal for an emblematic figuration of *Voluntà* ("Will") and *Ragione* ("Reason") (fig. 9). I will analyze this dual figuration in detail in Chapter 2. The most original of these conceits is his well-known proposal to figure *Virtù* as a single male (fig. 13), as opposed to the traditional panoply of females, each of which would represent a particular virtue (such as justice, temperance, or faith). I will discuss Filarete's figuration of *Virtù*, as well as the House of *Virtù* and Vice, at length in Chapter 7. After his menagerie of architectural projects and marvels, Filarete dedicates three books—XXII through XXIV—to a catechistic dialogue on *disegno*, which summarizes and responds to Alberti's book on painting.⁶² The final book of Filarete's *Libro*, as already noted, consists in a panegyric to the achievements of the Medici family's patronage of architecture.

⁵⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 632-33 = Filarete, *Treatise* (Spencer, trans. and ed.), I:293-94.

⁶⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 493-522 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228-41. Filarete, *Trattato* (Finoli and Grassi, eds.), 529-62 = Filarete, *Treatise* (Spencer, trans. and ed.), I:245-59.

⁶² See Alessandro Gambuti, "I « libri del disegno »: Filarete e l'educazione artistica di Galeazzo Maria Sforza," *AL* XVIII, 38/39 (1973) and Renzo Baldasso, "Filarete's *Disegno*," *AL* 155, 1 (2009).

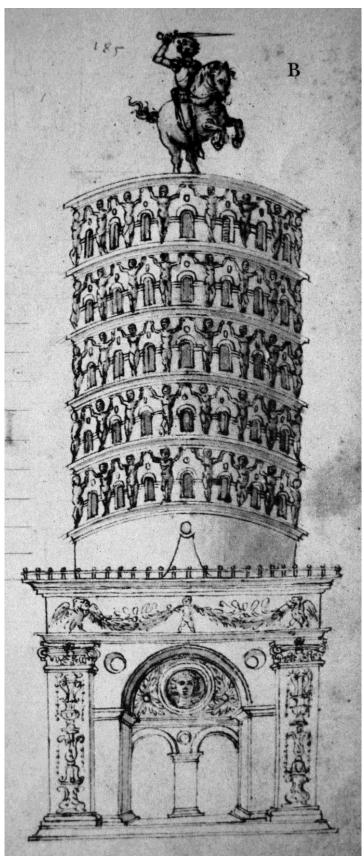


Figure 1: Rotating tower (Magl., 172r)

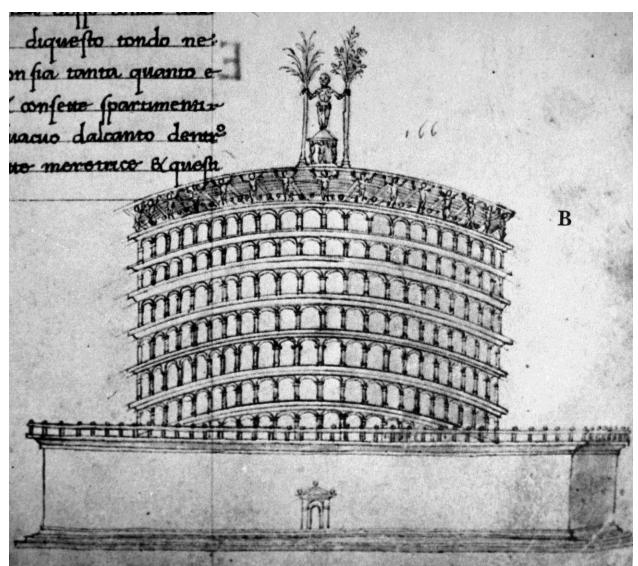


Figure 2: House of *Virtù* and Vice, elevation (Magl., 145r)

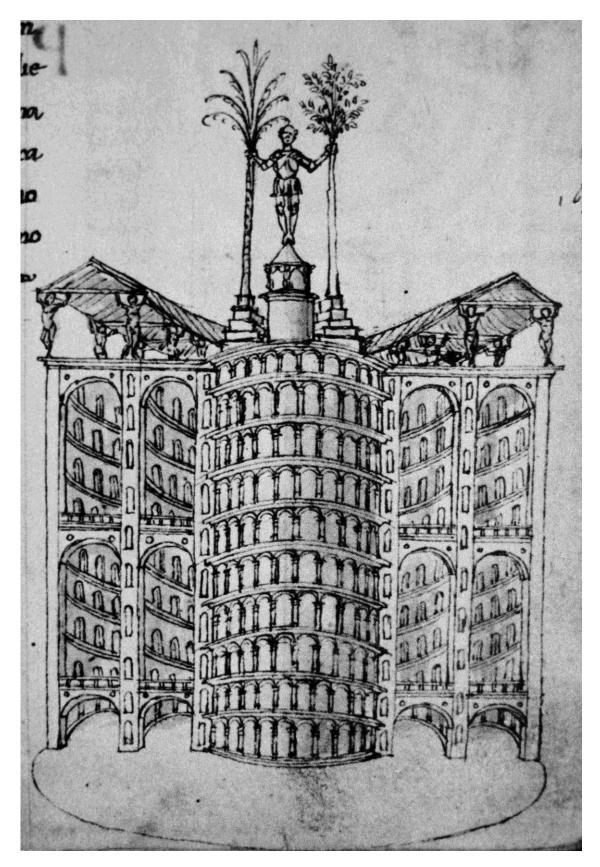


Figure 3: House of *Virtù* and Vice, section (Magl., 144r)

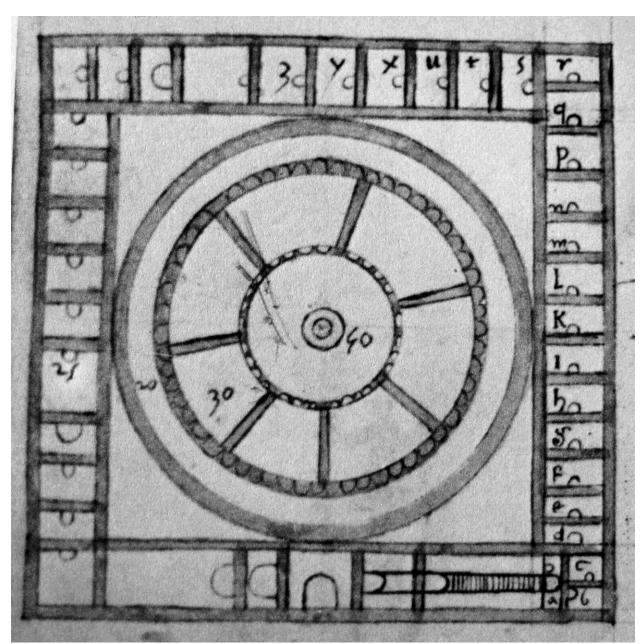


Figure 4: House of Virtù and Vice, base plan (Magl., 144v)

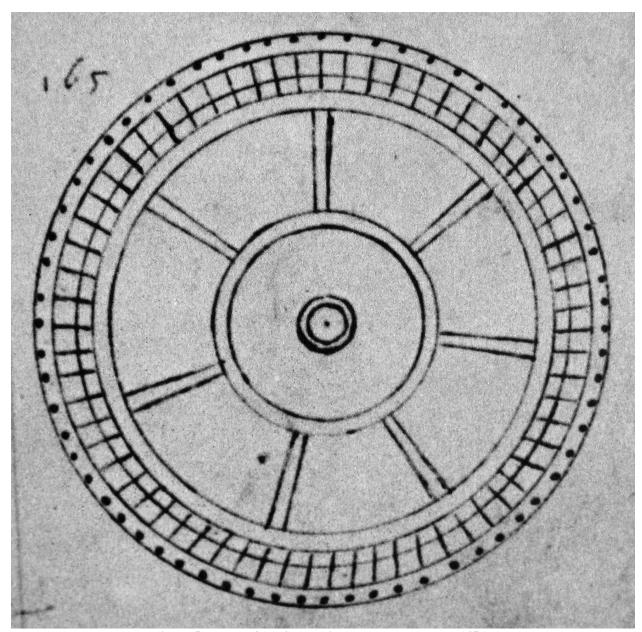


Figure 5: House of *Virtù* and Vice, tower plan (Magl., 145r)

Il Filarete

Filarete's nickname, which came to him late in his life, provides a compelling reason for treating *virtù* as the key theme that unlocks the full meaning of the *Libro*. In Filarete's dedication of the Magliabechiana copy to Piero di Cosimo de' Medici, he refers to himself as "tuo filareto

architetto"—"your *filareto* architect."⁶³ Given Filarete's very recent (or perhaps then current) position as Duke Sforza's court architect when he identified himself thusly, his claim to be an architect is hardly surprising, but the intriguing word he uses as an adjective—*filareto*—invites further consideration for a number of reasons. Following Vasari's usage in his *Lives*, wherein he refers to Averlino as "Antonio Filarete,"⁶⁴ modern scholarship has generally chosen to refer to Averlino using the term *filarete* either as an adjectival noun (Italian and French scholars habitually refer to the man as "Il Filarete") or as a flat substitute for the man's proper name (English, German, and Spanish scholars prefer the article-free "Filarete"). For the following discussion, the capitalized and unitalicized "Filarete" should be understood as referring to the man, while the uncapitalized and italicized "*filarete*" should be understood as referring to the word per se.

To begin with, the word *filarete* is neither Italian nor Latin; it is Greek. Further, *filarete* is not an authentic Greek word; it is a neologistic portmanteau, deriving from the Greek φιλία ("brotherly love" or "the love that obtains between true friends"; Latinized as *philia*) and αρετή ("virtue," "virtuosity," or most simply "excellence," especially of persons or personal qualities; Latinized as *arête*). Apart from this surface meaning, which names Filarete as a true friend of excellence, the word *filarete* manifestly recalls the ubiquitous and thoroughly Latinized Greek compound, φιλοσοφία ("philosophy"), which derives from *philia* and σοφία ("wisdom," particularly concerning universal truths or abstruse matters; Latinized as *sophia*). All of Filarete's contemporaries would have heard the echo of the Italian *filosofia* in his nickname.

If the Greek word *philia* might have been recognized through its presence within the vulgarized word *filosofia*, the Greek word *arête* was considerably less well known. *Arête* was

⁶³ Filarete, *Trattato* (Finoli and Grassi, eds.), 5 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3.

⁶⁴ Vasari, Vite, II:454 ff.

traditionally translated into Latin by the word *virtus*, which was and is translated into Italian by its descendent, virtù. I will treat Filarete's concept of virtù exhaustively in Chapter 7, but some preliminary observations are in order here. The Italian word virtù ramifies through all ethical and political thinking in the Italian Renaissance. As the standard translation of arête, it serves as the master term of Aristotle's Nichomachean Ethics, which was one of the most important sources for classical ethical thought during the late Middle Ages as well as the Renaissance. 65 As the Italian translation of the Latin word *virtus*, it opposes perhaps the single most important term in Christian moral theology, which is sin. And it serves as the keystone term in Niccolò Machiavelli's (1469 – 1527) The Prince (1513/1532), wherein it constitutes the crucial personal quality that a prince must rely upon to rule effectively and well. 66 Deriving ultimately from the Latin vir ("man"), virtù refers not only to "virtue" in the ethical sense, but also to manly strength, military prowess, and political effectiveness. 67 Thus, while Filarete's noble patrons, humanist friends, and artistic peers, upon hearing a "translation" of his nickname, would have found a "friendship with excellence" mildly idiosyncratic, they would have perceived the "[steadfast] love of *virtù*" as consonant with the essential aspirations of their culture.⁶⁸

The word *filarete* seems to have originated as an adjective, first appearing in the title of a Latin panegyric on Antonio Averlino that figured as part of the final book of Filelfo's (1398 – 1481) *De ioscis* (completed in 1465). Maria Beltramini reports the title of the panegyric in

⁶⁵ See David A. Lines, *Aristotle's Ethics in the Italian Renaissance (1300-1600): The Universities and the Problem of Moral Education* (Boston: Brill, 2002).

⁶⁶ In *The Prince*, *virtù* indicates the personal quality that allows a prince to achieve great things in spite of the vicissitudes of fortune (*fortuna*). Put simply, Machiavelli argues that the end of a good prince is glory (*gloria*), and the only worldly resource that remains completely completely under the prince's control is his own *virtù*.

⁶⁷ For an exhaustive philological study of the Latin word *virtus*, see Myles Anthony McDonnell, *Roman Manliness: Virtus and the Roman Republic* (Cambridge, U.K.: Cambridge University Press, 2006).

⁶⁸ Luigi Firpo confirms the Italian translation of *filarete* as "amante della virtù" (Firpo, "La città ideale del Filarete," 31).

question as "Ad Antonium Averlinum philaretum architectum." Filelfo's decision to describe his friend and colleague using an invented adjective derived from Greek sources was more than mildly eccentric, for the Greek language was not then widely current in Quattrocento Italy. While the rebirth of classical Latin studies and the reconstitution of the Latin literary canon were well and truly under way in Italy during Filarete's lifetime, a strong interest in the classical Greek language and its literary tradition had only just taken root in Italy during the early 1400s. Filelfo knew Greek by virtue of having lived in Constantinople for seven years in the employ of the Baile of the Venetians. After returning to Italy from Constantinople equipped with his rare and valuable knowledge of Greek, Filelfo made his way to Florence in 1427, which is where and when he most likely first made Filarete's acquaintance, before the latter moved to Rome in 1433.70 Filelfo's knowledge of Greek is particularly important because, in addition to serving Sforza in Milan during the same years as Filarete, he seems to have been one of Filarete's good personal friends. Filelfo wrote warmly of Filarete's moral qualities and artistic talents on more than one occasion. ⁷¹ In his *Libro*, Filarete reciprocates by praising Filelfo's competence in the Greek language as well as his overall mastery of classical letters. ⁷² Filelfo is therefore likely either Filarete's direct source for or his tutelary guide toward the Greek names and terms that appear in the *Libro*.

The final question that remains is why Filarete chose to adopt Filelfo's neologism as a nickname when he must have known that its significance would have been lost on most people

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⁶⁹ Pfisterer, "Ingenium und Invention bei Filarete," 274 and n. 41. Pfisterer's position is based on Beltramini, "Filarete e Filelfo," esp. n. 20. Given the Greek basis of the nickname, coupled with Filelfo's notorious mastery of Greek, Beltramini argues that the coinage was very probably Filelfo's invention.

⁷⁰ Paolo Viti, "Filelfo, Francesco," in *Dizionario biografico degli Italiani*, ed. Alberto Maria Ghisalberti (Roma: Istituto della Enciclopedia italiana, 1960-).

⁷¹ See Onians, "Alberti and ΦΙΛΑΡΕΤΗ," 106.

⁷² Filarete, *Trattato* (Finoli and Grassi, eds.), 321 = Filarete, *Treatise* (Spencer, trans. and ed.), I:146; Filarete, *Trattato* (Finoli and Grassi, eds.), 335 = Filarete, *Treatise* (Spencer, trans. and ed.), I:152; and Filarete, *Trattato* (Finoli and Grassi, eds.), 392 ff. = Filarete, *Treatise* (Spencer, trans. and ed.), I:181 ff.

unless it were translated for them. To some extent, such a question amounts to asking what currency the notion of Greek-ness in general might have had in Italy during Filarete's lifetime. Without launching into an unmanageably broad rehearsal of the immensely complex relations between the Latin and Greek halves of Christendom during the Quattrocento, a few points bear highlighting. Firstly and most importantly, as mentioned in passing above, Filarete's lifetime coincides with the rise of the Florentine infatuation with ancient Greece. After hearing Gemistus Pletho's (c. 1355 – 1452/1454) lectures on Neoplatonic philosophy during the Council of Florence in 1439, the Florentines developed an intense fascination with Greek Neoplatonic and Hermetic philosophy. The dominant themes of Neoplatonism and Hermeticism may be usefully oversimplified as a triangle of interlocking convictions: (1) that the apparent multiplicity of the phenomenal world hides a fundamental unity; (2) that the world's underlying unity may be grasped if its phenomenal manifestations are interpreted or decrypted (as it were) correctly; and (3) that knowledge of the common ground that unifies disparate things may be used to propitiate the eventuation of material and measurable effects in the world. Inflamed by Pletho's lectures, Cosimo de' Medici (1389 – 1464) founded the Accademia neoplatonica in Florence in 1459, charging Marsilio Ficino (1433 – 1499) to translate the Hermetic Corpus (attributed to the mythical Hermes Trismegistos) into Latin. Berthold Hub argues convincingly that Filarete's Libro responds directly to this trend by attempting to identify and articulate, however imperfectly, a common origin that unifies and perfects all architecture—a prisca architectura, analogous to the *prisca theologica* that according to the hermetic tradition constituted the font of all human knowledge. 73 Whereas Renaissance Neoplatonism (with its Italian epicenter in Filarete's home city of Florence) sought to find the ultimate origin and unity of human knowledge in the supposed writings of Hermes Trismegistos, Filarete sought to find and

⁷³ Berthold Hub, "Filarete and the East: The Renaissance of a Prisca Architectura," *JSAH* 70, 1 (2011).

articulate the ultimate origin and unity of architecture. A second crucial point concerning the broad perception of Greek-ness in fifteenth-century Italy is that it was generally recognized that the Latin culture so admired by the humanists had borrowed many of its literary preoccupations and cultural habits from the Greeks. In assuming a Greek nickname, then, Filarete aligned himself with the Neoplatonic search for the unified origins of human civilization even as he declared his allegiance to the culture from which so much of the greatness of the Romans had been inherited.

Biographical Sketch of Filarete

Because this dissertation concerns itself primarily with the content of Filarete's book on architecture, no more than a summary sketch of the overall contours of Filarete's life will be necessary to frame the discussion. We know, in any case, relatively little about Filarete's life apart from his artistic legacy. In 1972, Grassi referred to Filarete's biography as an "open problem," and nothing has changed substantially since. We know that Filarete was born in Florence in 1400. Vasari intimates that Filarete, while young, worked under Lorenzo Ghiberti (1378 – 1455). In 1433 Filarete received the commission to sculpt and cast the bronze doors for the central portal between the narthex and the interior of St. Peter's Basilica. He finished the doors in 1445, and so we can safely assume that he was based in Rome during the majority of the interval. In 1447 he was accused of stealing the head of St. John the Baptist, for which he was imprisoned and tortured before being released. Although he was eventually pardoned by the

⁷⁴ Grassi, introduction to *Trattato*, by Filarete (Finoli and Grassi, eds.), LXXXVIII. A chronology, usefully organized as a dated list, can be found on pp. LXXXVIII-XCI. While Grassi's chronology accounts for all the currently available evidence on Filarete's location and activities, readers interested in a more fluent rehearsal of what is known of Filarete's life can turn to Angiola Maria Romanini, "Averlino (Avurlino), Antonio, detto Filarete," in *Dizionario biografico degli Italiani*, ed. Alberto Maria Ghisalberti (Roma: Istituto della Enciclopedia italiana, 1960-).

⁷⁵ Vasari, Vite, II:454.

pope, he fled Rome. We have no hard evidence concerning his activities during the years immediately following his departure from Rome, though he somehow persuaded the Signoria of Florence to send a letter to Rome on his behalf, requesting that he be allowed to return to the papal capital. Filarete was in Venice in 1449. By 1451, however, he had accepted a position with Duke Sforza in Milan. While Sforza seems to have wanted Filarete to serve as his court architect, the local Milanese craftsmen, along with the local building committees and councils that knew, employed, and supported them, strongly resisted Filarete's influence. Filarete made substantial contributions to each of the three major projects then underway in Milan—namely, the Ospedale Maggiore, the Duomo, and the Ducal Castello—but mostly in a truncated or piecemeal fashion.⁷⁶ He also spent some time in 1457 contributing substantially to the design of the cathedral of Bergamo.⁷⁷ While in Milan, he was most successful in realizing his designs for the Ospedale Maggiore, likely because the Duke and his most loyal supporters maintained tight control over the project, in contradistinction to the Duomo, over which the city's native aristocracy exercised primary control. 78 Filarete's fortunes as Sforza's architect continued in this frustrating vein until he left Milan in 1465, returning to Florence. He was apparently planning a trip to Constantinople when he died in 1469—in Rome according to Vasari, though it may have been in Florence. The consensus opinion of modern scholarship estimates that Filarete composed his *Libro* while in Milan sometime between 1460 and 1464.⁷⁹

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⁷⁶ See Evelyn S. Welch, *Art and Authority in Renaissance Milan* (New Haven: Yale University Press, 1995) and Patrick Boucheron, *Le Pouvoir de bâtir : urbanisme et politique édilitaire à Milan (XIVe-XVe siècles)* (Rome: Ecole française de Rome, 1998).

⁷⁷ Gritti, "Filarete e la chiesa degli eremiti di san Girolamo," esp. 143 ff.

⁷⁸ Welch, Art and Authority in Renaissance Milan, 117-43, but esp. 120-24.

⁷⁹ See Spencer, "La datazione del *Trattato*"; Tigler, *Die Architekturtheorie des Filarete*, 78; and Grassi, introduction to *Trattato*, by Filarete (Finoli and Grassi, eds.), XI-XIII.

The Problem of Genre: Trattato or Libro

One reason, perhaps, for the general neglect that Filarete's book has suffered is its resistance to classification due to its promiscuous use of the conventions of several literary genres. Part festal symposium, part craft treatise, part chivalric epic, part catechistic dialogue, part narrative of discovery, and part panegyric solicitation, the *Libro* yields some measure of its meaning to most methods of literary analysis, but surrenders its whole self to none of them singly. Since it obviously addresses architecture—or more correctly, building—as its principal subject, and for lack of a better alternative, Filarete's *Libro* has usually been assigned (with understandable misgivings) a position among the canonical trattati d'architettura of the Italian Renaissance. 80 Except in that it concerns architecture, however, Filarete's book does not much resemble the *trattati* with which it usually shares library shelf space. All of the other *trattati* use the third person, discussing architecture from a more or less impersonal point of view, and while their treatment of architecture is not strictly systematic, they generally adopt an analytic—or at least isagogic—approach. If Filarete's fictional Architect often declaims his opinions in a didactic manner, the choice to ensconce those opinions within a fiction that includes other important characters distinguishes the work sharply from those of other authors. Filarete's book thus occupies an uncomfortably liminal position. In contemporary architectural history and theory, Filarete's book both is and is not a trattato d'architettura. On the one hand, Vaughan Hart and Peter Hicks's collection of essays covering the canon of Italian Renaissance

⁸⁰ Most prominently, Alberti's inaugural *De re aedificatoria*; Francesco di Giorgio Martini's (1439 – 1501) *Trattato di architettura civile e militare* (composed between 1478 and 1499); Sebastiano Serlio's (1475 – 1554) *I sette libri dell'architettura* (1537-1575, then 1966 and 1994); Daniele Barbaro's (1514 – 1570) original commentary on Vitruvius in his *Dieci libri dell'architettura di M. Vitruvio* (1556); Jacopo Barozzi da Vignola's (1507 – 1573) *Regola delli cinque ordini d'architettura* (1562); Andrea Palladio's (1508 – 1580) *I quattro libri dell'architettura* (1570); and Vincenzo Scamozzi's (1548 – 1616) *La idea dell'architettura universale* (1615).

architectural treatises dedicates an entire chapter to Filarete's *Libro*. ⁸¹ Published just one year later, however, Alina Payne's comprehensive study of the architectural treatise in the Italian Renaissance—which includes individual chapters on the books of Alberti, Francesco di Giorgio, Serlio, Palladio, Scamozzi, and Gherardo Spini (whose work is an obscure, unfinished treatise on architectural ornament)—mentions Filarete in passing several times, but does not grant the *Libro* its own chapter. ⁸²

Interpreted charitably, scholars have adopted and maintained the habit of referring to Filarete's book as a *trattato* or *treatise* simply in order to indicate its proximity to other books written on the same subject during the same epoch. Such a habit is, however, not without its dangers, as the word *treatise* (and its cognates in other modern European languages) nowadays connotes an exposition that addresses its subject matter analytically and systematically, with the aim of presenting the subject as a rationally organized system of concepts. Filarete's book, however, offers no such treatment of architecture. ⁸³ As Hans Hubert acutely notes, "[d]espite its title, 'Trattato di architettura,' Filarete's essay can be considered of only limited use as an architectural treatise, because it belongs neither to the literary genre of writings on the arts, nor is it a true [treatise] in the sense of a system of interrelated concepts that provides a logically reasoned doctrine of architecture." Persisting in calling Filarete's book a *treatise*—especially

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⁸¹ Vaughan Hart and Peter Hicks, eds., *Paper Palaces: The Rise of the Renaissance Architectural Treatise* (New Haven, CT: Yale University Press, 1998).

⁸² Alina Alexandra Payne, *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament, and Literary Culture* (Cambridge, U.K.: Cambridge University Press, 1999).

⁸³ Scholars have even characterized Filarete's *tone* as treatise-like, with the apparent intention of suggesting that Filarete's often pedantic tone implies that his method is analytic and his thinking systematic. See Andreas Tönnesmann, "Il dialogo di Filarete: l'architetto, il principe e il potere," *AL* 155, 1 (2009): 8, who approvingly cites Gerhard Goebel, *Poeta Faber : Erdichtete Architektur in der italienischen, spanischen und französischen Literatur der Renaissance und des Barock* (Heidelberg: C. Winter Universitätsverlag, 1971).

⁸⁴ Hans W. Hubert, "In der Werkstatt Filaretes: Bemerkungen zur Praxis des Architekturzeichnens in der Renaissance," *Mitteilungen des Kunsthistorischen Institutes in Florenz* 47, 2/3 (2003): 312: Trotz des Titels '*Trattato* di architettura' kann Filaretes Abhandlung nur bedingt als ein Architekturtraktat gelten, da sie weder der literarischen Gattung der artigraphischen Schrift angehört, noch ein echtes, durch ein System von zueinander in Beziehung stehenden Begriffen logisch begründetes Lehrgebäude der Architektur bietet.

given that neither Filarete nor his contemporaries referred to his book thusly—effectively insists that the parts and aspects that most closely resemble a treatise, in the modern sense of the term, lie at the core of the work, while the other parts and aspects may be safely marginalized. Filarete has his narrator at one point explicitly claim that a following section will constitute "a treatise per se [that] summarizes everything [useful for building] generally," but he manifestly means that the subsequent treatise will constitute only a minor *part* of the overall work. Even if one or several parts of the book are in fact properly treatises in themselves, most parts of the book are not, and so construing the *whole* work as a treatise divides the work invidiously against itself. Articulating one version of this position, Spencer, who interprets the work primarily as a vehicle for vaunting the Florentine approach to building in imitation of antiquity, argues that "[t]he exposition of the new architecture that Filarete advocates is the true core of the treatise. All the rest is only peripheral. However, the peripheral matter—the flights of fancy, the allegorical conundrums, and the digressions—tend to obscure the true aim of Filarete's treatise." Even Spencer, one of the staunchest defenders of the *Libro's* value, explicitly rejects its literary unity.

The habit of referring to the *Libro* as a *treatise* entails an analogous habit of evaluating its success accordingly. Filarete's work thus comes to a modern reader's attention packaged in a tissue of critical censure, most of it resolving to a complaint either that it is not elegantly written or that it does not articulate "a system of interrelated concepts that provides a logically reasoned doctrine of architecture." It may well be, as John Onians claims, that Filarete's spelling and grammar are "execrable," but such a complaint sheds little light on the insights into the

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⁸⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 52-53 = Filarete, *Treatise* (Spencer, trans. and ed.), I:21-22: [...] uno *Trattato* di per sé, sommario di tutte generalmente.

⁸⁶ Spencer, introduction to Filarete, *Treatise* (Spencer, trans. and ed.), I:xvii-xxxvii.

⁸⁷ John Onians, *Bearers of Meaning: The Classical Orders in Antiquity, the Middle Ages, and the Renaissance* (Princeton, N.J.: Princeton University Press, 1988), 158.

meaning of architecture contained in the *Libro*. As I mentioned in the Introduction, Filarete candidly admits that his book lacks both the authority of Vitruvius's and the polish of Alberti's, but he suggests that his work has other virtues that make it worthy of the dedicatee's attention. When Howard Saalman offers his lapidary opinion that "Filarete's attempt at architectural theorizing appears to be not only later and lesser [than Alberti's], but rather grotesque, if occasionally amusing, "90 he explicitly sets Alberti's elegantly Latinate *De re aedificatoria* as the standard. Such criticisms are common, but they can provide useful guidance only if Alberti's book and Filarete's book belong to the same genre. Since the *Libro* resists generic classification, however, such judgments are perhaps more tendentious than illuminating. Filarete's work certainly has its shortcomings, but it hardly seems conducive to a clear understanding of it to condemn it as a poor example of what it manifestly is not.

The most insidious hobgoblin empowered by the habit of referring to the work as a *treatise* is the *presumption* of its theoretical systematicity, so that the reader begins his encounter with the book expecting that its significance can be reduced, in the last instance, to some kind of proposition. Peter Tigler's 1963 monograph *Die Architekturtheorie des Filarete* is a watershed work in Filaretean studies, representing the first attempt to address the *Libro* under the assumptions that Filarete's thinking about architecture is unified, coherent, and comprehensible. Tigler organizes the results of his analysis of the *Libro* according to a number of theoretical

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⁸⁸ Scholars have made the haphazard orthography and conversational tone of the *Libro's* text the basis for any number of fatuous speculations, even going so far as to opine that it "appears to have been realized [by] dictating directly to an amanuensis, without subsequent correcting [purlirla]" (José Alcina Franch, "Ideas estéticas de Antonio Averlino," *Revista de ideas estéticas* 13 (1955): 126: "[...] parece haber sido realizada dictando directamente a un amanuense, sin purlirla posteriormente").

⁸⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 8 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3. Filarete's ostentatious modesty reads as a self-conscious echo of Vitruvius's request that his work be judged not as the work of a philosopher, rhetor, or grammarian, but rather as the work of a veteran architect. See Vitruvius, *On Architecture*, I:22-25 = I.i.18.

⁹⁰ Howard Saalman, "Early Renaissance Architectural Theory and Practice in Antonio Filarete's *Trattato di Architettura*," *The Art Bulletin* 41, 1 (1959): 89.

"themes," each of which serves as the focus of a single chapter. Tigler's method consists in gathering together all of Filarete's statements concerning a given theme and interpreting them as "theoretical statements." ⁹¹ Each of Tigler's chapters opens with a subsection entitled "Filarete's Theory" [Filaretes Theorie], in which Tigler gathers together all of the appropriate "theoretical statements," glossing the quotations with brief indications of how they relate to the theme in question. Although each theme on its own traces a viable path through the thicket of Filarete's text, Tigler views the *Libro* as a whole as an attempt to articulate a theoretical conception of architecture as a "science" based upon the principles of misura and disegno. 92 The arguments in Chapter 5 will make clear that I agree completely that *misura* and *disegno* represent two of the cornerstone concepts in Filarete's book. But I will also show that Filarete construes scienza very differently from how we construe science. For Filarete, scienza often functions as a near synonym for *pratica* ("practice"), if with more intellectual overtones. Overall, *pratica* is far more important for Filarete than *scienza*, which makes Tigler's privileging of *scienza*—especially given the modern notion of science as "a system of interrelated concepts that provides a logically reasoned doctrine"—appear anachronistic and misleading. In short, Tigler interprets Filarete's work as an analytic treatise in dialogic fiction's clothing. Overall, the greater part of the literature on the *Libro* willfully and quite groundlessly dismisses his choice of literary form as irrelevant. For all these reasons, it seems best to avoid calling Filarete's book a treatise and instead simply refer to it as he, his contemporaries, and his immediate successors did—as his *Libro* architettonico.93

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⁹¹ Tigler, *Die Architekturtheorie des Filarete*, IX: [...] theoretischen Äußerungen.

⁹² Tigler, Die Architekturtheorie des Filarete, 33.

⁹³ Cf. the reasons for calling Filarete's work a *Libro* rather than a *Trattato* in Genoni, "Filarete in Word and Image."

The Problem of Priority: Urban Fabric or Fabricating Buildings

Whether or not Filarete's *Libro* should be classed as a treatise is not the only dilemma of category that the work faces. In 1952, S. Lang published an article purporting to trace the history of the ideal city from Plato's *Republic* to Sir Ebenezer Howard's Garden Cities. 94 Lang attempts to develop a notion of "townscape" that can bridge the gap between mental abstraction and visuality, and Filarete's fictional cities of Sforzinda and Plousiapolis—especially the famous marginal images of Sforzinda's geometric city walls (figs. 6, 7, and esp. 8)—play pivotal roles in the argument. Two years later, Luigi Firpo definitively debuted Filarete's *Libro* to the community of modern scholars by classing it unambiguously as a member of the Renaissance genre of writings on ideal cities. 95 Since the publication of these two articles, scholars have reflexively introduced Filarete's *Libro* by characterizing it in the first instance as a book about architecture that "tells of the planning and construction of an ideal city." Sforzinda now appears regularly in historical surveys of utopias and ideal cities, so that the *Libro* is effectivey cast as a kind of architecture-centric foreshadowing of Thomas More's (1478 – 1535) *Utopia* (1516).97 Classed as a book about ideal cities, the Libro has found itself implicated in studies that aim to articulate the origins of modern city planning and urbanism. 98 In sum, Filarete's work has been thoroughly absorbed into the disciplinary canon of Utopian Studies and partially absorbed into the disciplinary canon of Urban Studies.

⁹⁴ Lang, "The Ideal City: From Plato to Howard."
⁹⁵ Firpo, "La città ideale del Filarete."

⁹⁶ Hub, "Filarete and the East," 19.

⁹⁷ See, e.g., Sabine Rahmsdorf, Stadt und Architektur in der literarischen Utopie der fruhen Neuzeit (Heidelberg: Universitätsverlag C. Winter, 1999) and Ruth Eaton, Ideal Cities: Utopianism and the (Un)Built Environment (London: Thames & Hudson, 2002).

⁹⁸ See, e.g., Pierre Lavedan, Histoire de l'urbanisme: Renaissance et temps modernes (Paris: H. Laurens, 1941) and Françoise Choay, The Rule and the Model: On the Theory of Architecture and Urbanism, ed. Denise Bratton (Cambridge, Mass.: MIT Press, 1997).

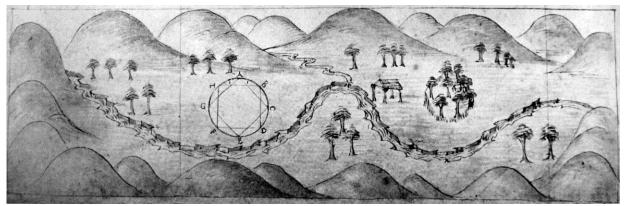


Figure 6: Geometric schematization of Sforzinda in naturalistic valley (Magl., 11v)

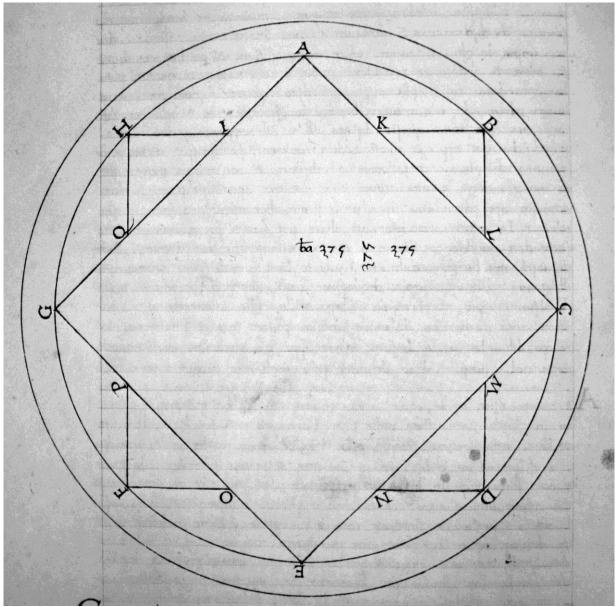


Figure 7: Geometric diagram of Sforzinda's walls (Magl., 13v)

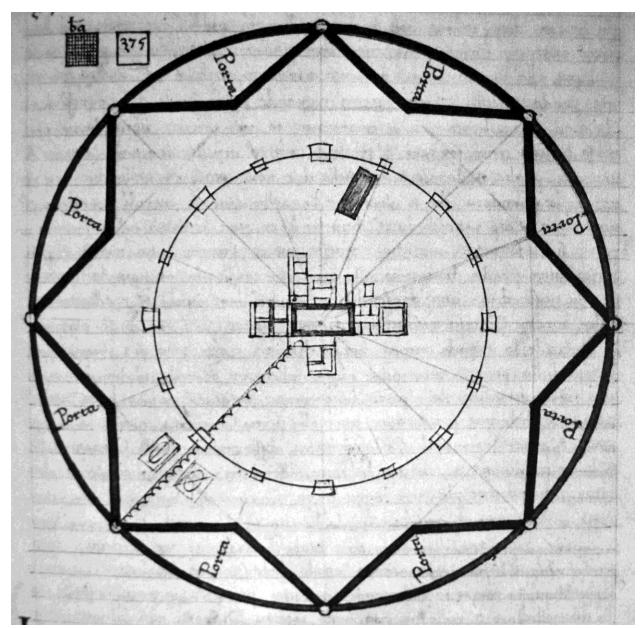


Figure 8: Schematic plan of Sforzinda (Magl., 43r)

The adjective that Filarete uses to characterize his book—namely, *architettonico*—obviously indicates that the work concerns architecture. Though the term can serve as the ordinary translation into Italian of the English adjective *architectural*, Filarete's usage in the particular case of his dedicatory preface is ambiguous for two reasons. Firstly, the construction "*architettonico libro*" tempts the reader to understand the book itself as having architectural

qualities, since Filarete could have more clearly stressed that the book was *about* architecture by calling it his "libro d'architettura." Such a locution would also have aligned more neatly with the precedents of Vitruvius's ten books de architectura and Alberti's ten books de re aedificatoria. Secondly, as Nikolaus Pevsner has plotted out, the Latin term architectonicus arrived in Quattrocento Italy via a rather different literary route than the terms architectus and architector. 99 Whereas the words architectus and architector had been used, if sparingly, during the Middle Ages as almost indifferent synonyms for artifex ("maker") or mason, the word architectonicus was altogether absent from medieval Latin until its reentry in the thirteenth century. The term reappears in the works of St. Thomas Aquinas (1225 - 1274), where it is used to claim that disciplines such as theology and philosophy order and regulate the work of subdisciplines just as master builders order and regulate the workers beneath them. Philosophy and, mutatis mutandis, philosophers—are thereby entitled to be characterized as "architectonicus." Aquinas's distinctive usage of the adjective derives from Aristotle's, who of course had its original referent—the master builder—in mind when he first applied it to domains of study. 100 Again, Filarete certainly meant to specify architecture as the principal subject of his Libro. Given his uneven mastery of literary learning, however, along with his easy discipline concerning technical terms, it remains necessary to leave open the question of whether Filarete also slyly intended to suggest that his book could and should subordinate other works that treated building or the arts.

Of course, saying that Filarete's book concerns architecture only opens the question of what Filarete means by the term, since the term *architecture* and its cognates obviously inhabited a different lexical milieu in Filarete's day than they do in ours. The two crucial differences

⁹⁹ See Nikolaus Pevsner, "The Term 'Architect' in the Middle Ages," *Speculum* 17, 4: 549-62, but esp. 559-60.

¹⁰⁰ Pevsner gives the relevant references in Aristotle's works as *Politics* 1282b and *Nichomachean Ethics* 1094a.

between milieus may be summarized by observing two constellations of philological facts. Firstly, to return to Pevsner's surefooted work on the subject, the Middle Ages documented its building activity using a wide variety of terms, but favoring dispositio, ordinatio, disegnare, deviser, and dictare. 101 When medieval scribes did use the Latin term architectus or architector, it was generally, as mentioned above, as a slapdash synonym for artifex or mason. Further, the central actor in a medieval building project—the grammatical subject with which the verb "to build" would be correlated—was neither the mason nor the foreman, but rather the lord or abbot responsible for initiating, supporting, and guiding the project. It was, as I noted above, only with the reexamination of Aristotle's original Greek texts in the thirteenth century that the specific, original meaning of architectus as the person nominally responsible for orchestrating a building project was reintroduced. And it was only with the recovery of a complete copy of Vitruvius's De architectura in the early fifteenth century that the crispness of that meaning was fully secured. 102 Like his peers, Filarete understood the Italian word architetto to refer precisely to the person responsible for planning and orchestrating an important building project, whose ability to lead such a complex endeavor, involving so many people, entitled him to receive credit for his actions at the same level as the lord or patron. The architect, that is, constitutes the meaningful differentia between architecture and building per se. A single person can build. Architecture happens when a single person—whether abbot, feudal lord, or professional artist—coordinates the efforts of multiple builders. The salient difference between building and architecture, in short, is cooperation, with its characteristic challenges in the domain of *communication*. This fundamental point provides the argumentative epicenter for Chapter 3.

Nikolaus Pevsner, "Terms of Architectural Planning in the Middle Ages," *JWCI* 5 (1942): 236-37.Pevsner, "The Term 'Architect."

The second window onto the difference between Filarete's lexical milieu and our own can be opened by attending to his terminological habits in the work itself. Filarete's *Libro* mentions edificare, the ordinary productive activity that results in edifici ("buildings"), far more than it mentions the discipline of architettura, even while it mentions architetti far more than it mentions manual builders. Specifically, the term architettura ("architecture") appears only five times in Filarete's text, while the terms architetto ("architect") and architetti ("architects") appear a combined total of eighty-one times. The term edificatore ("builder") never appears; the common term for a bricklayer or stonemason, *muratore* (literally, "wall-maker"), appears only twice; and the common term for master mason, maestro di scarpello (literally, "master of stonecutting" or "master of chiseling") only five times. ¹⁰³ The verb *edificare* ("to build") appears some 189 times, and the noun edificio ("building") 412 times. Within the context of the Libro, then, as in the Middle Ages, it is signori ("lords") and their architetti—and not maestri and muratori—who build. Filarete's focus on the conception and planning of buildings, however, does not imply a mutually exclusive division between "mental" architecture and "manual" building. He is not callously indifferent to the men who build with their hands, but rather straightforwardly sensitive to the fact that his readers—who were signori and not muratori would naturally have been interested to learn about building from their point of view. Within the Libro, the category of "the architectural"—"the architettonico"—includes that which concerns building from the vantage of the patron.

The *Libro* recounts the construction of individual edifices as well as urban infrastructures such as city walls and streets. Nowadays, we would tend to say that one builds a city simply by erecting lots of edifices in close proximity. Filarete, however, follows Vitruvius in insisting that

¹⁰³ For an authoritative summary of the common terms for builders and buildings in Renaissance Florence, see Richard A. Goldthwaite, *The Building of Renaissance Florence: An Economic and Social History* (Baltimore: Johns Hopkins University Press, 1980), xiv-xv.

the making of the city *precedes* the making of the buildings it comprises. In the first book of *De architectura* Vitruvius famously divides architecture into the making of buildings, the setting of sundials, and the assembly and maintenance of machines. He further divides buildings into private and public, with the latter category encompassing the city walls and such buildings as are necessary for "defence, religion, and amenity [*opportunitatis*]." In what remains of Book I, he provides the criteria for selecting a good site for founding a town, the military implications of city wall geometry, the most important considerations for laying out streets, and a few remarks on where best to locate important public buildings. Vitruvius, in short, construes the city as an essentially *public* entity, embodied primarily by its public buildings, out of the fabric of which private spaces might be excised.

Filarete's narrative follows this progression with precision, treating firstly Sforzinda's site, then its walls, then its streets, and then its public buildings. Filarete, however, provides a strikingly concrete image of the city as an actual fabric or stuff out of which the buildings will be made. Following closely upon the heels of his initial rehearsal of the famous Vitruvian anecdote of Dinocrates ("Zenocrates" in the *Libro*) and Alexander the Great, which concerns the founding of a city on Mount Athos ("Libano" in the *Libro*), Filarete explains why his discussion of building will include a description of the founding of a city. "But because one should first weave the cloth and then make the dress, I will first describe a city, as seems to me good and beautiful in its entirety. I will describe, within, all of the aforementioned buildings, and for these I will show their mode, form, and *misura*, according to their *qualità*." Just as the tailor (who, as his title indicates, "sizes" clothes) makes dresses out of cloth, so the architect (who gives the

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¹⁰⁴ Vitruvius, *On Architecture*, 32-33 = I.iii.1: [...] una defensionis, altera religionis, tertia opportunitatis.
¹⁰⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 50 = Filarete, *Treatise* (Spencer, trans. and ed.), I:20: Ma perché in prima si dee tessere il panno e poi fare la vesta, io discriverrò innanzi una città, secondo a me parrà che debba star bene ed essere bello il circuito. Discriverremo, dentro, tutti questi nostri sopradetti edificii e di questi ti mosterrò il modo e la forma e la misura secondo loro qualità.

"measures" for buildings) makes edifices out of the city. Just so, when the Architect boasts grandly that "our city will be completed in ten days," 106 he means that the city walls—and not all of the city's buildings—will be completed in ten days. Rather than a mere agglomeration of buildings belatedly recognized as a unity, a city, for Filarete as for Vitruvius, properly means an enclosure, established through ceremony, ritual, and political wherewithal, in which the world may be fitly ordered for human habitation. ¹⁰⁷ The building of city walls establishes, but does not fully realize, a city.

For the purposes of the current study, what is crucial is that Filarete has declared the construction of the city of Sforzinda to be primarily a means to the end of building the edifices therein. So when Firpo, for example, asserts that "Filarete passed unconsciously from the technical to the urbanistic plane," he has both reversed the manifestly deliberate order of presentation in the *Libro*—Filarete begins with the city, then proceeds to the buildings—and accused Filarete of moving between the two levels "unconsciously," despite the fact that Filarete discusses the relationship between the two levels explicitly. And further, when Firpo immediately goes on to announce dramatically "that [Filarete's] priority was the organic planning of a city is incontestable," 109 he fails to qualify his claim in light of Filarete's explicit assertion to the contrary. According to its author, the *Libro* concerns building first and foremost, and the descriptions of cities therein serve principally as devices that provide the proper setting for the consideration of urban edifices.

¹⁰⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 95 = Filarete, *Treatise* (Spencer, trans. and ed.), I:41: «[...] e così verrà a essere fornita in dieci dì la nostra città.»

¹⁰⁷ Joseph Rykwert's compelling reconstruction of the ancient understanding of the symbolic significance of towns and cities as places ritualistically set apart from their environs here finds a lucid and impressively late endorsement. See Joseph Rykwert, The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World (Princeton, N.J.: Princeton University Press, 1976).

¹⁰⁸ Firpo, "La città ideale del Filarete," 58: Filarete passò inconsciamente dal piano technico a quello urbanistico.
109 Firpo, "La città ideale del Filarete," 58: [...] la sua priorità nella pianificazione organica della città è incontestible.

As I have observed elsewhere, most literary utopias and accounts of ideal cities either lay out the chain of inferences whereby a given set of premises results in given political forms or describe a polity whose social forms are encountered by some contrivance as faits accomplis. 110 The most famous ideal polities—namely, those described in Plato's *Republic* and More's Utopia—are not made, but deduced. The Republic openly presents itself as the argumentative demonstration of the social structure of an optimal polity, and *Utopia* takes the form of a travelogue, sketching a sociological snapshot of a preconceived polity. Renaissance works that describe ideal cities generally employ one of these conceits: either a deductive demonstration or a post facto travelogue. A famous example of the former would be Franceso Patrizi's (1529 – 1597) La Città Felice (1553), which presents itself forthrightly as an argument premised "On the nature of man." And a contemporaneous example of the latter would be Anton Francesco Doni's (1513 – 1574) I Mondi (1552), which comprises dialogues concerning visits to seven fictional worlds. 112 Both of these conceits deliberately set aside a direct treatment of the invious vicissitudes of history and the inherent uncertainty of the future. The flesh and blood authors and readers of such works may be well aware that the works owe obvious debts to tradition, but the characters in the works are not similarly engaged in self-conscious reflection on their own history. That is, the literary works in question engage fully with the problems of anachronism that are so characteristic of Renaissance humanism, but the worlds described in these works remain innocent of such questions—remain, in a word, ahistorical. 113

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¹¹⁰ Jonathan William Powers, "Building Utopia: The Status of the Ideal in Filarete's *Trattato*," in *Imagining and Making the World: Reconsidering Architecture and Utopia*, ed. Nathaniel Coleman (New York: Peter Lang, 2011).

¹¹¹ Francesco Patrizi, *La città felice* (Venice, 1553; rpt. online

http://www.istrianet.org/istria/illustri/patrizi/works/citta-felice.htm): Della natura dell'uomo.

Anton Franceso Doni, *I Mondi del Doni* (Venice: Francesco Marcolini, 1552).

¹¹³ History in Plato's *Republic* is not properly history, as we would understand it, but rather the Noble Lie—the myth that provides a calculated and expedient basis for social cohesion. Similarly, history in the republic of Utopia consists in mainly of accounts of the exploits of the mythical king Utopus. Utopian history, in other words, is not so

Filarete's approach in describing his fictional cities differs radically, since he aims to depict not only the grand and beautiful buildings that his characters build, but also the inherently temporal processes whereby those buildings are conceived and designed. Filarete's buildings and cities, that is, are emphatically *not* ideal in that term's colloquial modern sense of *eternal*, absolute, and perfect. Construction times are dramatically compressed in the Libro—some ten miles of city wall (twenty braccia high and six braccia thick), for example, are improbably constructed in only ten days¹¹⁴—but they nevertheless possess real duration. Filarete likewise describes the processes whereby architectural ideas are conceived, developed, and refined as possessing real duration. The Architect often presents the Lord or the Lord's Son with architectural ideas that have already been significantly refined, and the Lord and Lord's Son respond by posing questions, demanding explanations, requesting drawings, choosing among alternatives. The Lord gives the order to build only after he has satisfied himself that he understands—and will be pleased by—what will be built. Even then, his command to commence building does not terminate the development of the project's design. The Architect claims, as a general professional prerogative, both the authority and the responsibility to improve the project—presumably in keeping with a spirit that will receive the patron's approval—during its construction: "Believe [me], when we build, [we will do so] with great diligence and we will do more than I can show you in the drawing, so that [in modo] I believe that it will please you much more than the design does now; because I have the habit [uso] of always wanting to improve the work that I will show [you in drawings]." The buildings in Filarete's *Libro* represent the

much concerned with the question of "What really happened?" as with the seemingly similar question of "Why do we live as we live here and now?"

¹¹⁴ For Filarete's improbable calculations regarding the construction of Sforzinda's city wall, see Filarete, *Trattato* (Finoli and Grassi, eds.), 90-100 = Filarete, *Treatise* (Spencer, trans. and ed.), I:38-43.

Filarete, *Trattato* (Finoli and Grassi, eds.), 64 = Filarete, *Treatise* (Spencer, trans. and ed.), I:27: «Credi ancora, quando noi edificheremo, che con più diligenza e più cose assai noi faremo che io non ti mostro nel disegno, in

living products of the explicitly temporal processes of ideation and construction. The *Libro* does not provide a logical demonstration of how humans ought to live, nor does it present its fictional polities as faits accomplis; rather, it describes the thoroughly improvisational building of edifices. Even in the *court durée*, Filarete's Architect neither denies nor resents time—he *uses* it.

Filarete's characters also engage with the longue durée—with the obscure facts and convoluted ramifications of ancient history. Among Filarete's major aims in the *Libro* is the presentation of the case for the resuscitation of arte antica (as practice, style, and purpose) in all the arts, and in architecture especially. 116 One of the climaxes of the narrative occurs when the Lord, after an inspection of his new city, port, and gardens, announces himself fully persuaded as to the superiority of antique modes of building:

"These antique modes [of building] are without doubt truly beautiful, and let no one ever again argue to me for modern usage. [...] [N]ow that I have understood and seen the mode that the ancients used, and especially since I have heard this Golden Book, which has greatly opened my intellect about these buildings. [...] Enough that I have understood [that] the antique mode of building is more beautiful, with better reasons and beauty than the modern [mode]. I have determined that whatever buildings I have built—whether large or small—I desire that all be in the antique mode." ¹¹⁷

It is crucial that we not blithely equate the characters' sense of antiquity in this context with either (personal) memory or (personal) imagination. The Architect's campaign to convince the Lord to build alla antica musters an impressive (if occasionally inaccurate) phalanx of references, to classical literature as well as to Filarete's considerable personal experience with the remains of ancient architecture. Modern scholars have shown themselves oddly eager to

modo che credo che molto più ti piacerà allora che non ti fa adesso il disegno; perché io ancora ho questo per uso: ch'io voglio sempre migliorare l'opera che la mostra.»

116 See Spencer, introduction to Filarete, *Treatise* (Spencer, trans. and ed.), I:xxxvi.

¹¹⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 481-82 = Filarete, *Treatise* (Spencer, trans. and ed.), I:222-23: «Questi modi antichi sanzafallo sono veramente begli, e non sia niuno che mai a me ragioni più a questa usanza moderna. [...] [O]ra ch'io ho inteso e veduto il modo che usavano quegli antichi, e massime poi ch'io ho udito questo libro d'oro, il quale m'ha aperto lo intelletto molto in questi edificii. [...] [B]asta, ch'io ho inteso el modo antico dello edificare è più bello e con miglior ragioni e bellezza che non è il moderno. Sì che io ho diterminato che quanti edificii o grandi o piccoli che abbia a fare tutti voglio che sieno al modo antico.»

demonstrate that most of the credit for the demonstrations of classical learning that appear in Filarete's *Libro* should accrue to the author's humanist friends and colleagues (of whom, as I noted above, Filelfo was almost certainly the most important) rather than to the author himself.¹¹⁸ Questions as to Filarete's personal competence in ancient languages, personal mastery of classical literature, and personal familiarity with Italian literature seem to me, however, to be a school of red herrings. All published works of letters are, to a greater or lesser extent, collaborative endeavors.

Of much greater interest, for historians of literature as well as for historians of architecture, should be Filarete's insistence that literary accounts of the civilizations of ancient Egypt, Greece, and Rome would seem too fabulous to credit were it not for the corroborating—and ultimately dispositive—evidence offered by architectural remains. "If it were not for the bones of the buildings one can see there, I do not believe that, [whatever] writing one finds about it, it would be credited [with being] half of what it was. But when simply one sees its remains [conquassamenti], who considers them well will judge to be true all that is read of it." Filarete understands his references to classical literature to draw a significant measure of their power to persuade from the visible evidence of architectural ruins. The mellifluousness of Cicero's Latin would, indeed, seem to offer less directly compelling evidence of Roman greatness (especially for the many participants in humanist culture whose command of Latin was less than perfect 120)

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¹¹⁸ For an argument (more suggestive than convincing) for viewing Filelfo as the primary conduit through which ancient Greek ideas flowed to Filarete, see S. Lang, "Sforzinda, Filarete and Filelfo," *JWCI* 35 (1972). For a stronger and stricter argument that Filelfo served as Filarete's source on Plato in general and Platonic political philosophy more particularly, see Onians, "Alberti and ΦΙΛΑΡΕΤΗ." For additional evidence of the personal friendship and professional collaboration between the Florentine architect and the Anconan humanist, see Beltramini, "Filarete e Filelfo," and Hub, "Filarete and the East."

¹¹⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 238 = Filarete, *Treatise* (Spencer, trans. and ed.), I:106: [...] se non fusse le ossa delli edificii che in essa si vede, non credo che per scrittura che si truovi d'essa fusse creduto la metà di quello che era. Ma quando solo si vede quelli sua conquassamenti, chi bene gli considera stima essere vero poi tutto quello che d'essa si legge.

¹²⁰ I was privileged to attend several presentations at the Renaissance Society's of America's annual convention in 2012 in Washington, D.C., in which the importance of the non-Latinate public for humanist culture more broadly

than the indefatigable ubiquity of Roman aqueducts, the evocative expectancy of Roman amphitheatres, and the awe-inducing quietude of the Pantheon. Petrarch's ardor for ancient ruins has been rather less emphasized than his enthusiasm for Cicero, though both conduce to an engagement with Roman culture. ¹²¹

Architectural historians have for some time pointed to the importance of architectural remains—whether disused, dilapidated, or fully ruined—in shaping the historical consciousness of Italian humanists. Payne, for example, paints a luxuriously detailed description of Renaissance Rome that interprets its zeitgeist in terms of the *fragment*—the relatively self-contained element that invites creative reintegration into a new whole. ¹²² Architectural *disegno* in Filarete's day, as I will show in Chapter 5, treated ancient ruins precisely as assemblages of reconfigurable fragments. Payne's reading is highly persuasive, although I believe she does not properly stress the fact that the architectural remains of Roman civilization could be viewed as fragments (in her sense) only in presence of an acute awareness of the unrecoverable unity of their original integration. Filarete's response to antiquity inhabits the gap between the certainty that Roman (and Egyptian and Greek) civilization cannot be resurrected and the desire to use its remains as a matrix for conjuring its greatness of spirit in a form appropriate for his own time.

Filarete's *Libro* quite frankly and self-consciously confronts the characteristically Renaissance problem of *anachronism*, which Thomas Greene summarizes concisely as "an awareness of [historical] discontinuity coupled with the threat of inferiority." Filarete's sense

was made quite clear. A forthcoming thematic issue of *I Tatti Studies*, with the projected titled *Latin and the Vernacular in the Fifteenth Century*, is slated to contain more elaborated versions of several of the relevant papers. ¹²¹ See Thomas M. Greene, *The Light in Troy: Imitation and Discovery in Renaissance Poetry* (New Haven: Yale University Press, 1982), 9 ff.

¹²² See the introduction and first chapter in Payne, *The Architectural Treatise*.

¹²³ Greene, *The Light in Troy*, 32. Anachronism has become an increasingly important concept in Renaissance studies, precisely because it represents perhaps the most important theme under which "the humanist situation [can] be regarded as a local version of a situation universally human." Greene amplifies: "The past always reaches us across a space which we want to deny. It reaches us incomplete, and in attempting to make it whole we merely

of anachronism extends into the future as well as the past. He views the projects described in his book as subject to all the possibilities and eventualities of mortal constructions: ruin, destruction, oblivion even. The Architect asserts categorically that "in the end a city consists only in the term that it has been granted." Mortality represents one condition that both the past and present—no matter how great—cannot escape. In another instance, the Architect, aiming to inspire his Lord to strive for a similar greatness, lists some of the grandest building projects in recorded history—the fabled cities of Thebes, Nineveh, Babylon, Troy, Carthage, and Rome, as well as the Pyramids and Solomon's Temple. After his list, he tempers his own audacity in offering such illustrious precedents as models for emulation:

I will therefore strive in our city to make and to order all the buildings that remain to be made, public as well as private. It seems to me that they need to be beautiful, with no expense spared, even though the same building can be built in varied ways, as with temples and other kinds [ragione] of buildings. I will take those kinds that seem to me to be the most beautiful. Those who come later who want to make more beautiful buildings or other varied kinds [ragioni] will make [them] according to what they know better; so [too] the places and the sites. 125

Though they might strive to rival the great architectural precedents of the past, the buildings and cities in Filarete's *Libro* do not exemplify the only sound formulas for recreating such glories as were accomplished in the past. Filarete even hints that he expects that his own works will one day be themselves surpassed.

create a new incompleteness" (*The Light in Troy*, 34). Although Greene means to address specifically the motivations of literary imitation in the Renaissance, he could hardly have offered a more apt summary of Filarete's ambivalent intentions toward the architecture of antiquity.

¹²⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 105 = Filarete, *Treatise* (Spencer, trans. and ed.), I:45 «[...] in una città non consiste altro per infino che gli è concesso il suo termine.»

¹²⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 239 = Filarete, *Treatise* (Spencer, trans. and ed.), I:106: Io adunque m'ingegnerò in questa nostra città fare e ordinare tutti edificii che restano a fare, cioè publici e anche privati, i quali a me pare sieno bisogno belli e sanza rispiarmo di spesa, benché in variati modi si possa fare uno medesimo edificio, così de' templi come d'altra ragione d'edificio. Io piglierò quelle ragioni che a me parrà essere più belle, quelli che verranno poi che vogliono fare più belli edificii o d'altre variate ragioni, faccino secondo che saperranno meglio fare e anche e' luoghi e ' siti.

Nathaniel Coleman provocatively suggests that architectural ideation in general makes implicit use of a "partial utopia" such that architects are ethically bound to imagine their projects as pushing their overall situations toward ideals recognized as incomplete. It remains doubtful, however, whether or not architecture as Filarete understands it could be harnessed to produce anything like a properly ideal city, whose timeless form has been deduced from axiomatic premises. The touchstone verb in the *Libro* is *edificare*—"to build," plain and simple—which for Filarete entails strategies of propitiation and improvisation rather than strategies of detailed planning and absolute control. Studies that link the *Libro* to utopianism and urbanism, however, tend to treat the architectural intentions, building processes, and completed building projects depicted in the *Libro* as isomorphic, if not entirely identical. Robert Klein's classification of Filarete's *Libro* as a utopian work, for example, goes hand in hand with his portrayal of it as a work that

released its author's dreams: the buildings became monstrous, the hydraulic mania (a constant since Plato's Atlantis) worsened—and the architect became legislator. In earlier chapters Filarete had given imaginary orders to the Duke of Milan and to the best Florentine artists (except Brunelleschi, unfortunately deceased); in the golden book a plethora of schizoid and sadistic fantasies turned spontaneously toward the fundamental and timeless themes of utopia: pedagogy, justice, sumptuary and tax laws. [...] [I]t is striking to notice how the architect, as soon as he extends his habits of urban organization to human material, conforms to the laws of the utopian genre while still leaving upon them the mark of his own temperament. 127

Klein's ominous reading makes sense only insofar as architectural intentions are conflated with the architect's personal wishes so that neither needs to compromise either with nature or with other people. Such a conflation grossly misapprehends Filarete's basic intentions by mistaking his characteristically Renaissance attempts to reimage ancient greatness for megalomaniac

¹²⁶ Nathaniel Coleman, *Utopias and Architecture* (New York: Routledge, 2005), 2.

¹²⁷ Robert Klein, "Utopian Ürban Planning," trans. Madeline Jay and Leon Wieseltier, in *Form and Meaning: Essays on Renaissance and Modern Art*, eds. Henri Zerner, Madeline Jay, and Leon Wieseltier (New York: Viking Press, 1979), 90.

idiosyncrasies.¹²⁸ As José Alcina Franch explains, "Of course the descriptions that are in [Filarete's] book do not evince any kind of archaeological rigor, and [of course] the monuments [described] therein evidence their implication in the general idea of Roman architecture that [Filarete] had as well as in the artist's own personal imagination."¹²⁹ Or as Spencer more pointedly puts it, "The projected architecture of the treatise [...] is not the result of any bizarre fantasy of Filarete's but a serious attempt to recreate in Renaissance terms the art of the past."¹³⁰

We can quite much more straightforwardly make sense of Filarete's penchant for fabulousness by contextualizing it within the long rhetorical tradition that valorized the mnemonic stickiness of shocking and strange images. And the often grandiose quality of Filarete's projects is easily understandable as a response to the recent and spectacular success of Filippo Brunelleschi's (1377 – 1446) dome for Florence's cathedral, which, as the largest dome constructed since antiquity, was remarkable principally for its vastness. Indeed, it was precisely its great size that provoked admirers like Alberti to compare it favorably to such awe-inducing precedents as the Pyramids. For buildings, monstrous size amounts to a species of the

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¹²⁸ Cf. Firpo, "La città ideale del Filarete," esp. 58-59. Firpo's interpretive approach is substantially identical to Klein's, rendering it susceptible to the same criticism. Cf. also Tönnesmann, "Il dialogo di Filarete," esp. 11, and as well Leila Whittemore, "City and Territory in Filarete's *Libro architettonico*," *AL* 155, 1 (2009), esp. 55.
Tönnesmann and Whittemore see the *Libro* as reducible to propaganda on behalf of the Sforza family, effectively sublating Filarete's desires into his patron's. Both commenters thus mistakenly interpret traces of a broad cultural problematic as evidence of Filarete's personal psychology.
129 Franch, "Ideas estéticas de Antonio Averlino": 131: Claro está que en las descripciones que hay en el libro no se

¹²⁹ Franch, "Ideas estéticas de Antonio Averlino": 131: Claro está que en las descripciones que hay en el libro no se sigue un rigorismo de tipo arqueológico, y que los monumentos que allí se señalan participan de la idea general que se tenía de la arquitectura romana y de la propria fantasía personal del artista.

¹³⁰ Spencer, introduction to Filarete, *Treatise* (Spencer, trans. and ed.), I:xxxv.

¹³¹ Frances Amelia Yates, *The Art of Memory* (New York: Routledge, 1966; repr. London: Pimlico, 1992), 25-27. Yates famously traces the tradition of advising students to use striking, "active images" [*images agentes*] to make things memorable to the pseudo-Ciceronian *Rhetorica ad Herennium*. Her vivid summary and trenchant discussion of the Herennian principles for forming *images agentes* far surpasses the original.

¹³² For an erudite reflection on magnitude as an important, but problematic, moral criterion for Renaissance architecture, see chapter three (entitled "Foul Enormity or Grandiose Achievement? The Moral Problem of Size") in Christine Smith, *Architecture in the Culture of Early Humanism: Ethics, Aesthetics, and Eloquence, 1400-1470* (New York: Oxford University Press, 1992).

grotesque, which is very nearly "the shocking and strange" made into a category. Is In one passage in the *Libro*, the Architect points to a pair of outsized columns in Rome that he says "are very marvelous to see, for the ornament that they have as well as for their magnitude. Is Both great magnitude and engrossing ornamentation can serve to make a building remarkable, and a building that can secure lasting fame for its patron (and architect) must be, almost by definition, remarkable enough to be memorable. I shall treat the intricate interdependence of these themes in greater detail in Chapter 7. Filarete clearly gives thematic preeminence to *building* in his *Libro*, and all attempts to subsume the work thematically beneath some other aspect—such as the *ex novo* construction of Sforzinda and Plousiapolis—end by obfuscating the historical significance and theoretical sense of the work.

Creativity and the Lens of Rhetoric

Both historical and theoretical motivations animate this dissertation. Historically speaking, scholarly commentary on the *Libro*, tempted perhaps by the color and variety of Filarete's literary conceits, has often willfully ignored the work's explicit and consistent focus on building. Further, commentators have often misapprehended Filarete's rather uncomplicated intentions in writing the *Libro* by interpreting them without reference to the Renaissance context in which more or less the whole culture undertook a bracing confrontation with the problem of anachronism. As a study in architectural history, this dissertation aims to interpret the *Libro* as a

¹³³ Mary J. Carruthers traces the use of fantastic images and grotesqueries in the monastic tradition of rhetorical memory. For a few illuminating applications of and commentaries upon the Herennian principle that the odd and emotionally disturbing image is more memorable, see her *The Book of Memory: A Study of Memory in Medieval Culture*, 2nd ed. (Cambridge, U.K.: Cambridge University Press, 2008), 134 and *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200* (New York: Cambridge University Press, 1998), 28-29. For a fascinating analysis of an example of grotesqueries used to make something more memorable, see *The Craft of Thought*, 161-70.

¹³⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 219 = Filarete, *Treatise* (Spencer, trans. and ed.), I:98: «[...] sono molto maravigliose a vederle, sì per l'ornamento ch'ell'hanno, e sì per la loro magnitudine.»

mature statement about architectural invention as it supervenes upon the manual activity of making buildings. As to the problem of anachronism, Filarete three times explicitly identifies the humanist revival of antique letters as the paradigm for the revival of antique building practice that he hopes to incite. In the first instance, the Architect insists that "[a]s there is a difference between antique letters and modern [letters], so likewise with those things that pertain to building, as well as to sculpture or other activities done through disegno." Filarete strikingly analogizes to letters, not architecture or building, but rather disegno—that is, the practice of drawing. The implication would appear to be that the ancient practice of disegno was superior to the modern practice of disegno, although Filarete could have had no direct knowledge of ancient disegno since neither any substantial corpus of ancient paintings nor any treatises on drawing or painting were (or are) known to have survived from antiquity. Filarete's analogy might simply express optimism that an ancient treatise on drawing or painting—a companion to Vitruvius's on architecture—would soon be recovered. More likely, however, is that it represents an instance of induction whereby Filarete, firmly convinced of the superiority of ancient buildings and certain that architecture depends upon disegno, has reasoned that the ancients must therefore have had a superior practice of disegno. From the symptom and presumed knowledge of its etiology, he conjectures the cause.

In the second instance, which follows soon after the first, Filarete produces a strict analogy between Latinity and building:

"I give you the example of ancient building to modern [building], [which is] exactly as [it is] with letters: that is, between the speech of Tullius or Virgil and the usage of thirty or forty years ago. Today this usage has been returned to better use than had prevailed in times past—during several hundred years—[for today] one speaks prose with ornate

¹³⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 212 = Filarete, *Treatise* (Spencer, trans. and ed.), I:98: «Cioè, come che nelle lettere è differenzia da quelle degli antichi ai moderni, così è proprio queste cose che appartiene all'edificare, e di scolture o d'altro esercizio che sotto il disegno si facci.»

eloquence. And this is so solely because they followed the antique mode of Tullius and other able [valenti] men." ¹³⁶

The Latin spoken and written in the 1460s—for the word "letters" [lettere] at the time still referred strictly to Latin and not to language or verbal works in general—surpasses the Latin spoken and written in the 1420s, because the humanists have made progress in establishing Ciceronian and Virgilian Latinity as the norm. Analogously, the building practice of the Quattrocento—and by extension the corpus of buildings thereby produced—may enjoy great improvement if only it cleaves to the antique mode.

Filarete puts the third and most extended comparison of building to letters into the mouth of a visiting Lord (whom Spencer argues should be identified as Francesco Sforza's friend, Lodovico Gonzaga). The visiting Lord says, after having seen and understood the many buildings that the Lord and his Architect have up to that point completed, "Lord, I seem to see those worthy buildings that were in Rome in ancient times, as well as those that we read were in Egypt. I feel myself reborn [in ancient times] on seeing these worthy buildings." The explicit use of the verb *rinascere* (and this marks one of its earliest known appearances) is striking, although in this instance it is the viewer, and not the spirit of the Roman past, that is reborn. The verb communicates, in any case, precisely that strong sense of historical disjunction that I have thematized with the term *anachronism*. Asked why the art of building has declined from its antique glory, the visitor replies,

¹³⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 228-29 = Filarete, *Treatise* (Spencer, trans. and ed.), I:102: «Io ne do questo essemplo all'edificare antico al moderno, come proprio le lettere, cioè come dire di Tulio o di Vergilio a

quello che s'usava da trenta anni a drieto o quaranta, che pure oggi è ridotta questa usanza in migliore uso che non si faceva in questi tempi passati, cioè del dire in prosa con ornato eloquio [f.59v.] già è parecchi centinaia d'anni. E questo è stato solo per rispetto che hanno seguitato il modo antico di Tulio e degli altri valenti uomini.»

137 See Spencer, "La datazione del *Trattato*," 97-98; Spencer, introduction to Filarete, *Treatise* (Spencer, trans. and ed.), I:xxxiv; and Filarete, *Treatise* (Spencer, trans. and ed.), I:175, n. 14. Spencer devotes so much attention to the identification of the unnamed visitor because he holds this episode to represent the climax of the *Libro*.

¹³⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 381 = Filarete, *Treatise* (Spencer, trans. and ed.), I:175: «Signore, a me pare vedere di quegli degni edificii ch'erano a Roma anticamente, e di quegli che si legge che in Egitto erano. Mi pare rinascere a vedere questi così degni edificii.»

"[J]ust as letters declined in Italy—that is, as spoken and [written] Latin became coarse and came to be gross—until fifty or perhaps sixty years ago when ingenious men became more subtle and refined. [...] [B]ecause no great buildings were built, because Italy was poor, men were no longer very practiced in such things. Not being practiced men, their knowledge became less subtle, and so the sciences of these things were lost. And so it came that when someone has wanted to make a building in Italy, his recourse has been to those who wanted to do the work, to goldsmiths and painters, and to masons." ¹³⁹

I have elided much of this speech, some of which vaguely—and therefore uninterestingly—blames French and German customs for displacing superior Italian counterparts, and the rest of which only amplifies the last point about goldsmiths and painters not being true architects. The kernel of the visiting Lord's argument is that antique letters and the antique mode of building became corrupted because they fell into *disuse*. The *scienza* of architecture was lost because builders wanted for *practice* and *experience*—or at the very least, wanted for high quality practice and experience—and not because no one thought to document these or those abstract principles. Likewise, Latin became corrupt through bad practice, not for lack of abstract principles. The essential point affirmed in this speech—namely, that architecture and letters overlap precisely to the extent that they both constitute living *practices*—constitutes one of the basic insights in whose light the present study has been undertaken.

Filarete's habit of citing of the humanist revival of letters as his conceptual model for tackling the problem of anachronism invites his reader to follow suit. This dissertation thus attempts to adapt certain of the conceptual tools of *rhetoric*—which has been identified by thinkers as eminent and as chronologically distant as Vico and Ernesto Grassi (1902 – 1991) as the intellectual discipline most characteristic of Renaissance thought—to the study of

¹³⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 382 = Filarete, *Treatise* (Spencer, trans. and ed.), I:176: «[C]he come le lettere mancorono in Italia, cioè che s'ingrossorono nel dire e nel latino e venne una grossezza, che se non fusse da cinquanta o forse da sessanta anni in qua che si sono assottigliati e isvegliati gl'ingegni. [...] [P]erché di questi grandi edifizii non si facevano, per cagione che Italia era povera, gl'uomini ancora non si esercitavano troppo in simili cose. E non essendo gli uomini esercitati, non si assottigliavano di sapere, e così le scienze di queste cose si perdono. E venuto poi quando per Italia s'è voluto fare alcuno edificio, sono ricorsi quegli che hanno voluto far fare a orefici e dipintori, e questi muratori.»

architecture. I propose, that is, to use rhetoric to interpret Filarete's *Libro* as an historically important and theoretically provocative account of how the practice of architecture (or perhaps better to say, the architect) is supposed to work, as well as a statement about what architecture can and should be. Of course, the three passages I have cited above would be, by themselves, narrow grounds upon which to defend the adoption of a rhetorical lens. As will become clear, however, other important aspects of Filarete's work—his use of the dialogue form, his prescient emphasis on the imagination, his unprecedented use of illustrative drawings, and his concern to "air his architectural ideas and show off his inventiveness" also invite the deployment of rhetorical concepts for their interpretation.

It is precisely in the nexus defined by those anxieties, terms, and aims of Filarete's *Libro* which might be gathered together beneath the heading of *invention* that the theoretical axis of this dissertation finds its fulcrum. Filarete's notion of those aspects of the architect's job that might be called *creative* (as opposed to secretarial or managerial) parallel, in a number of intriguing ways, traditional accounts of rhetorical *Inventio*. To be sure, the creativity of the architect also diverges from rhetorical creativity in equally intriguing ways. For most of our culture's history, rhetoric provided the basic lexicon in which the craft of thinking *inventively* was taught and accounted for in general terms. Filarete's *Libro* aims to teach the craft of architectural invention in part by explaining its potentialities and limitations in similarly general terms. Given such an ambition, Filarete can hardly help borrowing terms and conceptual configurations from the far older and more ubiquitous lexicon developed for the teaching and practice of rhetorical *Inventio*. Intended for improvisational use, refined over centuries, and thoroughly absorbed into European literary culture, rhetorical concepts possess a sturdiness and suppleness that makes them unusually serviceable as makeshift tools. Further, as rhetorical

¹⁴⁰ Lang, "Sforzinda, Filarete and Filelfo," 397.

training laid the practical foundation upon which Greco-Latin literati built their literary tenements as well as their literary monuments, so rhetorical concepts and terms inevitably dissolved into quotidian speech and thinking. Renaissance humanism revived the formal study of classical rhetoric, but it could not monopolize its resources, which had long ago been digested into both pedagogical institutions and workaday vernaculars. Although the pages that follow will show how Filarete in some crucial instances deliberately reaches out to rhetoric, it will also become apparent that he was able to articulate a coherent notion of architecture only because centuries of rhetorical tradition, concerned to cultivate the creativity of young literati, had dug and laid a vast lexical and conceptual foundation upon which he could build.

CHAPTER 2:

PRINCELY VOLUNTÀ

Two Conditions for Building

The narrative that unfolds within the *Libro* presumes two essential conditions that inform every aspect of the practice of building as Filarete views it. Although both conditions have far-reaching ramifications, they have been insufficiently emphasized by commentators—most likely because Filarete does not address them so much as assume them. The first condition (treated in the current chapter) is that Filarete clearly understands every building project to have its origin not in the architect, but in the patron. The architect quickens and catalyzes the realization of a building, but it is ultimately the patron who makes the building come to be. The second condition—which I will treat in Chapter 3—is that Filarete depicts every building project in the *Libro* as developing in direct relation to the communicative milieu that exists between and among all of the main characters. It has often been remarked that architects cannot avoid communicating with the persons who actually build the edifice. Filarete, however, views all of the architect's work—the crafting of the building's *design* no less than the coordination of the erection of its material body—as both enabled and constrained by human communication.

Princely Voluntà

Given that Filarete's *Libro* recounts the story of an autocratic Lord and his entourage, we are hardly taken aback to see the Lord's Architect working diligently to find, develop, and articulate architectural ideas that align with and express his Lord's will—in Italian, his voluntà. Filarete's modern reader will likely be tempted to view the entire narrative conceit of the Libro—a grand spasm of building activity that has the Lord's voluntà as its epicenter—as the author's amateurish attempt to ingratiate himself to his actual and potential patrons. But as I mentioned in the Introduction, Filarete was hardly alone in aiming his book at an audience of patrons. Most books written at the time and in the preceding ages, if their authors had any aspirations to a circulation beyond their own personal circles of acquaintance, were dedicated either to a patron or some other worthy—Vitruvius's and Alberti's books on architecture included. The most appealing explanation for the durability of such a practice remains the most straightforward: no work—whether of letters or of art—can come to be absent the conjunction of a workable idea and the effective means to realize it. The situation is particularly acute in the case of architecture, where the sheer quantity of resources necessary to realize a building project might constitute a large share of the total resources available to an entire community. It is thus more accurate, more charitable, and more interesting to interpret Filarete's celebration of the Lord's voluntà not as obsequiousness, but as an attempt (sometimes, admittedly, expressed with less than perfect grace) to remind the patron that his goodwill is the sine qua non of every building project. A realistic commitment to the production of excellent buildings implies a commitment to the propitiation of the human *voluntà* that lies at the origin of every building project—and not every person's *voluntà* has the political efficacy sufficient to mobilize the required resources. An architect may superintend the construction of a whole city of buildings,

but as the Architect candidly admits, he "cannot build it alone." When making any building, an architect is desirable, but a patron is indispensable.

As Filarete portrays it, the Architect evidently views making sense of his Lord's voluntà as one of his primary responsibilities. Whether the Lord provides instructions for what he wants done or whether the Architect proposes a new project (or a change to a project already underway) to the Lord, the overarching concern is always to ensure that everyone has understood the Lord's will. Filarete often depicts this concern in the most straightforward way imaginable: the Architect says (in so many words), "I understood your *voluntà*, and so I did such and such," and the Lord either responds with, "You have understood me," or he questions the Architect until he is satisfied that his *voluntà* has been adequately understood. ¹⁴² In general then, Filarete holds that an architect's *first* job is to understand his patron's *voluntà*, since no building can either come to be or long survive absent some human willing that it should exist (which of course does not exclude the possibility of a group of persons patronizing a building together, or several different persons patronizing the same building in series). The generation of mental schemata, drawings, and models that light the way, as it were, to the finished building is the architect's second job. As all of the building activity in the Libro refers ultimately and uniquely the Lord's voluntà, we may say that within the fiction of Filarete's Libro, the human faculty that serves as the ultimate ground of architecture is neither the imagination nor the intellect, but rather the will.

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¹⁴¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 52 = Filarete, *Treatise* (Spencer, trans. and ed.), I:21: [...] solo non la posso edificare.

hills for the purposes of my argument it would not matter whether Filarete actually used the word *voluntà* in any of these exchanges, the fact that he does so in several instances makes my reading all the stronger. See Filarete, *Trattato* (Finoli and Grassi, eds.), 147 = Filarete, *Treatise* (Spencer, trans. and ed.), I:65; Filarete, *Trattato* (Finoli and Grassi, eds.), 169 = Filarete, *Treatise* (Spencer, trans. and ed.), I:76; Filarete, *Trattato* (Finoli and Grassi, eds.), 272 = Filarete, *Treatise* (Spencer, trans. and ed.), I:123; Filarete, *Trattato* (Finoli and Grassi, eds.), 390 = Filarete, *Treatise* (Spencer, trans. and ed.), I:180; Filarete, *Trattato* (Finoli and Grassi, eds.), 411 = Filarete, *Treatise* (Spencer, trans. and ed.), I:189; Filarete, *Trattato* (Finoli and Grassi, eds.), 412 = Filarete, *Treatise* (Spencer, trans. and ed.), I:190.

To read the Architect's sometimes embarrassingly naked deference to his Lord's *voluntà* as nothing more than evidence of Filarete's self-serving endorsement of ducal power restricts the possible meanings of the *Libro* to those compatible with propaganda, thereby reducing architecture to a mere epiphenomenon of vulgar politicking. 143 No matter that the very notion of absolute political power has always been more rhetorically useful than strictly accurate. No matter either that the particulars of Francesco Sforza's political situation—and so likewise those of his court architect's working situation—are as complicated as one could wish. Evelyn Welch's and Patrick Boucheron's assiduous researches amply demonstrate not only that Sforza's political authority in Milan was anything but absolute, but also that he made little provision to insulate the building projects he endorsed from the vicissitudes of his larger political fortunes. 144 Whatever it may suggest about Sforza's political sitution, the fact that Filarete represents the Lord's voluntà—and no one else's—as the engine of all the building activity in the Libro has interesting consequences for architecture in general as well as for Filarete's particular conception of it. While Filarete is, as we shall see, clear and conventional in his construal of *voluntà* as an important factor in political dominance, he is equally clear and conventional in his construal of voluntà as a faculty of the human soul. I propose to bracket the broad equality of the Lord's voluntà with his brute political authority in order to concentrate on those aspects of Filarete's notion of architecture that concern the relationship between architecture and the humanity of those involved in its generation.

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¹⁴³ Gary Ianziti usefully observes that Filarete composed his *Libro* within a political milieu in which the Sforza family was actively engaged in the construction and dissemination of fictions that legitimated their rule. Ianziti's implicit critique, however, is perhaps not sensitive enough to the specific prerequisites of architectural production, one of which is political power of a sufficient concentration. See Ianziti, *Humanistic Historiography Under the Sforzas: Politics and Propaganda in Fifteenth-century Milan* (New York: Clarendon Press, 1988). Kenneth Hayes reads the *Libro* as appealing to the would-be patron by reducing the act of building to a practice that ossifies money and *de facto* political power into a concrete form that will be accepted as a reasonable facsimile of political legitimacy. See Hayes, "Machiavelli's Architect: Filarete and the Arché" (M.Arch. thesis, McGill University, 1993).

¹⁴⁴ Welch, *Art and Authority in Renaissance Milan* and Boucheron, *Le Pouvoir de bâtir*.

The Genesis of Architecture

Early in the *Libro*, as part of his preliminary exegesis of the origins, history, and theory of architecture, Filarete explicitly likens buildings to human bodies. He begins with the Vitruvian analogy between the measures of and proportions among an ideal human's members, and from this quite traditional basis extends the analogy considerably:

I will show you [that] a building is truly a living man, and you will see that it needs to eat [in order] to live, just a man does. So it sickens and dies, and so also it is often cured of his sickness by a good doctor. And also sometimes [just] as a man succumbs to a disorder [because] he did not attend well to his health, although [again] a good doctor oftentimes returns him to health, and he lives a long time, and, so living for his allotted time, dies. Some never become ill and then die at the end, and others are killed by other people for one reason or another. 146

Beginning from the traditional analogy of the proportionality of the human body and the proportionality of a proper building, Filarete develops a distinctively *qualitative*—even poetic—analogy, which he uses to shed substantial light on the human meaning of architecture. While Filarete expatiates on several aspects of this analogy, of particular interest to this study is his reciprocal comparison between human mortality and the perishability of human works on the one hand, and human natality and the generation of human works—buildings in particular—on the

chi per un'altra.

¹⁴⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 14-29 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6-12.

¹⁴⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 29 = Filarete, *Treatise* (Spencer, trans. and ed.), I:12: Io ti mosterrò l'edificio essere proprio uno uomo vivo, e vedrai che così bisogna a lui mangiare per vivere, come fa proprio l'uomo: e così s'amala e muore, e così an<che> nello amalare guarisce molte volte per lo buono medico, e anche molte volte come l'uomo si ramala per lo disordine di non avere buona avertenza alla sua sanità, e anche pure molte volte per lo buono medico ritorna in sanità, e vive gran tempo, e così vivendo poi pure per lo tempo suo si muore; e alcuno sarà che non arà mai male e poi alla fine muore, e alcuni sono morti da altre persone, chi per una cagione e

¹⁴⁷ It will be useful to point out that Filarete here invokes the first and most important of the philosophical and philological axioms of Vico's "new science," which states that "[b]ecause of the indefinite nature of the human mind, wherever it is lost in ignorance man makes himself the measure of all things" (Giambattista Vico, *The New Science of Giambattista Vico*, trans. Thomas Goddard Bergin and Max Harold Fisch, rev. ed., originally published as *Scienza nuova seconda* in Naples: 1744 (Ithaca, N.Y.: Cornell University Press, 1968), 60 = ¶120). Within a modern framework of mathematized science, Filarete's qualitative analogy has no firm grounding, and so has no currency. Within the Vichian framework of humanistic history, however, it offers what must be regarded as the only sound foundation for an authentic grasp of the meaning of architecture: we can make sense of architecture only by referring it to the primary matrix of our understanding, which is ourselves.

other hand. Just so, Filarete opens his discussion of this analogy in medical terms, which is to say, in terms of health and mortality.

If mortality has been a perennial theme in philosophy, natality—the condition of human existence such that we are all born into a pre-existing world—has received comparatively little philosophical attention. Likewise, the perishability of human works has been a constant concern for writers of all stripes, while the fact that all the works of human hands were conceived and, so to speak, born into the world, has received little to no attention. Having argued that buildings live and eventually die just as humans do, Filarete takes the next step of comparing their conception, gestation, birth, and growth to the biological process of human generation. The long and sometimes slippery passage in which he lays out this analogy is important enough to merit quoting at length:

The generation of the building is in this manner [forma]: just as no one can by himself generate another [person] without a woman, so similarly a building cannot be created by someone by himself. And as without a woman it cannot be done, so he that wants to build needs to have an architect and together with him to conceive it [ingenerarlo]. The architect then gives birth [to the building], and so, having birthed it, the architect becomes the mother of this building.

But before he gives birth [to the building], just as the woman carries [a baby] nine or seven months in her body, as I have said above, so the architect must for nine or seven months imagine it and ponder it and turn it over in his memory in several ways [fantasticare e pensare e rivoltarselo per la memoria in più modi], and make various drawings in his mind of the idea [generamento] that he has made with the patron, according to his [the patron's] voluntà. And just as the woman without the man can do nothing, so the architect is the mother who bears this idea [ingeneramento], and [still] in accord [with] his [the patron's] voluntà, when he [the architect] has thoroughly ruminated

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¹⁴⁸ Hannah Arendt explicitly interprets the human condition of natality in terms of the biological fact of human variety. See her *The Human Condition*, 2nd ed. (Chicago: University of Chicago Press, 1998), 8-9 and 178 ff. The concept of variety traditionally operated as one of the master tropes of rhetoric—where it was usually known by its Latin name, *varietas*. Filarete's and Francesco di Giorgio's reflections on the source of variety in human handiwork—and both writers explain the phenomenon of manufactured variety in specifically psychological terms—suggest the existence of a *craft* tradition that interprets *varietas* not only as a stimulus to pleasure, as it was understood in rhetoric, but also as theological evidence of God's generative intentions in creating humans. Cf. Yves Pauwels, "*Varietas* et *ordo* en architecture: lecture de l'antique et rhétorique de la création," in *La "varietas" à la Renaissance*, ed. Dominique de Courcelles (Paris: École Nationale des Chartes, 2001) and the sixth chapter (entitled "*Varietas* and the Design of Pienza") of Smith, *Architecture in the Culture of Early Humanism*.

and considered, and in many ways pondered, then he ought to choose that [idea] that seems to him most commodious and most beautiful at the termination of the gestation [generante]. Having done this, he gives birth, that is, he makes a small wooden model, measured and proportioned like that [which] he has made [in his mind], and then he shows it to the father. And because I have analogized for you the architect to the mother, so he needs [also] to be [the building's] nurse—he needs to be[, that is, both] mother and nurse. And as the mother is solicitous of her son['s wellbeing], so she will with love and diligence raise it and nurture it and provide for it, if possible, so as not leave it ordered in such a way [modo] that it will perish for want [of anything essential]. Even as the good mother wishes well for her son, so through [giving] assistance and knowledge the father endeavors [s'ingegna] to [ensure] that the [building] turns out well and is beautiful. He gives [the building] a good master so that it will come to be worthy and praised, because the good architect should endeavor [ingegnare] to make his building beautiful and good. And as the mother endeavors [s'ingegna] to find good maestri for her son, so the architect should find good *maestri*, such as those [expert] in [building] wall[s] and all the others that one needs to build. Thus the patron should not impede him [the architect], [for] without the *voluntà* of [the patron], [the architect] would be like the woman who, against the voluntà of her husband, cannot do anything; so it is similarly with the architect. 149

This passage justly ranks among the most famous in Filarete's *Libro*, and many of Filarete's commentators have drawn attention to it.

Mark Jarzombek, for example, recently published Spencer's translation of this passage along with a very brief gloss that characterizes Filarete's analogies (patron to father, architect to

¹⁴⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 40-41 = Filarete, *Treatise* (Spencer, trans. and ed.), I:15-16: Il generare dello edificio si è in questa forma: che sì come niuno per sé solo non può generare sanza la donna un altro, così eziandio a similitudine lo edificio per uno solo non può essere creato, e come sanza la donna non si può fare, così colui che vuole edificare bisogna che abbia l'architetto e insieme collui ingenerarlo, e poi l'architetto partorirlo e poi, partorito che l'ha, l'architetto viene a essere la madre d'esso edificio.

Ma innanzi che lo partorisca, come proprio la donna che nove o sette mesi in corpo lo porta, come di sopra t'ho detto, così l'architetto debba nove o sette mesi fantasticare e pensare e rivoltarselo per la memoria in più modi, e fare varii disegni nella sua mente sopra al generamento che lui ha fatto col padrone, secondo la voluntà sua. E così come la donna ancora sanza l'uomo niente fa, così l'architetto è madre a portare questo ingeneramento, e secondo la sua voluntà, quando l'ha bene ruminato e considerato e in molti modi pensato, debbe poi eleggere quello gli pare che sia più comodo e più bello secondo la terminazione del generante; e fatto questo, partorirlo, cioè farne uno disegno piccolo rilevato di legname, misurato e proporzionato come che ha a essere fatto poi, e mostrarlo al padre. E perché t'ho asomigliato l'architetto alla madre, così è bisogno che sia balia, e così bisogna che sia madre e balia. E sì come la madre è amorevole del figliuolo, così lui con quello amore e diligenza alevarlo e acrescerlo e fornirlo, se è possibile, se non lasciarlo ordinato, per modo che non perisca per suo mancamento. Sì come la buona madre vuole bene al suo figliuolo, e mediante l'aiuto e sapere del padre s'ingegna che sia da bene e che sia bello e dàlli buono maestro, perché venga valente e che sia laudato, così il buono architetto si debba ingegnare di fare il suo edificio bello e buono; e come la madre s'ingegna di trovare buoni maestri al figliuolo, così l'architetto debba trovare buoni maestri, come son quelli da muro e tutti gli altri che hanno a lavorare, se già il padrone non gl'impedisce, sanza la volontà del quale lui sarebbe come la donna che contra la voluntà del marito non può fare alcuna cosa; così è proprio a similitudine l'architetto.

mother, building to child) as "astonishing." ¹⁵⁰ Jarzombek's brief article has no ambitions to offer a sustained interpretation, intending principally to commend Filarete's analogy to a larger audience. Following the precedent established by modern commentators, Jarzombek chooses Filarete's more famous contemporary Alberti as a foil to help the reader place Filarete within the larger context of architectural history and theory. To couch the passage for readers likely unfamiliar with the *Libro* in its entirety, Jarzombek first provides a useful summary of Filarete's career, and then contrasts Filarete's depiction of the patron-architect relationship as "intimate" with Alberti's depiction of the same relationship as "professional." Jarzombek, that is, focuses on the tenor of the *relationship* between patron and architect. The interest of Filarete's analogy, however, does not consist in the "intimacy" between patron and architect (which is a curiously prurient suggestion), but rather in the fact that it specifies complementary *contributions* from patron and architect vis-à-vis the generation of buildings. ¹⁵¹ In fact, both Alberti and Filarete construe the patron-architect relationship in much the same terms, with the operant themes being hierarchy, service, and virtù. Alberti analyzes buildings in a way that clarifies their abstract composition, thereby suggesting how one might go about conceiving their configuration. Filarete, on the other hand, provides an overarching metaphor—namely, fatherhood—that illuminates the role of the patron, coupled with a rich library of examples that suggest how one might deploy that metaphor in particular cases.

One important reason for quoting the above passage in full is to show that the core of the patron's contribution consists in his *voluntà*. To be exact, the Italian term *voluntà* appears four

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¹⁵⁰ Mark Jarzombek, "Architecture and Sexuality in the Words of Filarete," *Thresholds* 37 (2010): 6.
¹⁵¹ Alberto Pérez-Gómez has drawn attention to the fact that Filarete's discussion of the relationship between patron and architect amounts to a discussion of "mutual responsibilities." Pérez-Gómez characterizes the patron as "fecund," while the architect is responsible for the gestation of the patron's original intention into "[an] initial image, [a] design/idea, which is the basic intellectual production of the architect" (Alberto Pérez-Gómez, "Filarete's Sforzinda: The Ideal City as a Poetic and Rhetorical Construction," presented at *Imaginary Cities: Fictions of Space in the Early Modern World* (University Park, Penn., USA: 2007)).

times in the passage. In its final two appearances, it is clearly assigned to the patron: the architect can accomplish nothing if he thwarts the patron's *voluntà*. In its first two appearances, however, the term constitutes part of the rather anodyne phrase, "*secondo la voluntà sua*"—"according to his *voluntà*." The architect is urged to work upon the architectural idea according to "*la voluntà sua*," but the punctuation and rhythm in the original Italian offer little guidance as to *whose voluntà* is meant. In his translation Spencer firmly—and I believe mistakenly—assigns this *voluntà* to the architect. Spencer, that is, has Filarete claim that an architect should reference his *own voluntà* in developing an architectural idea conceived in partnership with his patron. Such a reading presumes a parity between the patron's *voluntà* and the architect's *voluntà* that finds neither echo nor endorsement anywhere else in the *Libro*. On the contrary, the unique instance in which the Architect explicitly lays claim to a *voluntà* is when it is held in common with the Lord: "So with a *voluntà* common to the Lord and to me [...]." Even the Lord's Son invariably checks his proposals and plans against his father's *voluntà*. When the term *voluntà* refers to the personal will of one of the characters in the *Libro*, it refers to the will of the patron.

Even when the architect has been completely excised from the process of preparing an initial design for a building, the will of the patron remains plenipotent. When the time comes in the construction of Sforzinda for the erection of the city's fortress and fortifications, the Lord insists on designing them personally. The Lord says, "I want to order the fortress in my own fashion [modo], because it may well be that you order these other buildings better than me, but this one [the fortress], because I have had occasion to take [others]—by force as well as by other

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¹⁵² Filarete, *Trattato* (Finoli and Grassi, eds.), 435 = Filarete, *Treatise* (Spencer, trans. and ed.), I:202: Allora di comuna voluntà al Signore e ancora a me.

Filarete writes chapter XXV (the panegyric on Medici building projects) more or less in his own voice. Though chapter XXV contains instances where the *author* speaks of his own *voluntà*, I would distinguish sharply between the authorial persona that voices chapter XXV and the fictional persona (which I have called "the Architect") that voices the remainder of the *Libro*. Filarete certainly has, and sometimes expresses, his own personal *voluntà*, but the Architect never does.

means—I want to order it a bit in my fashion [modo]." And the Architect replies, "In the name of God, let it be so. Therefore, your Lordship will explain [it] to me, and I will do [it] according to your voluntà." The Architect humbly indicates his willingness to superintend the physical construction, offering no reason to suppose that he considers his elision from the creation of the conceptual design as marking out this project as special or as altering the basic relationship between architect and patron. Thus, when Filarete (in the longer passage above) insists that a good architect generally refers not to his own voluntà, but rather to his patron's. Of course, "patron" and "architect" specify roles rather than particular persons. One person could provide the wherewithal and the inventiveness that together lauch a building project toward concretization—as indeed the Lord does in ordering his own fortress. But in general, the political and financial wherewithal to build and the capacity to develop truly excellent building designs rarely inhere in the same person. Filarete's account reflects, as one would expect, the typical realities of his day rather than the hypothetical situation faced by a hypothetical prodigy.

A modern reader might find it remarkable that Filarete identities the patron, rather than the architect, as the father of the building, since in the modern caricature of architectural practice it is the architect who "creates" the building. Filarete's identification of the patron with the building's father makes more sense, however, when viewed in light of the Aristotelian and Galenic theories of sexual physiology current his own day. ¹⁵⁴ According to Galen, male and

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¹⁵³ Filarete, *Trattato* (Finoli and Grassi, eds.), 147 = Filarete, *Treatise* (Spencer, trans. and ed.), I:65: «[I]o voglio ordinare la rocca a mio modo, perché e' potrebbe bene essere che questi altri edificii tu gli ordinerai meglio di me, ma questo, perché mi sono pure ritrovato a pigliare e per forza e per altre vie, sì che lo voglio ordinare un poco a mio modo.»

[«]In nome di Dio, sia. Adunque la vostra Signoria mi darà ad intendere, e io farò secondo la vostra voluntà.» ¹⁵⁴ Filarete was neither a physician nor a natural philosopher, and so he almost certainly had only a superficial knowledge of the lively debates that characterized the Renaissance's reception of classical theories of reproduction and sexual physiology. The following summary thus aims only to adumbrate the broad contours of the theory of sexual physiology that Filarete likely means to evoke in his discussion of the parental roles of the patron and the architect. To develop my account, I consulted the following excellent resources: Anthony Preus, "Galen's Criticism of Aristotle's Conception Theory," *Journal of the History of Biology* 10, 1 (1977); most especially, Ian Maclean, *The Renaissance Notion of Woman: A Study in the Fortunes of Scholasticism and Medical Science in European*

female sexual organs are essentially the same, except that men's organs are extroverted and fully developed while women's remained introverted and underdeveloped due to a lack of humorial heat. Both men and women produce "seed," but only men's seed harbors strong generative potential. Properly speaking, children have only one genetic parent on the Galenic view, namely, the father. In his dedicatory preface to Piero di Cosimo d' Medici, for example, Filarete refers to Piero's father as "[i]l tuo genitore." 155 By calling Piero's father his genitore—in the singular— Filarete evidences his subscription to an essentially Galenic view of reproduction. ¹⁵⁶ The mother bears and rears the child, but she is not its *genitore*; she does not contribute genetically to its generation. In contrast to our own view, Filarete locates original creativity not in the architect, but in the patron, for it is the patron who, as the "father," acts as the sole genetic parent of the building. As we see it today, the "creative process," in architecture as in any other art, consists mainly in the process of exploring and ultimately laying out the formal implications of the artist's original inspiration. The modern architect draws inspiration from somewhere—an historical precedent, a natural form, a mathematical formula, a social or political concern, or what have you—and creates his design on that basis. On Filarete's view, however, the architect carries the idea and elaborates the building's form, while the patron generates and sustains its

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Intellectual Life (Cambridge, U.K.: Cambridge University Press, 1980), ch. 3; Joan Cadden, Meanings of Sex Difference in the Middle Ages: Medicine, Science, and Culture (Cambridge, U.K.: Cambridge University Press, 1993), esp. 13-38; and Sophia M. Connell, "Aristotle and Galen on Sex Difference and Reproduction: A New Approach to an Ancient Rivalry," Studies in History and Philosophy of Science (Part A) 31, 3 (2000). ¹⁵⁵ Filarete, Trattato (Finoli and Grassi, eds.), 3 = Filarete, Treatise (Spencer, trans. and ed.), I:3.

¹⁵⁶ I am not arguing here for Filarete's deliberate choice of Galenism among alternative accounts of reproduction. It was precisely because Galen's writings provided the dominant account during the Renaissance that Filarete need not have read them. Galen's model was sufficiently diffused throughout the culture that its terms and categories were current in the vernaculars.

essence. 157 The patron creates a building—or rather, the seed of a building—through his original and originating intention or desire: his *voluntà*. 158

Filarete also distinguishes sharply between the work of the architect, who develops and refines an idea for an edifice's basic form—what we would call the *design* of an edifice—and the work of the master builder, who actually constructs the edifice's material body—what we would call the building or construction of an edifice. Confusingly, Filarete habitually uses a single word—*edifizio*—to refer not only to the building itself, but also to the mental schemata, working drawings, and models that serve as guides for the fabrication of the building, indicating that he views these as manifestations of some uniform substratum. These positions seem to contradict one another only because we suppose that the concrete edifice comes into being as a sunstantively distinct copy or imitation of the "ideal" image of the building that the architect conceives in his mind. For Filarete, however, the edifice is not primarly a *copy* of the architect's mental image, but rather a consequence of the patron's voluntà. As the reflections in Chapter 4 will make clearer, Filarete's account of architectural practice as essentially voluntary changes the grounds upon which the practice of architecture confronts the theory of imitation. We can most straightforwardly make sense of Filarete's positions by assigning responsibility for the essential origination and sustenance of the building to the patron—and more particularly to his *voluntà* and tasking the architect with the material realization of that voluntà. The architect does not create an idea for a building ex nihilo, but rather cultivates an idea such that it expresses or explicates the patron's voluntà. The self-evident fact that every act of building is voluntary means that the ultimate ground for the excellence (or decadence) of architecture consists not in

¹⁵⁷ Offering a characteristically modern reading that mistakes ideation for creation, Kemp argues that although Filarete calls the patron the father of the building, the Libro should be read as depicting the Architect as the one who "generates" buildings. See Kemp, "From 'Mimesis' to 'Fantasia," 360.

158 For the image of architectural ideas as "seeds," I am indebted to Pérez-Gómez, "Filarete's Sforzinda."

the sublimity (or ruination) of its visible body, but rather in that body's genetic unity with the *voluntà* that originally sought satisfaction in building something.

The Patron's Voluntary Pleasure

The patron provides not only the initial "seed" of the building, but also whatever it needs for its sustenance. The constant upkeep and repair needed to keep the building "alive" and "healthy" depend upon the patron's *voluntà*. According to Filarete, the patron should adopt an essentially amorous attitude toward his buildings. Soon after the passage (quoted above) in which he compares the patron to the building's father and the architect to its mother, Filarete extends his analogy between humans and buildings even further, suggesting that buildings resemble humans not only in their material proportionality, but also in their spiritual capacity to inspire love.

"[The act of] building is nothing if not a voluntary pleasure [piacere voluntario], as when a man is in love, and who has tried [to build] knows that there is so much pleasure and desire in [the act of] building that the more a man does it, the more he wants to do it, and he might well never [worry about what he was] spending, and all day look [forward] to the experience. Just as when one who is in love willingly [volentieri] goes to see his beloved, and when she is seen in some place he does not regret the time he was bored, so he who builds goes willingly [volentieri] to see his building, and the more he sees it the more he would like to see it, and the larger his soul grows, and time passes and he never regrets it or rationalizes it or notices it, [just] like the lover with the discourse of his beloved.

"And so he is delighted and it enlarges his soul when it is praised; and so, when he is away [from the building] and someone speaks of it, this pleases him, and he will desire to go see it; and always with a spirit of union, he desires the things that he believes are best for it, just as a man in love [does for his beloved]. No one loves [only] half [of his beloved], [but] makes it useful and does it honor, and this to only two ends: for utility and for fame, so that it will be said that it was such a one who had built such a beautiful building. Since it was made by means of the architect, [the architect] should be

sufficiently loved and honored; and [the architect] should test himself so that he will be as ready as he can be." ¹⁵⁹

It is, of course, striking that Filarete should characterize the relationship between patron and building as amorous (especially so soon after having characterized it as filial!). More striking, however, in light of the foregoing discussion, is Filarete's characterization of amorous love as a "voluntary pleasure" [piacere voluntario], with its clear etymological link to voluntà.

Filarete uses the adjective *voluntario* only one other time in the *Libro*, namely, during a listing of crimes and their respective punishments in ancient Egypt, based on Diodorus Siculus's account in his *Library of History*. Hore specifically, Filarete mentions "adulterio voluntario"—voluntary or knowing adultery. Whereas Diodorus notes particularly that it is the *woman's* consent that distinguishes voluntary adultery from the garden variety, Filarete does not in his epitome specify whose *voluntà* is at issue. In Filarete's day as in ours, the notion of some action being voluntary is redolent of moral and legal concerns, of crimes and consequences. We can understand what Filarete might mean by a "voluntary pleasure" only by interpreting its dispositive term—namely, *voluntario*—within the moral and legal lexicon that, in Filarete's time, would have provided the appropriate context. In fifteenth-century Europe, the

¹⁵⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 41-42 = Filarete, *Treatise* (Spencer, trans. and ed.), I:16: Non è altro lo edificare se none un piacere voluntario, come quando l'uomo è innamorato, e chi l'ha provato il sa, ché nello edificare c'è tanto piacere e desiderio che quanto più l'uomo fa più vorrebbe fare e, pure che egli possa, mai non guarda a spesa, e di questo tutto dì si vede la sperienza. Così come uno quando è innamorato volentieri va a vedere la sua amorosa, e quando ella è in lugo che egli la vegga non gli rincresce e non gli viene a noia il tempo, così colui che fa edificare va volentieri a vedere il suo edificio, e quanto più lo vede più lo vorrebbe vedere, e più gli cresce l'animo, e quel tempo passa e non gli rincresce mai o di ragionarne o di guardarlo, come lo innamorato proprio di ragionare dell'amorosa.

E così si gode quando gli è lodato e crescegli più l'animo; e così, quando è assente e che uno glie ne ragioni, molto gli piace e desidera d'andarlo a vedere, e sempre coll'animo d'agiugnere desidera cose che creda che stiano bene, come proprio fa lo 'nnamorato, e se niuno mezzo glie l'ama e fagli utile e onore. E questo solo a due fini: uno pella utilità e l'altro per fama, perché si dica: il tale fa fare così bello edificio; sì che, faccendosi per mezzanità di quello architetto, debbe essere amato e onorato quando per lui è sufficiente; e questo si debbe esaminare d'averlo più sufficiente che si può.

¹⁶⁰ Spencer locates Filarete's source in Book I of *The Library of History*; see Filarete, *Treatise* (Spencer, trans. and ed.), I:289, n. 12. For the original text, see Diodorus Siculus, *The Library of History*, trans. C. H. Oldfather (Cambridge, Mass.: Harvard University Press, 1933), I:263-81.

¹⁶¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 624 = Filarete, *Treatise* (Spencer, trans. and ed.), I:289.

¹⁶² Diodorus, *The Library of History*, I:271.

school of thought now known as Scholasticism dominated the field of moral philosophy. The whole apparatus of Scholastic moral philosophy operates in tandem with its moral psychology, which constitutes one (in most ways quite conservative) interpretation of Aristotelian faculty psychology. To keep the discussion serviceably brief, and since his position is representative as well as seminal, we can use a caricature of Aquinas's understanding of the will [voluntas] to clarify what Filarete might mean by a "voluntary pleasure." ¹⁶³

Thomist psychology pivots on a fundamental distinction between the senses and the intellect, each of which operates as a faculty of knowledge. ¹⁶⁴ We know the material world through the senses, and we know abstractions through the intellect. Such a distinction makes it possible first of all to explain how humans in general can know such abstractions as goodness and love, which have no material existence. But Christians in particular must not only know goodness and love, they must actively desire and strive after them. In Thomist psychology, therefore, desires also divide along the cleavage of the fundamental distinction between senses and the intellect, so that just as humans can long after or loathe objects of the senses, so they can likewise long after or loathe objects of the intellect. Thomas posits a faculty of intellectual or rational (which is to say, non-sensual) appetition, which permits us to desire objects of the

¹⁶³ The following comments are emphatically not intended as an argument that Filarete was a Thomist in any strong sense. The point is simply to develop a basic interpretive framework capable of illuminating Filarete's text.

¹⁶⁴ The literature on Thomism is as vast as one might expect, and the subsection on Thomist moral philosophy is only somewhat less extensive. The following caricature is neither a full rehearsal of nor a penetrating comment upon Thomist moral philosophy. It is merely a crude sketch, intended only to be useful within the confines of the present study. My account closely follows David M. Gallagher, "Thomas Aquinas on the Will as Rational Appetite," *Journal of the History of Philosophy* 29, 4 (1991). To contextualize Thomas's conception of the will within his moral and political philosophy, I also consulted Shawn Floyd, "Thomas Aquinas: Moral Philosophy," in *The Internet Encyclopedia of Philosophy*, eds. James Fieser and Bradley Dowden, http://www.iep.utm.edu/aq-moral/, and John Finnis, "Aquinas' Moral, Political, and Legal Philosophy," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, http://plato.stanford.edu/archives/fall2011/entries/aquinas-moral-political/.

While Gallagher provides all of the relevant references across Thomas's writings, those eager to deal directly with the relevant parts of Thomas's account of the human will can find his most important remarks in *Summa Theologiae* I-II.6 (esp. i-ii) and I-II.8 (esp. iii). For Thomas's tangentially relevant discussion of the psychological implications of love, see I-II.26.

intellect. While the faculty of sensual appetency has no special name, Thomist psychology calls the faculty of intellectual appetites *the will* [voluntas].

David Gallagher points out that "almost invariably the distinction between the two levels of appetite turns on the notion of control." While the will is most certainly the faculty that desires abstract goods and shuns abstract evils, it differs from sensual appetite most manifestly in the fact that while we cannot control our sensual appetites, we can control our rational appetites. Gallagher explains more fully:

Control requires the ability to see means in relation to ends; control is possible only if there is reflection on the judgment which governs an action, only when there is a universal object which contains within it multiple particulars. It seems then that while rationality provides the fundamental basis for the distinction between will and animal appetite, this distinction is mediated, so to speak, by the less basic but more immediately grasped distinction in terms of control. The distinction in terms of control is not something Thomas proves. Rather he accepts it as an obvious part of our experience and undertakes to elucidate what is required on the part of an agent whose acts remain within its control. ¹⁶⁶

When Filarete commends the act of building to a potential patron as a *voluntary pleasure*, he is firstly and most importantly characterizing the patron's pleasure in building as resulting from a free choice, fully informed by rational deliberation and by a more or less complete understanding of the relations between means and ends. Filarete is thus placing the patron, rather than the architect, in control of the building process, and he likewise promises the patron the corresponding pleasure of control—a *voluntary* pleasure. Filarete's use of the adjective *voluntario* also acts secondarily to distinguish the patron's pleasure in building from embodied or sensual pleasures. The Lord, after all, never participates in the physical construction of any of his buildings (setting aside his symbolic use of a spade during Sforzinda's foundation

¹⁶⁵ Gallagher, "Thomas Aquinas," 583.

¹⁶⁶ Gallagher, "Thomas Aquinas," 583.

ceremony). ¹⁶⁷ In Filarete's account, the act of building appeals to the patron's intellect rather than to his senses, which implies an operational (though not necessarily absolute) distinction between the mental conception and the physical making of a building. ¹⁶⁸

However striking the phrase *piacere voluntario* may be, and however obvious the connection between the term *voluntario* and moral philosophy, it is too much to ask of a single phrase that it bear the whole weight of any interpretation of Filarete's moral psychology. Fortunately, in another context within the *Libro*, Filarete discusses *voluntà* and its relationship to *ragione* ("reason") in quite abstract terms, thereby providing a straightforward view into his general understanding of moral psychology. As part of the decorative scheme for his palace and court, the Lord asks that Justice, Temperance, Prudence, and Fortitude—the four cardinal virtues—be painted on the walls of his council room. Immediately thereafter, the Lord asks the Architect to invent a scheme for depicting *Voluntà* and *Ragione* as a single figuration. ¹⁶⁹ After some time working upon the matter using his imagination [*fantasticare*], the Architect proposes a scheme (fig. 9). Later in the narrative, Filarete will claim that these figures decorate the cover of the Golden Book (fig. 10). ¹⁷⁰ His concise description of them will serve as readily as any summary I could prepare:

1.

¹⁶⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 106-08 = Filarete, *Treatise* (Spencer, trans. and ed.), I:46-47.
¹⁶⁸ The faculties of will and intellect were conceived, in the Renaissance, as something like competitors. The intellect, which aspired to truth, was seen as the faculty that produced understanding; the will, which aspired to goodness, was seen as the faculty that produced action. Filarete's views of these faculties accord broadly with the conventional views of his era. There was considerable debate as to which faculty was more fundamental, which more powerful, which more important, and so on. For a valuable overview of the philosophical milieu from which Filarete would have drawn his basic terms and concepts, see Tamara Albertini, "Intellect and Will in Marsilio Ficino: Two Correlatives of a Renaissance Concept of the Mind," in *Marsilio Ficino: His Theology, His Philosophy, His Legacy*, eds. Michael J. B. Allen, Valery Rees, and Martin Davies (Leiden: Brill, 2002).

¹⁶⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 266-67 = Filarete, *Treatise* (Spencer, trans. and ed.), I:120-21.
¹⁷⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 411-12 = Filarete, *Treatise* (Spencer, trans. and ed.), I:190. The actual illustration in the margin of the Magliabecchiana copy shows a rather different cover, with a single figure bracketed by two *putti*, with the Italian inscription "Memoria – Ingengno – Intelleto" (fig. 10). Pfisterer argues convicingly that this trinity should be read as a translation of the three faculties that Vitruvius cites as crucial for the practice of architecture—respectively, *memoria*, *sollertia*, and *acumen*. See Pfisterer "I libri di Filarete," *AL* 155, 1 (2009): esp. 107, where he cites Vitruivus, *On Architecture*, 20-23 = I.i.17.

"The way [modo] that I have thought of figuring Voluntà is this: make a nude woman with one foot on a wheel, wings on her feet and shoulders, and her head full of eyes. In one hand [she holds] two scales such that one goes down and the other up; and with her other hand she seems to seize the world. And Ragione is in this form, more or less: she sits atop a heart; in one hand she holds a scale, which is balanced, and in the other [hand] she holds reins, each line of which corresponds to one of the senses [sentimenti] of man; and on her feet she has lead slippers; and she has three faces: old age, middle age, and youth, which latter [face] represents the future, [even as] the middle aged [face] represents the present, and the old [face] represents the past."¹⁷¹

Although Filarete explicates the symbolic meaning of only the three faces of *Ragione*, the meanings of the figures' other aspects seem straightforward enough. These figures are described immediately on the heels of discussions of the four cardinal virtues, which lends strong moral overtones to Filarete's abstract conceptions of *Voluntà* and *Ragione*. Such proximity even suggests an ontogeny of the virtues, since in both Aristotelian and Thomist ethics the virtues depend directly upon the will, and the exercise of the will, properly speaking, depends upon deliberative reason.

¹⁷¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 266-67 = Filarete, *Treatise* (Spencer, trans. and ed.), I:120-21.

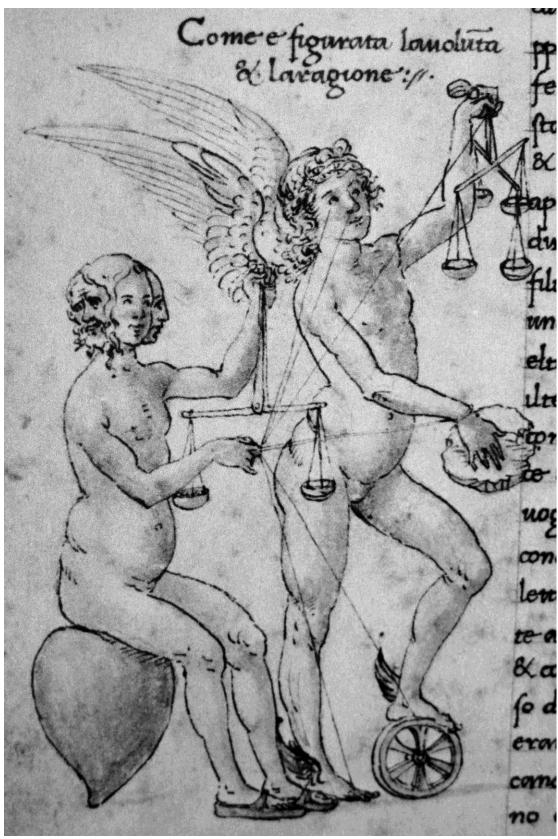


Figure 9: Figuration of Voluntà and Ragione (Magli., 69v)



Figure 10: Golden Book (Magl., 108v)

Voluntà 's foot upon a wheel symbolizes her dominion over fortuna. The wings on her hands and feet symbolize her swiftness of action—in neat contradistinction to the lead slippers that force Ragione to move slowly and deliberately. The many eyes in Voluntà's head indicate her ability to find opportunities to act in all situations. Her pair of unbalanced scales indicates decision (in the sense of a decision taken). And while her seizing the world of course shows that she is the principal psychological instrument of political dominion, it primarily symbolizes that it is only through her offices that a human acquires any worldly good. Ragione sits upon a heart because in the fifteenth century the heart was held to be an organ of thought as well as feeling (reason might thus have her "seat" in—or in this case, upon—the heart). The balanced pair of scales that she holds represents her responsibility for balanced deliberation—indeed, this particular incarnation of *Ragione* must be understood, precisely because she is juxtaposed with Voluntà, as practical, moral reason (i.e., as phronesis). The reins that she holds, which control the five human senses, show that Ragione guides and restrains the senses (implying interestingly that Voluntà has no direct contact with the senses). And the lead slippers and three faces have already been explained. Filarete's conception of *Voluntà* as the swift-moving faculty that enables decisive, worldly action—especially when juxtaposed with his conception of *Ragione* as the slow-moving faculty that restrains the senses and enables balanced deliberation—accords in its broad outlines with Thomist moral psychology. Given that Voluntà's domination of fortuna and grasping of the world are not at all Thomist in origin, Filarete's figurations may be read as cleverly weaving the pivotal political notions of fortuna and virtù into a basic Thomist psychological conception of the will as a "rational appetite." ¹⁷²

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¹⁷² The reflexive reference when discussing the political notions of *fortuna* and *virtù* in the Italian Renaissance is to Machiavelli's writings, though given the vastness of the literature on Machiavelli, such a reference may prove more vexing than satisfying. For a usefully concise discussion of the relationship between *fortuna* and *virtù* in

Seeing as Loving

The piacere voluntario that Filarete promises to the patron who builds comes into focus as a somewhat peculiar satisfaction. The fact that such a piacere is voluntario implies that it has an immaterial, intellectual cause. And indeed, since the patron does not physically make his own buildings, he can hardly take pleasure in the physical activity of building. While Filarete claims that all of the buildings described in the *Libro* are beautiful, mere material beauty has no power to ignite a piacere voluntario. But a building, for Filarete, comprises more than simply foundations, walls, and roof. In his allegory of the generation of a building (which I quoted above), Filarete uses a single word, edifizio ("building"), to refer not only to the physical edifice, but also to the mental schema that the architect develops, as well as to the model that the architect prepares as a prelude to construction. All of these are the building, in the same sense that fetus, infant, child, and man are all simply various stages through which the same living being passes. While Filarete obviously recognizes operative distinctions between initial schemata, working drawings, models, and concrete buildings, he does not in this account insist upon an absolute distinction among them. He rather seems to regard the distinction between the idea in the architect's mind and the actual building as instrumental. For Filarete, the essential unity of an architectural project—which subsumes drawings and models as well as the building—derives not from any eidetic resemblance, but from the underlying voluntà that generates and sustains the edifice that is its ultimate concretization. Whether mentally "conceptual" or materially "real," the building responds to the same *voluntà*. In line with

Thomist psychology, every building enjoys an intelligible existence that we know through our intellects as well as a physical existence that we know through our senses.

According to Filarete, the sense of sight serves as the primary instrument of connection between the patron as lover and the building as beloved. The lover's principal pleasure consists in gazing upon the beloved. Elsewhere in the *Libro*, Filarete outlines a basic theory of vision, in which the eye delivers perceived images directly to the *intellect*, which functions as the faculty of understanding. ¹⁷³ In Filarete's opinion, vision concerns *intelligible meaning* at least as much as it concerns shape and color. In gazing upon his building, the patron literally sees its form, color, texture, and material grace. And in seeing the building, the patron is additionally given to understand such usefulness, nobility, and conceptual elegance as it might possess. The patron may love his building while looking at its material form, but strictly speaking, he does not love the building's body, but rather its intelligible identity. Or rather, he feels the acute pleasure of loving the building—the *piacere voluntario* of a man in love—in response to his intellectual comprehension of its significance. In Filarete's view, it is the pleasure attendant upon the cultivation and contemplation of a building's intelligible meaning that most forcefully moves men to build. ¹⁷⁴

¹⁷³ Filarete, *Trattato* (Finoli and Grassi, eds.), 648 = Filarete, *Treatise* (Spencer, trans. and ed.), I:301.

¹⁷⁴ For a schematic table of conceptual correspondences that illuminates Filarete's accounts of the relationships among architecture, love, the will, vision, and the intellect, see Albertini, "Intellect and Will in Marsilio Ficino," 223 (and which I have reproduced in the notes in Chapter 3).

CHAPTER 3:

COMMON INTENDERE

The Rubric of Understanding

A reader sensitive to the diction of Spencer's translation of the *Libro* can hardly miss how very often the English verb "to understand" (including its cognates) appears. A quantitative analysis of word density in Filarete's original Italian text corroborates what the (mental) ear suggests: the Italian verbs that would be translated as "to understand" in English—mainly intendere, but also comprendere and capire—appear in the text with astonishing frequency. In fact, the verb *intendere* ("to understand," "to hear") appears 845 times; the verb *comprendere* ("to understand," "to comprehend") appears 124 times; and the verb capire ("to understand," "to catch," "to grasp,") appears 5 times. In aggregate, then, the *Libro's* characters directly reference the rubric of understanding some 974 times. (To provide a relative scale: the extremely generic Italian verb fare—"to make" or "to do," along with all the other auxiliary meanings and uses one would expect—appears some 2,056 times.) Alternatively, the three key verbs in Quattrocento Italian that refer to the act of building appear, in aggregate, some 932 times: edificare ("to build") appears 577 times; the verb *murare* ("to build [walls]," "to wall in") appears 347 times; and the verb scalpellare ("to chisel" or "to shape" stone or wood) appears 8 times. 175 Counting words is a blunt method, but in this case it shows quite clearly that what I will call the rubric of

¹⁷⁵ As before, my confidence in the correctness of the Quattrocento Italian terms related to building rests principally upon Goldthwaite, *The Building of Renaissance Florence*, xiv-xv.

understanding plays a more important role in Filarete's *Libro* than one might expect. In a *libro* architettonico that explicitly purports to treat "the ordering of buildings," the frequent occurrence of verbs meaning "to build" comes as little surprise, but the equally frequent occurrence of verbs meaning "to understand" seems curious.

Although the rubric of understanding appears in Filarete's text with impressive frequency, the characters in the dialogue never reflect on the subtleties of hermeneutics per se, and their discourse never suffers from such misunderstandings or confusions as would ordinarily instigate inquiry into the conditions of mutual understanding at a more general level. The characters in Filarete's narrative, in other words, invoke the rubric of understanding constantly even though they never fail to communicate successfully with one another, notwithstanding the number of quite complicated architectural ideas advanced in the book, a few of which stretch the limits of imagination, to say nothing of credulity. Most often, the rubric of understanding appears as part of either an almost ritualistic insistence on the difficulty of understanding something—most often a drawing or a description of a building—or a confirmation that something has been successfully communicated. A brief section of the Architect's discussion of the church that constitutes part of the men's section of the hospital of Sforzinda will suffice to give a sense of how the rubric of understanding tends of appear in the *Libro*:

"It is true that describing all of its particularities would be difficult both to say and also to understand ['ntendere], but I will draw it as it was built, [and] you will be able to understand [intendere] the mode [modo] through this drawing better than you could by reading [a description of] it, or rather, of the exterior parts; you can understand [intendere] the interior from what has been said above.

¹⁷⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 4 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] ordine delli edificii.

"I will say no more about the portico, because you have understood [inteso] that it is interior." ¹⁷⁷

This particular passage is only somewhat egregious in its repetitive use of the verb *intendere*. Filarete insists again and again on the difficulty involved in understanding architectural ideas, and he endows his characters with the impressively rigorous habit of confirming their understanding of one another at nearly every turn. In 220 of its 838 appearances in Filarete's text—more than a quarter altogether—the verb *intendere* takes the form of the past participle inteso, characteristically used in such constructions as "avete inteso" (either "you have understood [what I mean]," or "Have you understood?") and "ho inteso" ("I have understood"). This construction appears with dizzying frequency, to cite a longer passage that showcases the role that understanding plays throughout the narrative, during the scene at the beginning of chapter VI, in which the Lord explains his plans for the fortress of Sforzinda to the Architect. The dialogue consists almost entirely of a back-and-forth in which the Lord describes a series of schematic ideas—which the Architect sometimes draws in order to demonstrate his understanding—punctuated by confirmations from both parties that the ideas have been understood. ¹⁷⁸ In sum, Filarete sees to it that his readers cannot fail to grasp that architectural ideas are unusually slippery, nor can they miss the pains taken by his characters to ensure that architectural ideas remain common property.

To be sure, the rubric of understanding often crops up in the *Libro* simply because the Architect is speaking pedantically, confirming that the Lord, the Lord's Son, or some of the various *maestri* of building, painting, and sculpting who have been hired to execute the project

¹⁷⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 314-15 = Filarete, *Treatise* (Spencer, trans. and ed.), I:142: «Vero è che a volere discrivere tutte le sue particularità saria difficile a dire e anche a 'ntendere, ma io ne disegnerò una come è fatta, potrassi intendere il modo per questo disegno meglio che non si faria per leggere, cioè le parti di fuori; quelle dentro si potranno intendere come di sopra è detto.

[«]Del portico non dico altro, perché l'avete inteso che è intorno.»

Filarete, *Trattato* (Finoli and Grassi, eds.), 148-64 = Filarete, *Treatise* (Spencer, trans. and ed.), I:65-74.

have correctly grasped some important concept or architectural idea. The Architect, however, is not the only character who evinces an explicit concern with correct understanding. Where the Architect worries constantly that his drawings, descriptions, and proposals should be correctly understood, the Lord worries that his *voluntà* should be correctly understood by everyone, so that what is ultimately built should accord with his desires and intentions. When the Golden Book is translated, all of the characters worry about understanding correctly the building designs presented therein. Even the Golden Book's putative author, King Zogalia, evinces a pointed concern that the projects described therein should be properly understood. To a substantial extent, to have a personal voice in the *Libro* means to contribute to the intense and ubiquitous presence of the rubric of understanding within the work.

Brute Persuasion and Mere Pedagogy

The fact that no enduring misunderstandings or disagreements develop in Filarete's narrative leaves the reader perplexed as to why the author has opted for the dialogue form since, as Brian Vickers has sharply observed, "[t]he great problem in the dialogue form is to relate speakers to clearly differentiated attitudes." The signal advantage of the dialogue form is its ability to present more than one side of an issue or argument, thereby inviting readers to exercise their own intelligence and judgment in reconciling the differences of opinion dramatized in the conversation. Observing that humanism construed reading as a *practice*, Victoria Kahn argues that for the humanists literary endeavor was allied to politics because the practices of reading and writing demanded the same forms of reasoning and judgment that characterize civic deliberation

¹⁷⁹ During the relatively condensed description of the church in the Golden Book, for example, the verb *intendere* appears five times and the verb *comprendere* two time. See Filarete, *Trattato* (Finoli and Grassi, eds.), 408-10 = Filarete, *Treatise* (Spencer, trans. and ed.), I:188-89.

¹⁸⁰ Brian Vickers, *In Defence of Rhetoric* (New York: Oxford University Press, 1988), 30.

especially and political action in the broadest sense. "The central assumption of the humanist rhetorical tradition is that reading is a form of prudence or of deliberative rhetoric and that a text is valuable insofar as it engages the reader in an activity of discrimination and thereby educates the faculty of practical reason or prudential judgment which is essential to the active life." ¹⁸¹ Although it does not absolutely require it, the very structure of the dialogue form naturally invites mapping "clearly differentiated attitudes" onto the multiple interlocutors that are the sine qua non of the genre. Following the byplay of a debate, pondering the relative merits of each argument, and judging the ultimate issue for oneself are precisely the proverbial exercises that a humanist dialogue aims to leave to the reader. Filarete's *Libro* manifestly owes many debts to humanism, and the unarguable fact that it depicts multiple characters in conversation with one another credentials it as a dialogue. Filarete's characters, however, both invariably understand one another and always enjoy perfect consensus—the combination of which would seem to obviate the reader's need to exercise his "discrimination" and "prudential judgment." Even when a difference of opinion makes one of its surpassingly rare appearances in the *Libro*, Filarete does not recount its flow and byplay, but rather simply notes its presence: "[The Lord's Son] stayed [behind] and together, with various modes and opinions in our discussion, we arranged the mode [modo] as seemed best to us. 182 Filarete does not dramatize how, but rather simply reports that, "various modes and opinions" developed during the conversation.

The dialogue form can also be used to frame an essentially isagogic treatment of a subject in which one interlocutor dominates the exchange in order to present a coherent and articulate position—basically a catechism. An example of a catechistic dialogue particularly famous during the Renaissance would be Cicero's *Partitiones oratoriae* (54 or 46 B.C.E.), in which Cicero

¹⁸¹ Victoria Ann Kahn, *Rhetoric, Prudence, and Skepticism in the Renaissance* (Ithaca: Cornell University Press, 1985), 11.

¹⁸² Filarete, *Trattato* (Finoli and Grassi, eds.), 384 = Filarete, *Treatise* (Spencer, trans. and ed.), I:177.

depicts a gently fictionalized version of his son asking a series of increasingly sophisticated questions about rhetoric, which a fictionalized version of the author answers systematically. Along these lines, Mia Genoni argues that Filarete casts his discussion of architecture in the form of a dialogue because Filarete's intended audience, who were his social betters, would have been better disposed toward the equivocal mode of the dialogue, which persuades graciously, rather than the univocal mode of the treatise, which declares peremptorily. ¹⁸³ Genoni, that is, suggests that Filarete's choice to write his *Libro* as a dialogue derives from his relationship with his intended audience and not from an intention to dramatize a variety of opinions. I find Genoni's suggestion a compelling explanation of Filarete's choice to frame his preliminary summary of architectural history and theory by representing himself as an attendee at a symposium. The other attendees ask basically intelligent—if somewhat unimaginative—questions, which the narrator answers in pedantic fashion. The mini-treatise on *disegno* that comprises chapters XXII, XXIII, and XXIV of the *Libro* also follows the form of a catechistic dialogue. The Lord's Son asks a progressively intricate series of questions about *disegno*, and the Architect answers them.

Genoni's proposal is rather less helpful, however, in making sense of the far more extensive sections of the *Libro* that involve the planning and building of Sforzinda and Plousiapolis. Most of *Libro* comprises long descriptions that alternate with digressive commentary on this or that aspect of building, all punctuated with a tattoo of confirmations of mutual understanding. The Lord and the Lord's Son often ask the Architect to explain drawings, buildings, or particular architectural features, but the Architect's subsequent "explanations" hardly constitute a systematic—let alone isagogic—exegesis of architecture as a general subject. The general format of the narrative section of the *Libro* thus often resembles a dialogue

¹⁸³ Mia Reinoso Genoni, "Vedere e 'ntendere: Word and Image as Persuasion in Filarete's Architettonico Libro," AL 155, 1 (2009): 37-38.

superficially, but the characters do not treat architecture as a subject open to wide-ranging debate. Perhaps for this reason, Luisa Giordano argues that Filarete presents his theory of architecture through examples rather than through an elaboration of general principles: "Filarete [as opposed to Alberti], when presenting anything other than a mere general definition, chooses to describe one or more particular examples from which his readers must deduce the theoretical criteria for themselves" As Kahn convincingly demonstrates, however, the humanist predilection for using examples stems in the first instance from their conviction that prudence and judgment require *exercise*. Such a conviction is allergic to even the trappings of theoretical orthodoxy. Insofar as Filarete's *Libro* aligns with the overall drift of humanist principles, its intensive use of examples might testify to an intention to exercise the reader's judgment, but should not for that reason be taken as an invitation to "deduce theoretical criteria" from particular cases. The characters' unanimity leaves, in any event, little leeway for the reader to exercise his evaluative reasoning, and the ordering of descriptions and commentary often seems more opportunistic than systematic.

One possible way to read the unbroken concord of mutual understanding during the construction sequences in the *Libro* is as an idealized expression of the conditions under which Filarete would prefer to work. Those interpretations of Filarete's *Libro* that read it as a protoutopian fantasy tend to view the characters' harmony of understanding as part of the work's articulation of the desires of the author (and, to a somewhat lesser extent, his patron). ¹⁸⁶ Given

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¹⁸⁴ Giordano, "On Filarete's *Libro Architettonico*," 57.

¹⁸⁵ Victoria Ann Kahn, "Humanism and the Resistance to Theory," in *Literary Theory / Renaissance Texts*, eds. Patricia A. Parker and David Quint (Baltimore: Johns Hopkins University Press, 1986), esp. 377-81.

¹⁸⁶ Genoni, for example, argues that the *Libro* represents Filarete's attempt to persuade his patron to endorse his preferred mode of building. Because, in her view, both persuasion and utopia can be explained in terms of desire, she proposes the phrase "utopia of construction" (Genoni, "Filarete in Word and Image") to refer to the fact that the Architect, Lord, and Lord's Son never seem to encounter anything more than trivial difficulties when conceiving, planning, or managing building projects. Genoni argues that the *Libro* depicts the process of construction as Filarete *desires* that it should be, and further, that the book aims to infect Sforza with the same desire. It would be vague, but

that Filarete's first and most important reader was his patron, it certainly makes sense to construe the *Libro* as sketching the conditions for an excellent working relationship between patron and architect. The kind of ideological analysis in vogue nowadays—which assumes the immanence and preeminence of ulterior motives—would aim to show how the *Libro* aims to persuade or influence its reader covertly. Such an approach, however, both misapprehends Filarete's basic situation and imagines him as cripplingly naïve, as somehow hoping that his intended readers—who were ambitious, worldly men of intelligence and judgment, surrounded by plenty of well-educated courtiers eager to score political points—would somehow not notice that the Architect's working conditions have been romanticized to the point of absurdity.

Building is *the* central issue in the *Libro*, and whenever the Architect touches on it he is quite forthright in positioning himself as an advocate that patrons should undertake to build many edifices and to build them as excellently as possible. He is also forthright in advancing himself as a valuable ally for the patron interested in securing for himself the fruits of an outstanding architectural legacy. Filarete admits that his skills as a writer do not match Alberti's, but to suppose that he depicts his characters, their basic situation, and the central subject of his work altogether differently than he intended is to imagine him as crushingly incompetent. It is impossible to imagine so infamously vain a humanist as Filelfo writing letters of recommendation on behalf of such an imbecile. Ultimately, the *Libro* quite openly presents itself as an instrument of persuasion, and it is therefore no insight to observe that it operates as one. ¹⁸⁷

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not entirely inaccurate, to characterize the laminar quality of the building processes described in the *Libro* as *ideal* in that term's colloquial meaning of *optimal*. The building conditions depicted in the *Libro* are so extravagently unrealistic, however, that I find it unlikely that anyone could believe that such empty conceits could seduce Sforza—or indeed anyone with a modicum of life experience. It is both more straightforward and less arrogant to see Filarete as using optimal building conditions as a literary device that conducts the reader expeditiously through the *Libro's* long list of projects.

¹⁸⁷ For a winningly modest articulation of this obvious point, see Spencer's introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xxxvi: "Filarete's treatise was written for a variety of purposes, some of which are more successfully realized than others. Basically it has a hortatory function, but this can never be separated from the

If we understand Filarete as sketching a vision of the optimal working conditions for a court architect, we must acknowledge that he does so overtly, expecting that his intended readers will judge that depiction within the context of the whole work, and not as mere (Freudian) fantasizing.

Like any serious work of letters, the *Libro* advances several agendas simultaneously. Filarete probably did imagine the marvelous concord that characterizes the relationship between the Libro's main characters as serving as a beacon toward which a patron could strive, but his narrative additionally and obviously recommends at least one practical means for achieving such concord. Filarete's characters enjoy an unparalleled unanimity concerning architecture in part because of the constant confirmations of mutual understanding. Spencer argues convincingly that "[t]he primary aim of Filarete's treatise is instruction," 188 which implies that we may read the characters as *modeling* a form of hermeneutic prudence that can serve to insulate the patron's projects against the costs associated with misunderstanding. Building projects, after all, quite obviously involve large investments of time, labor, care, and money. Even relatively small misunderstandings can entail significant costs. Filarete teaches his patron the prudential habit of confirming the shared understanding of a project at every turn through the simple expedient of depicting fictional paragons who model the desired habit. Still, if one of Filarete's goals were to impress his readers with the importance of maintaining a clear understanding, he might well have done better to describe at least one building process as miscarrying spectacularly—and thus memorably—as a result of some discord or misapprehension between patron and architect. If only because Filarete did *not* avail himself of so obvious a trick, interpreting the continuous confirmations of understanding in the *Libro* as a pedagogical tactic remains at best only partially

educative aspects of the work or its existence as literature. Filarete is attempting in the treatise to convert both patron and artist to his own point of view."

¹⁸⁸ Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xx.

satisfying. If it is obvious why misunderstandings might be costly, it is less obvious why they might be likely. Filarete's manifest anxiety about understanding raises not only the practical question of which means might be most effective in establishing and maintaining a shared understanding, but also the related theoretical question of what it is, exactly, that knits together the minds of Filarete's characters—what it is that bridges, or leaps, the gap between minds.

The Lens of Rhetoric

The majority of the narrative in Filarete's *Libro*, with its constant references to the rubric of understanding, establishes the essential mode of Filarete's articulation of his view of architecture as *communicative*—or more correctly, as *rhetorical*, where rhetoric is understood as the traditional discipline of effective communication. Within the *Libro's* narrative, none of the principal characters contributes his strength or sweat to the physical task of erecting an edifice, and apart from Filarete's rather cursory overview of materials and tools, therea are no extended discussions of or commentary upon the technical aspects of building. Filarete also never describes in significant detail the thoughts, words, or actions of the workmen, foremen, sculptors, and painters who perform the manual work of actually making Sforzinda, Plousiapolis, and all of the buildings therein. The reader instead encounters bland reports that construction is proceeding swiftly, that this or that building has been completed, that the workers are happy, or what have

the "matter" of a speech) and *verba* (the "words"—in the sense of diction, figure, and style—of a speech). In his erudite discussion of the ramifications of this distinction vis-à-vis the longstanding rivalry between philosophy and rhetoric, Vickers observes that both Cicero and Quintilian held that "while philosophy can offer the *res*, or subject-matter of communication, only rhetoric can supply the *verba* that turn it into effective and persuasive discourse" (Vickers, *In Defence of Rhetoric*, 43). Quintilian, in particular, decidedly affirms the status of rhetoric as the art of communication: "For the verb *eloqui* means the production and communication to the audience of all that the speaker has conceived in his mind, and without this power all the preliminary accomplishments of oratory are as useless as a sword that is kept permanently in its sheath" (Vickers, *In Defence of Rhetoric*, 43, quoting Marcus Fabius Quintilianus [Quintilian], *The Institutio Oratoria of Quintilian*, trans. Harold Edgeworth Butler (London: Heinemann, 1920), III:184-85 = VIII.Pr.15-16).

¹⁹⁰ It should be noted that Filarete does describe a contemporary iron smelting operation in some detail. See Spencer, "Filarete's Description of a Fifteenth Century Italian Iron Smelter."

you. So, for example, after the Architect explains his plans for the city wall gatehouses of Sforzinda to the *maestri* working beneath him, he simply reports what happens: "Having seen this arrangement, all of these *maestri*, who had to make this work, understood me. With great care and good spirit and without further explanation, all of them worked so much—those who built the walls and those who made the armature of the vault—that by the evening—that is, by the evening of the first day—the first lower vaults at the ground level were raised, with their stairs and exits in place." Notably, this passage dispenses with the conceit of direct address, effectively addressing the reader rather than the Lord. Here, the details of the communications between the Architect and the foremen, as well as the specific technical and mechanical challenges involved in the actual construction, have all been subsumed beneath the matte surface of a past-tense third-person report. None of this is to say that Filarete views mechanical or technical matters as irrelevant to architecture—on the contrary, he appears to presume that their importance will be taken for granted—but his narrative leaves them out of focus, as it were, while attending intently to the details of the communications among the Lord's entourage. Further, of the several responsibilities that Filarete assigns to the Architect—such as, among others, interpreting the Lord's voluntà, developing preliminary architectural ideas into workable schemata, preparing drawings and models, inventing machines, and superintending most construction processes—it is noteworthy that while *some* require for their successful execution specialized technical knowledge, all require a native gift for understanding others, coupled with a knack for interpersonal communication.

¹⁹¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 141 = Filarete, *Treatise* (Spencer, trans. and ed.), I:62: Sì che, veduto questo ordine, e quegli maestri, che avevano a fare questa opera, m'intesono i principali tutti; con gran sollecitudine e buono animo tutti lavorarono, e sanza altro fu inteso, e chi a murare e chi a fare l'armadure delle volte, tanto che in quella sera, cioè per quello primo dì per infino alla sera, furono fatte le prime volte di sotto del piano terreno e colle scale e usci appartenenti a' luoghi.

We might be tempted to write off the ubiquity of the rubric of understanding as an otherwise irrelevant artifact of Filarete's willfully eccentric choice to write his *Libro* as a dialogical narrative rather than an isagogic treatise. We might likewise be tempted to explain Filarete's elision of mechanical and technical concerns as a strategic response to his intended audience, which comprised not young apprentices aspiring to become architetti, but potential patrons. Such explanations, focused on the issues of literary genre and intended audience, are not entirely foolish. But they impertinently presume that Filarete made such important authorial choices as generic form, habitual diction, and thematic focus irrespective of the book's definitive preoccupation with building. Such explanations, that is to say, presume that what Filarete has to say about architecture has nothing to do with communication—with rhetoric. The actual, material construction of an edifice is quite obviously the sine qua non of building, and so no reasonable person could possibly doubt the importance of such logistical and technical expertise as makes construction actually, materially possible. As nearly every stage of every building project involves more than one person, however, such logistical and technical expertise can be of no avail absent a communicative undergirding that makes it possible for a whole group of people to deploy the expertise possessed by some or only one of them. Filarete's decision to keep the specifics of construction offstage, so to speak, has the effect of placing the rhetorical aspects of architectural practice in the spotlight. Precisely because it is a dialogue, the Libro makes clear that communicative competence is nearly as essential to architecture as technical expertise. But even if a modern reader were quite ready to admit such a truth, she might find her grasp of its quite radical implications impeded by the typically modern suspicion of rhetoric (nowadays usually understood as either oratorical bombast or misleading argumentation) acting in tandem with the modern deference to all things mechanical and technological.

Although my vehemence in insisting on the validity of using rhetoric as an interpretive frame for a *libro architettonico* risks appearing overdone, I would submit that the modern prejudice against rhetoric runs so deep that it plays out in exceedingly subtle ways. A few comments about an unusually insightful modern treatment of the relationship between architecture and drawing (a relationship that will figure crucially in Chapter 5) may help both to clarify my concern and to inoculate the reader against certain ramifications of the modern prejudice against rhetoric. In his article, "Translations from Drawing to Building," Robin Evans conscripts the metaphor of linguistic translation to describe the relationship, in architectural practice, between drawings and buildings. Evans calls "the doctrine of essentialism" the notion that a drawing instantiates or embodies a semantic content that must be preserved when the drawing is subsequently "translated" into a building. But just as linguistic translation often turns out to be a slippery affair, so in the movement from mental image to drawing to building, "[w]hat comes out is not always the same as what goes in. Architecture has nevertheless been thought of as an attempt at maximum preservation in which both meaning and likeness are transported from idea through drawing to building with minimum loss." ¹⁹³ Evans meditates on the compositional and expressive differences between drawings and buildings, concluding that "[r]ecognition of the drawing's power as a medium turns out, unexpectedly, to be recognition of the drawing's distinctness from and unlikeness to the thing that is represented, rather than its likeness to it." 194 Drawing and building do not, and never have, referred to a single selfsame meaning for the simple reason that their technical and operational differences place them in

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¹⁹² Robin Evans, "Translations from Drawing to Building," in *Translations from Drawing to Building and Other Essays* (Cambridge, Mass.: MIT Press, 1997), 161.

¹⁹³ Evans, "Translations," 161. Evans's basic characterization accurately caricatures a substantial proportion of drawing practices since, say, the publication of Denis Diderot's (1713 – 1784) *Encyclopédie* (1751 – 1772). But it is worth nothing that Evans's account tends to obscure, rather than clarify, the basic Renaissance understanding of how architectural drawings work.

¹⁹⁴ Evans, "Translations," 154.

separate semantic silos. Evans interprets the semantic distance between drawings and buildings, however, not as a cause to despair, but as a reason to hope. He further argues that drawings have remained central to architectural practice not in spite of their semantic distance from buildings, but largely *because* of that distance, which leads straightforwardly to his humble proposal that architects become more self-conscious in using "the transitive, commutative properties of the drawing to better effect."

Evans's article is useful for our purposes here because it draws to the surface an assumption about architecture that is endemic in modern thinking on the subject. In using the metaphor of translation to frame his reflections, Evans adopts the conceit of treating meaning as something inherent in a medium or manual technique rather than a mind. As the title of his essay indicates, Evans represents the crucial semantic gap that must be crossed or "translated" in architectural practice as intervening between drawings and buildings. Evans is not alone in construing translation in architecture mainly as a matter of material technique rather than interpersonal communication. Dalibor Vesely—another exquisitely subtle and sensitive commentator—habitually uses the term translation in a similar manner. ¹⁹⁶ My point is precisely that the best contemporary architectural theorists routinely bracket most, if not all, of the implications raised by the necessity of interpersonal communication for architectural production. The act of rewriting into English a speech composed in Italian harnesses the gap between languages in order to bridge the more important gap between minds. The true test of a given linguistic translation, after all, is the *listener's* (or reader's) opinion of its intelligibility, accuracy, and elegance. In Evans's seductive essay, however, the underlying communicative intention of architectural drawings—their raison d'être as instruments of interpersonal

¹⁹⁵ Evans, "Translations," 160.

¹⁹⁶ Vesely, Architecture in the Age of Divided Representation, 63, 68, 88, and 151.

understanding—has been effaced. The itinerary from drawing to building appears as an impersonal affair, as if the differences between drawings and buildings could be negotiated without reference to the gaps between the architect's mind, the client's mind, and the minds of the persons whose hands do the actual building. The discipline of architecture has historically been, and today remains, oddly hesitant to engage, at both theoretical and pedagogical levels, with the gritty problems posed by the obvious fact that architecture needs clients, contractors, laborers, funders, and critics at least as much as it needs architects.

In Filarete's fiction, the distance that separates the conception of a building from its completion has been homogenized and tranquilized in order to remove all turbulence. Filarete effectively replaces *fortuna* with fortuity, so that all omens bode well, all processes proceed smoothly, all bad decisions are averted, and all unpredicted events turn out opportunely. Further, and more importantly, Filarete argues that architectural ideas are alive just as men are alive, and so he views their growing and changing as desiderata rather than as devilments. When, for example, he presents to the Lord the drawing for the whole city of Sforzinda, the Architect boldly promises that "we will do more than I can show you in the drawing." In another instance a bit later on, the Lord inspects Sforzinda's city walls and finds that the Architect has built them according to a revised plan—developed without the Lord's knowledge, let alone consent—that differs from the one originally proposed. The Lord remarks, after the Architect has explained the new design, "I like this better than the one you first explained to me," to which the Architect replies, "I certainly did say we would improve it." It is healthy and appropriate for a building, as both intellectual idea and material object, to continue to develop until it is either

¹⁹⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 64 = Filarete, *Treatise* (Spencer, trans. and ed.), I:27: [...] più cose assai noi faremo che io non ti mostro nel disegno.

¹⁹⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 118 = Filarete, *Treatise* (Spencer, trans. and ed.), I:51: «Piacemi più in questa forma che non faceva nel modo che mi desti a 'ntendere prima.»

[«]Io vi dissi bene che miglioreremo.»

abandoned or destroyed. Filarete recognizes a distance between conception and completion, but the impossibility of faultless translation along any portion of that distance does not represent a problem for him or his patron. Filarete still confronts a problem of translation, a distance that needs crossing, but for Filarete the crucial gap lies neither between varieties of material media nor between different versions of a given plan, but rather between persons, between minds.

Moving Hearts and Hands

The practice of building, for Filarete, needs to bridge the gap between hearts as well as minds. During a discussion of how the patron ought to love and honor his architect, Filarete explains that the architect actually integrates the patron's soul [animo] into his own, so that half of the architect's soul follows the patron's desire [appetito]. The passage contains several striking images and important connections, making it worth quoting at length:

Now we will state what ought to be done for him, that is, for the architect. Firstly, he should be honored and loved by anyone who would do as he does, [and] who desires that his building turn out well—with such love and diligence as he has for the one without whom he cannot procreate [generare uomo]. For without the architect one can neither make [generare] nor dedicate a building that turns out well, for the aforementioned reasons. And because [the architect's] scienze are rare he should be esteemed, for a man is said to be noble [gentile] insofar as he has virtù. And also because, having appointed him as maker and organizer, your soul is in his so that half of his soul follows your appetite. With this love, which I have described above, he serves you and cultivates [conduce] this thing that you love so much and upon which you spend so much treasure, solely for [the sake of] the desire you have to see it served. There are many who have gone into debt and mortgaged their real estate solely for the great pleasure they receive from building. ¹⁹⁹

¹⁹⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 44-45 = Filarete, *Treatise* (Spencer, trans. and ed.), I:18: «Ora diremo quello che si dee fare verso di lui, cioè verso l'architetto: principalmente dee essere onorato e amato da chi fa fare non altrimenti che lui disidera che 'l suo dificio vadia bene, né con altro amore e diligenza che s'ha inverso di quella sanza la quale generare uomo non si può, neanche sanza l'architetto non si può generare, né dedicare edificio che stia bene, per le ragioni antedette. E perché ancora sono in rari queste scienze, e per questo ne dee essere fatto stima, però che l'uomo è detto gentile tanto quanto egli ha virtù, e anche perché, avendolo eletto per fattore e ordinatore, e l'animo tuo nel suo e lui el suo ha messo in seguitare il tuo appetito; con quello amore che detto è di sopra ti serve e conduce quella cosa la quale tu tanto ami, e spendici tanto tesoro solo per lo desiderio che hai di vederlo fornito; ché

Many of themes in this passage echo those discussed in Chapter 2, where I argued that Filarete views the patron as the *genitore* of a building, whose *voluntà* serves as the "seed" from which a building might grow. As the faculty of the soul capable of producing action, voluntà was in the fifteenth century held to orient itself vis-à-vis the Good, while the intellect, capable of producing understanding, was held to orient itself vis-à-vis the True. Voluntà was therefore closely linked with love, which is manifestly a state or feeling capable of inducing action.²⁰⁰ The passage quoted above shows that the mutuality of understanding about which Filarete's characters worry so anxiously reposes atop a mutuality of love so thorough that it partially fuses the souls of the patron and the architect. The Lord and the Architect can understand one another in large part because they share a desire to see the building exist—because they both, in other words, love the building. Like humans, buildings come to exist and continue to thrive through the offices of love. In fact, one might argue that the intensity and importance of love required for the generation of a building surpasses that required for the generation of a person, because whereas a human might be conceived involuntarily, no building ever came to exist except that someone deliberately desired that it should exist, actively willed it so, and cared for its wellbeing at every step.

Communication in Filarete's *Libro* comprises not only the translation, from mind to mind, of intellectual content—concepts and ideas and parameters for a project—but also the

molti sono che si sono indebitati e impegnati i loro beni immobili solo per lo grande piacere che loro pigliano dello edificare.»

Although the following table summarizes only Ficino's ultimate understanding of the correspondences between the intellect and the will (he worked on the problem of their relation for more than thirty years), it adequately reflects his epoch's sense of what was at stake in the debate about which faculty was more important. Filarete's frequent use of tropes redolent of love and vision constitutes strong evidence that whatever his literary ability or philosophical acuity, he was certainly well aware of the both the terms and the stakes of this particular debate.

Intellect	Truth	universal	separation from objects	inner (enfolding) motion	seeing	visual metaphors
Will	Good	particular	union with objects	outer (unfolding) motion	desiring	love metaphors

Source: Albertini, "Intellect and Will in Marsilio Ficino," 223. Albertini's concluding remarks (pp. 223-25) explicate the most important ramifications of the correspondences represented in the table.

translation, from heart to heart, of what might be called voluntary content—a willingness to build according to the patron's desires and a love for the building that prompts spontaneous care for it. Filarete clearly depicts the architect as the bearer of the Lord's voluntà, but he also insists that the architect's love and goodwill are not to be taken for granted. Like anyone else, "if [the architect] sees that he is not valued [meritato] as he values himself, he cannot love the work, nor think of useful things." The architect works for pay, certainly, but payment here plays a communicative role in that it expresses care. To be sustainable, love must be reciprocal, in action as well as in sentiment, and so the patron must take the worldly cares of the architect to heart if he hopes to ensure that the architect stays focused on the worldly cares of the patron. Filarete's emphatic discussion of the proper way to organize a payment system capable of handling thousands of workers extends the scope of this consideration beyond the Lord's inner circle to the foremen and the laborers. ²⁰² Day laborers, after all, are beings with free wills, which means that they act (and therefore build) only as they choose. The workers adopt the Lord's voluntà as their own, caring that the building should turn out well, more or less proportionally as they feel that the Lord cares for them, as evidenced in the first instance by his dependable and timely payment of their salaries.

In addition to the elemental issue of managing the payment of wages, the architect also explicitly undertakes to communicate the patron's *voluntà* to the workers so as to inform their building activity. Generally speaking, a competent architect "should understand the arrangement and the need[s] of the building, which proceed according to the *voluntà* and need[s] of the prince

²⁰¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 47 = Filarete, *Treatise* (Spencer, trans. and ed.), I:19: «[...] che se vede non essere meritato secondo vede che lui merita, non può avere amore all'opera, né pensare cosa che sia troppo utile »

²⁰² For Filarete's broad comments on how to organize and pay a large number of workers, see Filarete, *Trattato* (Finoli and Grassi, eds.), 93-99 = Filarete, *Treatise* (Spencer, trans. and ed.), I:40-42.

[principale]."²⁰³ Having understood the *voluntà* of his patron, which bears directly upon the organization and needs of the building, the architect must then "with great diligence ponder and understand every advantage, as if he were himself to bear the expense."²⁰⁴ The architect internalizes the patron's *voluntà* and works out in minute detail the ramifications of that *voluntà* insofar as they might receive architectural expression. Having understood the patron's *voluntà* and pondered the complexities of its potential expression, the architect then organizes the workers who will realize the building:

And if it is a large building where many masters are [needed], [the architect] ought to order and distribute them so that [in modo] they neither lose time nor argue with one another. He should choose one of these building maestri, who seems to him adequate, and he should refer the workers to him and organize the works that they have to do. [He must see to it] that this maestro understands well [so that] he can make the other [workers] do things [correctly]. [This maestro], having continually understood the voluntà and the misure that [the architect] gives him day by day, executes them and makes them be executed [by the other workers] so that, when the architect inspects the work, [he sees that] what stands has been done according to that which has been explained.²⁰⁵

It is telling that while the architect's first task is to distribute the workers (one presumes topographically), he does so not only improve their efficiency, but also to keep peace among them, one key effect of which would be to dispose them to be a more receptive audience. The architect then chooses a spokesperson and communicates to him—or rather, *through* him—not only the *misure* of the building, but also the *voluntà* that flows from the patron. Each worker's making should reflect, in other words, not only the *misure* provided by the architect, but also the

²⁰³ Filarete, *Trattato* (Finoli and Grassi, eds.), 43 = Filarete, *Treatise* (Spencer, trans. and ed.), I:17: «[...] debbe intendere l'ordine e il bisogno dello edificio, che vada secondo la volontà e bisogno del principale.»

²⁰⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 43 = Filarete, *Treatise* (Spencer, trans. and ed.), I:17: «[...] con ogni diligenza pensare e intendere ogni vantaggio, come se lui proprio avesse a fare la spesa.»

²⁰⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 44 = Filarete, *Treatise* (Spencer, trans. and ed.), I:17: E se caso è che sia uno edificio grande dove molti maestri siano da murare, debbe lui ordinargli e distribuirgli in modo che non abbino a perdere tempo, né avenire contenzione infra loro; debbe eleggere uno di questi maestri da muro, il quale gli paia più sofficiente, e a lui referire e ordinare i lavorii che s'hanno a fare, e che quello lo 'ntenda bene e gli altri poi far fare, e che continuamente lui, inteso la volontà e le misure che dì per dì lui gli dà, metterle e farle mettere ad esecuzione in modo che, quando l'architetto rivede il lavoro, che sia stato fatto secondo che a quello ha dato a intendere.

voluntà provided ultimately by the patron. The Architect weaves a rhetorical fabric that enfolds all of the persons involved in making a building, from the Lord at the top to the lowliest laborer. While intellectual understanding provides the dynamic weft threads that wend through the architect's communications, it is voluntà—with all its psychic retinue: desire, intention, pleasure, and most importantly love—that provides the stable warp threads that bear the primary communicative load in a building project.

Architecture and the Constraints of Communication

If the patron's *voluntà* provides the basic impetus for a building project, the topographical site and social situation into which the project is built together provide the physical materials and conceptual constraints out of which the specificity of the project emerges. Into the interstice between a preexisting environment and the voluntà that enivisions transforming it, the architect deploys a complex and plastic ensemble of tools that *informs* (in the precise meaning of the term) the union of environment and voluntà, which ultimately becomes the material fact of a finished building. The patron's voluntà may serve as the ultimate seed of a building, but the architect, too, has a crucial contribution to make, for he must work the patron's voluntà into an intelligible and feasible plan that is then "performed," leaving an edifice as a residuum. To use the psychological lexicon we have been developing, the architect is charged not only with communicating the patron's voluntà to those responsible for realizing it in material form, but also for transmuting the patron's voluntà into an intelligible plan for a project. As I will discuss further in Chapter 4, Filarete uses several terms to refer to the basic plan or scheme for a project, including *invenzione* ("invention"), fantasia ("fantasy," "figment"), and idea, but he does not give clear priority to any of them. There are several possible reasons why Filarete might choose to avoid settling on a

single term, but the most important is that his thinking about architecture draws from intellectual traditions venerable enough in his day to have crystallized in vernacular speech and habits of thought. 206 Still, it will keep things clearer for the moment if we use a single expression consistently. The modern English word *idea* captures much of the spirit of its fifteenth-century Italian cousin while cleaving to the tradition, anchored by Vitruvius, of using the word *idea* to refer to the eidetic symbol of a building project. 207 It also signals my intention to contend, in Chapter 4, with the essentially Platonic and Neoplatonic lexicon that has given our culture's conversation about architecture its basic shape. For all these reasons, I will refer to a preconception for a building project as an *architectural idea*.

Because architectural ideas must be communicated, fitness for communication represents one of their salient excellences. It would obviously be futile for the Architect to work out an architectural idea that could not be adequately communicated both to the Lord and to the relevant workers and craftsmen. Like most architects in our own time, Filarete's Architect mainly produces not buildings, but rather descriptions, measurements, drawings, and administrative systems—the instruments of shared understanding. An armature of communicative constraints supports, like scaffolding, the communicative space described by the *Libro's* narrative. By *communicative constraints*, I mean, for example, such factors as the Architect's skill in drawing

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²⁰⁶ For the specific case of *fantasia*—though his general observations apply, *mutatis mutandis*, to all of the terms in question—see David Summers, *Michelangelo and the Language of Art* (Princeton, N.J.: Princeton University Press, 1980), 103-04.

²⁰⁷ Vitruvius, *On Architecture*, 24-25 = I.ii.2: Species dispositioniis, quae graece dicuntur *ideae* [ἰδεαι], sunt hae, ichnographia orthographia scaenographia.

²⁰⁸ I mean neither to reform nor to jettison any philosophical tradition of idealism. My main concern in the current study is that the key terms and categories of idealism—under whichever name, and in any of its varieties—illuminate the historical and theoretical significance of Filarete's *Libro* only partially at best. I have therefore aimed to develop an alternative collection of interpretive tools, derived mainly, though hardly exclusively, from the rhetorical tradition. While I do not argue the larger point in this dissertation, I submit that although idealism has provided the principle terms in which art criticism and art history have conducted their respective analyses, architecture has always resisted, in a variety of important ways, idealist interpretation. Even if any particular argument should prove less than entirely convincing, I hope that my overall approach might be read as a guide to some of the important dissonances between idealism and architecture.

and explaining his ideas; the Lord's and the *maestri's* capacities for understanding such drawings and explanations; the Architect's *estimation* of the Lord's and the *maestri's* capacities for understanding; the *maestri's* abilities in communicating with their underlings; the ability of Architect to persuade competent *maestri* to hire on to the Lord's projects; and so on. It is noteworthy that while the Architect's proposed projects become more elaborate and fabulous after the discovery of the alchemical powders that presumably permit the transmutation of metals, his measurements and descriptions remain unchanged in their meticulousness. Even after money is no longer a constraint, the Architect remains intensively aware that his capacity to organize groups of men to build the edifices that the Lord desires depends intimately on the intricacies of his communicative situation.

The discipline of rhetoric recognizes the supreme importance of the *situation* or *occasion* in which a speech is delivered or a text is read, and it calls that situation or occasion the *kairos*. ²⁰⁹ A *kairos* means "an opportune moment" or "a propitious time," making it primarily a kind of temporality, though it encompasses the notion of geographical and social situation. More practically, a *kairos* means those transient potentialities and limitations implicit in a given occasion, which the rhetor must identify and then attempt to conscript to his cause. ²¹⁰ The elaborate ceremony that couches the founding of Sforzinda in the *Libro*, for example, pivots upon astrological auspices that attend the temporal question, "when would be good to

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²⁰⁹ For a concise overview of the rhetorical concept of *kairos*, see James L. Kinneavy, "*Kairos*: A Neglected Concept in Classical Rhetoric," in *Rhetoric and Praxis: The Contribution of Classical Rhetoric to Practical Reasoning*, ed. Jean Dietz Moss (Washington, D.C.: Catholic University of America Press, 1986). For a more meticulous account of the concept's precedents, origins, and early development in Sophistic thought, see Michael Carter, "*Stasis* and *Kairos*: Principles of Social Construction in Classical Rhetoric," *Rhetoric Review* 7, 1 (1988): 101-06.

²¹⁰ The ability to speak well extemporaneously—*ex tempore*: out of or making use of the (potentialities) of the time or occasion—was traditionally regarded as the supreme achievement of rhetorical education. See Quintilian, *The Institutio Oratoria of Quintilian*, IV:133-34 = X.7.1: Maximus vero studiorum fructus est et velut primus quoddam amplissimum longi laboris ex tempore dicendi facultas," which I translate as "But the greatest fruit of our study and the most ample prize of our long labors is the faculty of speaking extemporaneously."

begin.'"²¹¹ All the characters in the narrative interpret the astrologer's answer to this question as a *kairos*—an auspicious occasion—during which construction might begin with good prospects. More generally, it is precisely the power of astrology to coordinate human intentions and cosmic occasions that Filarete honors when he has it "put above all"²¹² the other liberal arts in the House of Vice and *Virtù*. According to Filarete, a competent architect needs to know astrology, "because when ordering and making something, he [should] see that it begins [*principiare*] under [a] good planet and under [a] good constellation."²¹³ A good architect can identify and interpret a *kairos* so as to make use of its potentialities for his project.

Just as a *voluntà* serves as the "seed" or "principle" of a building project, so a *kairos* serves as a crucial constraint upon its development. In this sense, concerned with beginnings, a *kairos* refers to a relatively discrete moment in which one seizes or realizes an opportunity rather than to an indefinitely extended duration in which one manages a process. The figure of *Voluntà* that Filarete invents, which I described and interpreted in Chapter 2 (fig. 9), reaches to grasp the world not simply to conquer it brutishly, but primarily to realize the opportunity implicit within a wordly *kairos*. The figure of *Voluntà* has many eyes precisely so that she can identify and understand each *kairos* as it arises. And the stars, it needs emphasizing, differ not only from season to season, but also from latitude to latitude. Astrological readings correspond to places as well as to times. A *kairos* encompasses both time and place. When an architect views a situation as a mere "site," as a perdurable substratum that his project reshapes, he disregards the unique potentialities of the project's occasion. Better to cultivate ideas that emerge out of the current time—*ex tempore*—and out of the current place so that they are both informed and constrained

²¹¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 101 = Filarete, *Treatise* (Spencer, trans. and ed.), I:43: «[...] quando fusse buono principiare.»

²¹² Filarete, *Trattato* (Finoli and Grassi, eds.), 540 = Filarete, *Treatise* (Spencer, trans. and ed.), I:249: [...] messa di sopra da tutte [...].

²¹³ Filarete, *Trattato* (Finoli and Grassi, eds.), 429 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: «[...] perché quando ordina e fa una cosa, che guardi a principiare su buono pianeto e su buona costellazione.»

by the character of the present moment and the local vicinity. As a practice, architecture does not concretize ideas so much as originate concrete change.

A rhetorical *kairos* both *occasions* and *situates* a speech. It is not a principle of generation, however, but rather a constraint that informs how the rhetor articulates the subject of his speech. To be effective, an oration cannot address an abstracted or imagined audience, but the actual one at hand—in all the fine-grained particularity of its actual circumstances. Analogously, the issues of architectural ideation and effective architectural communication are thoroughly interdependent—a fact which the rhetorical concept of *kairos* both honors and illuminates. One way to articulate the creative part of the architect's job is to say that he must invent an architectural idea that marries his patron's *voluntà* to a *kairos*. But the architect also serves as the center of gravity for the communicative space in which the activity of building unfolds. While the patron contributes his *voluntà* and the architect contributes specific "modes and measures," it is the *kairos*—which the architect must diagnose and harness—that makes possible the union of these two principles, the ultimate issue of which is the material instantiation of an architectural idea.

CHAPTER 4:

BETWEEN IDEAS AND ARCHITECTURE

Architectural Ideas in Filarete's *Libro*

Up to this point I have deployed the notion of an architectural idea as though it were unproblematic. In most workaday situations the notion of an architectural idea *is* unproblematic in that it needs no speculative specificity in order to function. An architect and his team need neither a general definition of an architectural idea nor a general account of ideation in order to conceive and refine a workable idea for a project. Groups involved in the designing and building of an edifice resolve internecine misunderstandings by focusing their attention on drawings, models, texts, and the concrete details of the situation. The ultimate *telos* of the building process might be intangible, but in most circumstances it is unified, intelligible, and communicable. To be sure, architectural ideas admit of variable expression, and architects often discover interesting aspects of a given idea by multiplying its expressions. Modern architects and architecture critics even hold that architectural ideas may be worked out using not only concatenations of drawings, models, and texts, but also series of fully realized building projects.²¹⁴ Without a working notion of an architectural idea in general, however, we could not *explain* to someone outside any given project how *these* drawings here and *those* models over there belong together. Without such an

²¹⁴ For an elegant account of one historical instance where an important modern architect used a series of programmatically similar commissions to develop a single architectural idea toward a more harmonious and coherent expression, see Kenneth A. Breisch, *Henry Hobson Richardson and the Small Public Library in America: A Study in Typology* (Cambridge, Mass.: MIT Press, 1997).

abstraction, we would find it extremely difficult to teach an apprentice, a would-be client, a journalist, or indeed anyone unhabituated to the rhythms of architectural practice how and why it typically unfolds as it does.

Filarete recognizes that architectural ideas and material buildings are not identical, but he only occasionally distinguishes crisply between the pre-material, mental notion of a building and its subsequent realization in stones and mortar. He typically calls both simply the *edifizio*. Indeed, Filarete rarely undertakes philosophical speculation at all, so when he does distinguish explicitly between a mental schema and a materialized building, one suspects practical utility rather than metaphysical nicety as the primary concern. As I mentioned in Chapter 3, Filarete deploys three rubrics to refer to architectural and artistic ideas: invenzione ("invention"), fantasia ("fantasy," "figment"), and *idea*. Filarete most often uses the rubric of *invenzione*—in the forms inventore, inventori, and inventrice—to refer to the men, women, and divinities credited with discovering "arts and sciences" or "worthy things." Filarete thus credits Adam, for example, with being the *inventore*—the discoverer—of measure and proportion. ²¹⁷ The terms *invenzione* and *invenzioni* appear only a few times in the *Libro*. The singular *invenzione* appears twice, both times in reference to grand proposals: namely, (1) the Architect's proposal to found Sforzinda, ²¹⁸ and (2) the marvelous rotating tower invented by "Onitoan Nolievra" (fig. 1), which is described in the Golden Book.²¹⁹ And the plural *invenzioni* appears four times, always in reference to artistic programs of remarkable ingenuity, which Filarete characterizes using some combination of the adjectives variate ("varied"), belle ("beautiful"), and nove ("new" or "innovative").

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²¹⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 435 = Filarete, *Treatise* (Spencer, trans. and ed.), I:202: [...] arti e scienzie.

²¹⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 455 = Filarete, *Treatise* (Spencer, trans. and ed.), I:211: [...] cose degne.

Filarete, *Trattato* (Finoli and Grassi, eds.), 18 = Filarete, *Treatise* (Spencer, trans. and ed.), I:8.

²¹⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 52 = Filarete, *Treatise* (Spencer, trans. and ed.), I:21-22.

²¹⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 632-33 = Filarete, *Treatise* (Spencer, trans. and ed.), I:293-94.

Filarete usually describes both the actions of *inventori* as well as those actions that result in artistic *invenzioni* by using the verb *trovare* ("to find"), thus making for a tight linkage between intellectual discovery and what we would today call something like artistic creativity.²²⁰

When the Architect first mentions his grandiose plan for the *ex novo* construction of Sforzinda, he explicitly calls his preliminary notion both an *invenzione* and a *fantasia*.²²¹ The conflation of *invenzione* (a rhetorical term) and *fantasia* (a medical and philosophical term) in the artistic discourse of the Quattrocento is historically important, and it provides one of the cruxes for the arguments advanced in Chapters 5 and 6.²²² Once the Lord approves the preliminary proposal, the Architect articulates his architectural idea—which is, to reiterate, at once an *invenzione* and a *fantasia*—by means of a drawing. When the Architect christens the

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The literature on the role of the imagination vis-à-vis rhetoric is extensive, though the interested reader might profitably begin with Donald Lemen Clark, Rhetoric and Poetry in the Renaissance: A Study of Rhetorical Terms in English Renaissance Literary Criticism (New York; Columbia University Press, 1922; repr. Charleston: BiblioBazaar, 2008); Ernest G. Bormann, "Fantasy and Rhetorical Vision: The Rhetorical Criticism of Social Reality," Quarterly Journal of Speech 58, 4 (1972); Dan Flory, "Stoic Psychology, Classical Rhetoric, and Theories of Imagination in Western Philosophy," Philosophy & Rhetoric 29, 2 (1996); Ruth Webb, "Imagination and the Arousal of the Emotions in Greco-Roman Rhetoric," in The Passions in Roman Thought and Literature, eds. Susanna Morton Braund and Christopher Gill (Cambridge, U.K.: Cambridge University Press, 1997); Lawrence D. Green, "Aristotle's Rhetoric and Renaissance Conceptions of the Soul," in La "Rhétorique" d'Aristote: traditions et commentaires de l'Antiquité au XVIIe siècle, 283-97, eds. Gilbert Dahan and Irène Rosier-Catach (Paris: J. Vrin, 1998); Lawrence D. Green, "Aristotelian Lexis and Renaissance Elocutio," in Rereading Aristotle's Rhetoric, eds. Alan G. Gross and Arthur E. Walzer (Carbondale: Southern Illinois University Press, 2000); and Debra Hawhee, "Looking Into Aristotle's Eyes: Toward a Theory of Rhetorical Vision," Advances in the History of Rhetoric 14, 2 (2011). A superior guide to the literature on the imagination in general is Bo Pettersson, "On the Study of Imagination and Popular Imagination: A Historical Survey and a Look Ahead," in Popular Imagination: Essays on Fantasy and Cultural Practice, ed. Sven-Erik Klinkmann (Turku: Nordic Network of Folklore, 2002).

²²⁰ Cf. Kemp, "From 'Mimesis' to 'Fantasia," 349.

²²¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 52 = Filarete, *Treatise* (Spencer, trans. and ed.), I:21-22
²²² For two intelligent discussions of the semantic confliction of the terms inventions and fontagin in the

For two intelligent discussions of the semantic conflation of the terms *invenzione* and *fantasia* in the fifteenth and early sixteenth centuries, see Murray Wright Bundy, "Invention' and 'Imagination' in the Renaissance," *Journal of English and Germanic Philology* 29 (1930) and Summers, *Michelangelo and the Language of Art*, 103-04. Both authors argue convincingly that the Quattrocento interpretation of *fantasia* (φαντασία in the original Greek) as the engine of *invenzione* takes over and extends a position first articulated in medieval poetics. Summers goes on to rehearse the conceptual history of *fantasia*, with Bundy's meticulous historical survey of the classical tradition of the concept—Murray Wright Bundy, "The Theory of Imagination in Classical and Mediaeval Thought," *Illinois Studies in Language and Literature* 12, 2-3 (1927)—underpinning his account. Additional important historical surveys of the imagination include the opening chapter of Kieran Egan, *Imagination in Teaching and Learning: The Middle-school Years* (London, Ont.: Althouse Press, 1992); Richard Kearney, *The Wake of Imagination: Toward a Postmodern Culture* (Minneapolis: University of Minnesota Press, 1988); Elizabeth Ruth Harvey, *The Inward Wits: Psychological Theory in the Middle Ages and the Renaissance* (London: Warburg Institute, 1975); and Mary Warnock, *Imagination* (London: Faber and Faber, 1976).

proposed city that he has "generated" together with his Lord "Sforzinda," he at the same time names his drawing of the city "Averliano." The Lord is the *genitore* of the city, but the Architect is the *genitore* of the drawing. Filarete would seem here to posit two separate developmental trajectories that share a unified origin in a single *invenzione* or *fantasia*, which has fused with the patron's *voluntà*. We might here extend Filarete's analogy between the patron as the building's father and the architect as its mother by suggesting that the fusion of fantasia and *voluntà* results in a kind of zygote. With the patron's help, the architect works upon this zygote for some period of time, finally producing a drawing that represents the initial, tentative materialization of the preliminary idea. Although drawing and building develop from the same source, with the drawing preceding the building temporally, the drawing does not constitute a straightforwardly intermediate step toward the material completion of the building in the same way that, say, digging the foundations would. The drawing Averliano is obviously related to the city Sforzinda, but two are ultimately independent, which is why Filarete can name the drawing after himself. In a sense, the drawing and the city are somewhat like siblings. The Architect, or indeed anyone who understands disegno, could use Averliano to help guide the construction of Sforzinda by relying on the family resemblance between the two materializations.

Just as a voluntà belongs to a person, so the invenzione or fantasia that constitutes the other half of an architectural zygote likewise belongs to a person. ²²⁴ The terms *fantasia* and fantasie often appear in the Libro following singular possessive adjectives: the Architect refers to la mia fantasia ("my fantasy")²²⁵ as well as, in one instance, to sue fantasie ("his [Lord's]

²²³ Filarete, *Trattato* (Finoli and Grassi, eds.), 53 = Filarete, *Treatise* (Spencer, trans. and ed.), I:22. This eponym represents the sole instance in the main body of the text (i.e., outside the dedication) where Filarete references his own name without an anagrammatic veil.

²²⁴ Communes, societies, companies, and indeed any social grouping of humans also possess, *mutatis mutandis*, both a *voluntà* and the capacity to produce *invenzioni* and *fantasie*.

225 Filarete, *Trattato* (Finoli and Grassi, eds.), 531 = Filarete, *Treatise* (Spencer, trans. and ed.), I:245.

fantasies"). ²²⁶ Filarete views *fantasie* as the idiosyncratic products and personal possessions of particular minds. He also uses the rubric of *fantasia* to indicate a grand proposal or artistic program, in which cases he characterizes *fantasie* just as he does *invenzioni*—as *variate*, *belle*, and *nove*—with the evident intention of emphasizing their superlative ingenuity. In referring to preliminary architectural and artistic notions, the rubrics of *invenzione* and *fantasia* are functionally synonymous. Even in the absence of possessive adjectives, it is clear that credit for *fantasie*—and likewise for *invenzioni*—accrues to individuals. The *invenzione* or *fantasia* of Sforzinda belongs to the Architect, and the *invenzione* of the rotating tower belongs to the ancient architect Onitoan Nolievra.

The rubric of *fantasia* also exhibits one crucial difference from that of *invenzione*:

Filarete often uses the singular *fantasia*, usually coupled with a singular possessive adjective, to refer to an individual's personal faculty of imagination. A person uses his *fantasia*, in this sense, to compose, store, and edit architectural ideas and artistic programs. The rubric of *fantasia* does not appear all that frequently (only some twenty-seven times altogether), but in a few instances it strikingly appears—rather eccentrically—as a *transitive verb*. The *Libro* contains several etymological rarities like *fantasicare*, *fantasticando*, and *fantasticato*, which refer to the productive action of the architect's mind as it works upon architectural ideas. Filarete's remarkable portrayal of the psychological faculty of imagination as the engine of architectural ideation justifies Martin Kemp's assertion that "[f]antasia for Filarete is an all-pervasive factor, embracing every facet in the conception of a work of art or architecture." Overall, the rubric of *fantasia* functions as one of the pivots in Filarete's thinking about architecture in that it refers not

²²⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 170 = Filarete, *Treatise* (Spencer, trans. and ed.), I:76.

²²⁷ Kemp, "From 'Mimesis' to 'Fantasia,'" 369-70. Kemp's study serves to highlight the timeliness of Filarete's highlighting of *fantasia* in the context of the shift in the Quattrocento from an artistic lexicon focused on *imitation* to an artistic lexicon focused on *imagination*.

only to the cognitive faculty of imagination, but also to its characteristic activity and its characteristic product—the latter of which is a unified, intelligible, and communicable idea.

The rubric of *idea*, to pass to the third term, appears only three times in the entire *Libro*: once to refer to portraits of the three Fates on a symbolic vase, ²²⁸ once to refer to one of Phidias's famed sculptures of Athena, ²²⁹ and once to refer to the images of goddesses and young women that Marcus Aurelius reputedly painted. ²³⁰ In the first instance, Filarete calls the decorative image of each of the three Fates a "simulacrum" [simulacro], thereby evoking all the connotations of similitude, with its irrepressible links to the traditional theory of imitation. In the second instance, Filarete describes Phidias's sculpture as an idea that has been "fabricated" [fabbricata]. Specifically, he discusses how Phidias managed to sign his work, circumventing an Athenian law forbidding such signatures, so that everyone would know that both the actual sculpture and the underlying idea were his. In the third instance, Filarete describes Aurelius's paintings as "painted" or "depicted" ideas, which were made "in the likeness" [alla somilitudine] of his lovers. For Filarete, the rubric of *idea* refers to some kind of preconception that may be tangibly realized, with strong overtones of an essential similarity between plan and product, thus straightforwardly evoking the traditional Platonic account of technical making as imitation. Filarete interestingly uses the rubrics of *invenzione* and *fantasia* in reference to all three of the arti belli—painting, sculpture, and architecture—but he noticeably excludes architecture from association with the rubric of *idea*, using the latter only in reference to painting and sculpture. Such an omission constitutes slim evidence—particularly given the extreme rarity with which the

²²⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 104 = Filarete, *Treatise* (Spencer, trans. and ed.), I:44: «[...] '1 suo coverchio sono quelle tre fatale Idee nelle quali consiste essa nostra vita.»

²²⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 576 = Filarete, *Treatise* (Spencer, trans. and ed.), I:265: «[...] per questo nello estremo orlo dello scudo iscolpì la sua testa, in modo che era conosciuto lui avere fabbricata la detta idea.»

²³⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 586 = Filarete, *Treatise* (Spencer, trans. and ed.), I:269: «Aurelio, il quale era uomo molto amoroso di belle giovane e sempre dipingeva idee, le quali sempre le faceva alla somilitudine di quelle sue amorose.»

rubric of *idea* appears in the *Libro*—upon which to argue that Filarete holds that architecture resists the theory of imitation. Although Filarete's evocations of Platonic Idealism are unmistakable, they are also few in number and give every indication of being little more than perfunctory genuflections to the philosophical fashion of the day. Still, there are more compelling reasons to think that some variant of the theory of imitation provides the basic intellectual framework for Filarete's conception of architecture.

The Limits of Literary Imitation

G. W. Pigman III has surveyed the various metaphors that Renaissance authors deploy in their discussions of imitation, and he classes the metaphors of generation that Filarete prefers as metaphors of transformative imitation, under which heading additionally fall apiary and digestive metaphors.²³¹ All of Filarete's favorite metaphors for discussing the generation, refinement, and basic character of architectural ideas thus align neatly with one of the major contemporaneous tropes for construing *literary* imitation. In essence, Filarete appears to have understood what we would call "creative thinking" as a transformative process, which in his day qualified it as an *imitative* process. Just so, as I emphasized in Chapter 1, Filarete explicitly cites the ongoing revival of classical letters as his paradigm for a revival of classical building practice. The humanists consistently proclaimed *imitation* as the master term under which they conducted their attempts to revive the literature and culture of antiquity. In its most sweeping conception, as Greene explains, the concept of imitation serves as the touchstone for the majority of Renaissance responses to the anxiety occasioned by the discovery of the insuperable difference between antiquity and modernity. Renaissance imitation, that is, constitutes a self-conscious acknowledgement of anachronism. A Renaissance author who attempted to imitate a given

²³¹ G. W. Pigman III, "Versions of Imitation in the Renaissance," *Renaissance Quarterly* 33, 1 (1980): esp. 3-11.

classical text knowingly used incomplete information to formulate what Greene calls an "etiological construct," the sole purpose of which was to render the model text intelligible in spite of its manifest otherness.

Renaissance imitation at its richest became a technique for creating etiological constructs, unblocking—with the fiction of the work—the blockages in transmission which created humanist pathos. Imitation acts out a passage of history that is a retrospective version or construct, with all the vulnerability of a construct. It has no ground other than the 'modern' universe of meanings it is helping to actualize and the past universe it points to allusively and simplifies. It seeks no suprahistorical order; it accepts the temporal, the contingent, and the specific as given. ²³²

In line with Greene's general account, Filarete's notion of architecture might be illuminatingly characterized as a use of fiction that "acts out a passage of history" in a way that remains selfconsciously vulnerable to critique while still attempting to draw the authentic spirit of the past into the present.

For humanists, the thematic meaning of imitation was incarnated through specific practices in which an author (whether student or master) quite self-consciously used the cultural gap he knew to exist between classical literature and his own milieu. Even the most primitive and modest techniques of humanist imitation acknowledged and reified the gap between original and derivative, aiming to produce specific relations between the two. ²³³ In essence, humanist literary imitation sublimated the anxiety occasioned by the consciousness of historical anachronism into the technical minutiae of a specific kind of literary production. Certain projects in the *Libro*—the House of *Virtù* and Vice, for example, for which Filarete unequivocally names the literary precedents of Ovid's Houses of Sun and Envy, Statius's House of Mars, and Virgil's House of Dreams²³⁴—ostentatiously set out to engage classical precedents in a precise and

²³² Greene, *The Light in Troy*, 21.

²³³ Humanist literary imitation of the late Trecento and early to middle Quattrocento was particularly concerned to disguise the identity of the model or original. See G. W. Pigman III, "Barzizza's Treatise on Imitation," Bibliothèque d'humanisme et Renaissance 44, 2 (1982).

234 Filarete, *Trattato* (Finoli and Grassi, eds.), 530 = Filarete, *Treatise* (Spencer, trans. and ed.), I:245.

controlled manner. Certain other projects, as Genoni has convincingly demonstrated, refer to contemporary models that are not mentioned in the text, but rather evoked in the Libro's marginal drawings.²³⁵

Overall, however, the projects described in the *Libro* evince a generic "antique-ness" that does not engage designated precedents so much as aim to sound a note consonant with the moral tenor of antiquity taken as a whole. In Filarete's view, the character of antique culture reduces to a pointed concern with excellence or virtuosity (in Greek arête, in Latin virtus, in Italian virtù). This concern underwrites his nickname and suffuses his whole sense of the importance of architecture. Illuminating this concern will be the central preoccupation of Chapter 7. His account of building in general indicates that while identifiable classical precedents might be desirable for certain projects, they are hardly essential. Filarete's critique of contemporary (Gothic) building practice and concomitant recommendation of antique building practice, in other words, are qualitative rather than categorical. He wants to reorient building practice toward excellence—as the ancients did—and not simply to advocate the use of antique models formal templates. Filarete thus does not advocate the copying of antique buildings per se, but rather the resuscitation of antique building *practice*. This is why Filarete numerous times criticizes "modern" Gothic buildings as poor buildings, but he never denies that they are in fact buildings.²³⁶ Similarly, though he often criticizes "modern" architects for being pretenders and usurpers—for being, in a word, bad architects—he never denies that they have actually done the work that architects do. 237 Ultimately, Renaissance conceptions of literary imitation bear only obliquely on Filarete's sense of the value and utility of antique buildings. The issue of

²³⁵ Genoni, "Filarete in Word and Image," ch. 2 and Genoni, "Vedere e 'ntendere."

²³⁶ See, e.g., Filarete, *Trattato* (Finoli and Grassi, eds.), 12-13 and 481-82 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6 and 222-23. Filarete even grants in one instance that some modern bridges may be as beautiful as antique ones; see Filarete, *Trattato* (Finoli and Grassi, eds.), 356-57 = Filarete, *Treatise* (Spencer, trans. and ed.), I:162-63. ²³⁷ See Filarete, *Trattato* (Finoli and Grassi, eds.), 12-13 and 381-82 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6 and 175-76.

anachronism provides an important interpretive backdrop for making sense of Filarete's notion of architecture, but it does exhaust it. In short, it would distort Filarete's opinions as to the sources and uses of architectural ideas to interpret them too strictly in terms of literary imitation.

Renaissance Idealism

The terms *invenzione*, *fantasia*, and *idea* all refer in Filarete's *Libro* to preconceived mental models that guide processes of fabrication, and in this they operate as synonyms. The rubric of *idea* in particular refers to mental *images* that admit of either sculptural fabrication or painterly depiction, such that the ensuing materialization evinces some resemblance or likeness to the original mental image. In Filarete's usage, that is, the rubric of *idea* refers decisively to the Platonic theory of imitation. Erwin Panofsky's virtuoso study of the relationship between the Platonic Ideas and European art theory has its epicenter in the Renaissance, where the Platonic theory of imitation became, in his view, the decisive account of artistic creation. Given the authority of Panofsky's findings, it is tempting to read Filarete's invocation of the rubric of idea—no matter how rare its appearances—as an invitation to interpret his overall conception of architectural creation in Platonic or Neoplatonic terms. The building imperfectly imitates the drawing, which imperfectly imitates the architect's mental idea of the building, which imperfectly imitates the eternal and objective Platonic Idea of the building, so that all these items fall neatly into a hierarchy ordered according to their "remove" from an ineffable model. 238 Faced with such a seductive account, an alert critic might well ask about the historical vicissitudes in the interpretation of Plato's theory of mimesis that have been submerged beneath

²³⁸ Panofsky's account prepares the ground for the modern reading the history of architectural drawing, which almost always uses terms descended from the Florentine lexicon of *disegno*, as so many versions of the "doctrine of essentialism" (Evans, "Translations," 161) that Evans has so eloquently called into doubt.

its glossy surface. It is precisely these historical changes that Panofsky's study teases out and interprets.

Panofsky begins by juxtaposing the original meaning (according to today's conventional interpretation) of the Platonic Ideas as ineffable, intelligible essences against Philipp Melanchthon's (1497 - 1560) interpretation of the Platonic Ideas as more or less equivalent to the mental images that he supposed that artists use to guide their facture. ²³⁹ Having established the scope and trajectory of his investigation, Panofksy tracks the historical career of the Ideas from their origin in Plato's thought to their preeminent position in the Classicism of the seventeenth century, in which they provided the basis for "a metaphysics of art that seeks to derive the phenomenon of artistic creativity from a suprasensory and absolute—in today's language 'cosmic'—principle,"²⁴⁰ thereby making possible a "normative, 'law-giving' aesthetics." ²⁴¹ Modern art theory relies upon Plato's Ideas, that is, to the extent that artists are thought to give visible expression to something "suprasensory and absolute," something that surpasses the phenomenal. Panofsky locates the key conceptual shift that made it possible to conceive Ideas as the semantic anchors of artistic endeavors in the transition from the Middle Ages to the Renaissance, during which the distance between the artist as "subject" and his work as "object" was formalized. Specifically, the Renaissance literature on the arts

differs from the earlier literature of art by no longer answering the question "how to do it?" but the quite different and thoroughly unmedieval question "what abilities and, above all, what kind of knowledge enable the artist to confront nature with confidence whenever he is required to do so?"

When considering the meaning of art, Renaissance writers shifted their focus from the artist's tangible, manual practice to the psychological and epistemological grounds upon which that

²³⁹ Erwin Panofsky, *Idea: A Concept in Art Theory*, trans. Joseph J. S. Peake (Columbia: University of South Carolina Press, 1968), 3-7.

²⁴⁰ Panofsky, *Idea*, 111.

²⁴¹ Panofsky, *Idea*, 110.

²⁴² Panofsky, *Idea*, 50.

practice could be explained and defended. The Renaissance artist's main tools in his "confrontation" with nature were thus not his hands, but his mind, knowledge, and ingenuity. The subjective psychology of the artist became proportionally more interesting as the objective ontology of mental images was recognized as correlated with a reality more fundamental than visible nature.

Broadly speaking, Panofsky understands Renaissance culture as insisting that the artist attend to and imitate nature, but not a nature reduced to its visible surface. The Renaissance artist attends to natural things and, grasping their underlying essence, renders those things visible in an improved—even a perfected—form.²⁴³ Such a conception of mimetic practice depends upon an epistemology that sees the personal psychology of the artist mirrored in the products of his practice. The psyche of the artist becomes a device that apprehends and gives concrete expression to a reality that transcends the reality available to the senses. Renaissance artists aimed to provide not only visual representations of phenomenal nature, but also intellectual access to the transcendent Ideas that underlay those phenomena. The artist needed before his mind's eye not only a sensory impression of, say, the particular fleshly woman who served as his model, but also the mental image of an *ideal* woman. Such an ideal is transcendent and general in that it stands for a whole category of things, but it is also crafted and specific in that the artist makes or derives a specific (and concretely reproducible) simulacrum from his experience and imagination.²⁴⁴

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²⁴³ Such an account proceeds from a quite orthodox version of Aristotelian *mimesis*. See Aristotle *Poetics*, trans. Stephen Halliwell, in *Aristotle: Poetics – Longinus: On the Sublime – Demetrius: On Style* (Cambridge, Mass.: Harvard University Press, 1995), 134-35 = 1461b: "Poetic needs make something plausible though impossible preferable to what is possible but implausible. <It may be impossible> that people should be as Zeuxis painted them, but it is ideal, since a paragon should be of higher stature."

²⁴⁴ The ideal woman was in the Renaissance emphatically not understood to be a particular woman, but as a refinement or composite of ideal parts, as evidenced by the dogged determination with which humanists trotted out the famous story of the painter Zeuxis. Commissioned to paint a portrait of Helen, Zeuxis was said to have been dissatisfied with all the models available to him, so he created a composite image by combining the most beautiful

David Summers provides valuable ballast for Panofsky's compelling study, reminding us that "however great the importance of the Platonic idea of beauty (or beauty of the idea) may have been in the Renaissance, other traditions of meaning shaped the discussion of the art of the period at its deepest levels." ²⁴⁵ Summers's book, *The Judgement of Sense*, comprises a set of studies that treat precisely these "other traditions of meaning," such as drawing and mechanics, which profoundly influenced the way that artists and art connoisseurs approached the making and evaluating of artworks even though they rarely surfaced as explicit speculative concerns.²⁴⁶ Just so, Filarete's notion of architectural invention synthesizes elements drawn from several traditions without elevating them to theoretical issues, properly speaking. Most importantly, commentators have long pointed to *disegno* as a crucial concept in Filarete's *Libro*. ²⁴⁷ Filarete insists time and again on the importance of disegno for architecture. As I will discuss in greater detail in Chapter 5, the specific dimensions of that importance clearly provide important limits on his sense of the potentialities implicit in the practice of architecture. Commentators have also long identified the rubric of *fantasia* as a striking and important aspect of Filarete's thinking about architecture in particular and Renaissance discussions of art in general.²⁴⁸ As discussed

parts of five different models (the most beautiful arms from one, the most beautiful legs from another, etc). On the ubiquity and significance of the myth of Zeuxis, the *locus classicus* of which is the second book of Cicero's De inventione (a crucial text in rhetorical pedagogy in the Middle Ages and the Renaissance), see Leonard Barkan, "The Heritage of Zeuxis: Painting, Rhetoric, and History," in Antiquity and Its Interpreters and esp. Elizabeth Mansfield, Too Beautiful to Picture: Zeuxis, Myth, and Mimesis (Minneapolis: University of Minnesota Press, 2007). ²⁴⁵ Summers, *The Judgment of Sense*, 2.

²⁴⁶ See also Summers, *Michelangelo and the Language of Art*. Though it focuses on Michelangelo, Summers's study brings to light some crucial parts of the broadly current conceptual lexicon of the Renaissance workshop. In serving their own needs, artists borrowed concepts (often from philosophical lexica) then operant in the vernacular to talk and think about art.

²⁴⁷ Since I discuss Filarete's conception of *disegno* in greater depth in Chapter 5, it will be sufficient here to refer the reader to two studies that take Filarete's disegno as their central concern: Gambuti, "I « libri del disegno »" and Baldasso, "Filarete's Disegno."

²⁴⁸ Max Dvořák, for example, asserts that the fifteenth and sixteenth centuries valorized "the autonomous play of imagination as the real, independent duty of art" (Max Dvořák, Kunstgeschichte als Geistesgeschichte: Studien zur abendländischen Kunstentwicklung (München: R. Piper, 1924), 128: [...] des autonomen Phantasiespieles als der eigentlichen selbständigen Aufgabe der Kunst). Peter Tigler glosses this assertion by exclaiming that "fantasticare' is one of Filarete's favorite words!" (Tigler, Die Architekturtheorie des Filarete, 39: [...] »fantasticare« ist eines der

above, the rubric of fantasia is the only one of the three rubrics that Filarete uses to refer to architectural ideas that encompasses verbs, indicating that he views the characteristic mental activity of the architect as *imaginative*. When artists, patrons, and humanists in the Renaissance became interested in describing the operation of the artist's mind (precisely the "subjective" domain that Panofksy identifies as newly interesting during the Renaissance), the terms available at the time did not speak with any specificity to the characteristic patterns of artistic cognition. The generic philosophical conceit most competent to handle discussions of mental images was that of the *imagination*, which belonged equally to both natural philosophy and medicine. As I will show in Chapters 6 and 7, Filarete not only aligns the imagination with reason, but also invests the imagination with a power over ideas equal to that of reason. It is on these grounds that Filarete's "advocation of *fantasia* – interpreted in terms of marvellous insight which extends the processes of thought – is very remarkable and original." The final aspect of Filarete's notion of architecture that I will single out (though it was not his uniquely) was invention, which was a literary notion whose natural habitat was the discipline of rhetoric. If Filarete's conception of architecture is indeed mimetic, its amalgamation of crucial elements from the craft tradition of disegno, the speculative traditions of natural philosophy and medicine, and the literary tradition of rhetoric should lead us to conjecture that the notion of mimesis he has in mind is unlikely to qualify as orthodox.

Lieblingswörter Filaretes!). Not coincidentally, the term *fantasia* serves as the title of an entire section of Summers, *Michelangelo and the Language of Art*.

²⁴⁹ Kemp, "From 'Mimesis' to 'Fantasia,'" 396.

Architectural Imitation

Architecture has always been the fly in the ointment when it comes to the theory of imitation. ²⁵⁰ In its most naïve formulation, the theory of imitation holds that the productive activities of painters and sculptors take their principal cues from real objects, persons, or events. A portrait of a person resembles that person; a sculpture of a horse resembles a horse. Similarly, literary works of fiction describe, depict, or otherwise evoke tangible persons, things, and situations. A fictional dialogue acts as a kind of armature upon which a reader hangs what we would call a mental image of the conversation depicted therein. ²⁵¹ Now, nature is only one of the two traditional sources of imitation, the other being authoritative cultural exemplars. While nature provides the ultimate source of forms, culture too provides a reservoir of exemplary works that also merit imitation. A writer may thus write from life, or he may write in imitation of another work or perhaps another author's oeuvre in general. Renaissance writers and artists tended to direct their mimetic efforts toward works thought to survive from antiquity, but the basic dichotomy of sources for models remained the same. Filarete's use of the verb imitare reflects quite precisely this conventional dichotomy: *imitare* appears only twice in the *Libro* both times in chapter XXIV (and thus within the mini-treatise on disegno). It appears first during an argument that color in paintings and mosaics must be used so as to imitate the real colors of flowers and metals (imitation of nature), and then again a few pages later during a discussion of the impropriety of deliberate anachronism when working from classical models (imitation of antiquity). 252

²⁵⁰ Cf. James S. Ackerman, "Imitation," in *Antiquity and Its Interpreters*, 9 ff.

²⁵¹ For a lucid discussion of the cooperation between writer and reader required for the generation of the energetic mental images that vivify the experience of reading, see Elaine Scarry, Dreaming by the Book (New York: Farrar, Straus and Giroux, 1999).

²⁵² Filarete, *Trattato* (Finoli and Grassi, eds.), 669-70 and 676 = Filarete, *Treatise* (Spencer, trans. and ed.), I:311 and 315.

The remarkable perdurability of the theory of imitation derives in large part from its capacity to explain with elegant simplicity what it is that artists do: artists make what they see. A culture's heritage constitutes a gallery of eminently imitable works, but it is nature that constitutes the eternally available template from which the artist may draw inspiration, as well as the imperishable standard against which the critic may evaluate artistic endeavor. For painting, sculpture, and narrative literature, such an account provides an admirably intelligible hierarchy of formal derivation. Many typical architectural elements and forms, however, though often derived from historical precedent, have no obvious phenomenal basis in nature. While architectural ornamentation often imitates natural forms quite explicitly—as when animal and vegetative motifs are used, for example—such constituitive elements as foundations, walls, columns, ceilings, roofs, doors, and windows have only indirect, or in any case semantically distant, analogues in nature. Unlike painting and sculpture, architecture does "not depend upon two (admittedly uneasily overlapping yet nonetheless continuous) frames of reference – Antiquity and nature – but [upon] only one: the former."²⁵³ The ultimate source of the most important architectural forms—by which I mean more or less those that are not applied ornamentation—cannot be derived from phenomenal nature.

One might propose, somewhat slyly, that Filarete's Architect develops his architectural ideas by imitating the Lord's *voluntà*. Certainly Filarete holds that architectural projects receive their primary impetus from the patron's *voluntà*, but it is revealing that while the Architect often complains about the difficulty of understanding drawings, descriptions, and architectural ideas in general, he never complains about the difficulty of understanding the Lord's *voluntà*. What the Lord wants or intends becomes problematic proportionally as it becomes specifically

²⁵³ Alina Alexandra Payne, "*Ut poesis architectura*: Gherardo Spini and Italian Architectural Criticism Circa 1570," in *Antiquity and Its Interpreters*, 145.

architectural. A desire to become famous by sponsoring an otherwise nonspecifically "magnificent" building project is quite easy to understand. When the Lord runs up against the limits of his own ability to explain a convoluted architectural configuration, however, barriers to understanding arise:

[The Lord said,] "And then I want you to set back five braccia, and make a square fifteen braccia high with a cornice in a certain way [modo] that I do not know how to describe, but if I saw it, I would recognize if it matched the way [modo] I have in mind."

[The Architect responded,] "You want it made in the way [modo] that I will show you drawn here. I believe, according to what I can understand, that it will please you in this form."

"Although a little flawed, you have understood me." ²⁵⁴

This is one of the few instances in the *Libro* where the characters evince any difficulty whatsoever in understanding one another, and the difficulty is occasioned not by the opacity of the Lord's desire per se, but by the cunningness and intricacy of the built form. Even were we to hypothesize a patron burdened with quixotic or neurotic motivations, an architect could continue working simply by assuming the intelligibility of the patron's motivations. The architect, that is, could locate motivational aberrations and particularities on a map broadly defined by such pedestrian desiderata as shelter, fame, security, and status. Filarete claims that building (more specifically, building "habitations" [habitazioni]) constitutes a "necessity for human life," but he identifies by name only two basic motivations for building at a level beyond basic shelter namely, utility and fame²⁵⁶—which he unambiguously expects his reader to accept as selfevidently intelligible. The difficulties that confront an architect in the communication of architectural ideas, in other words, do not arise in the domain of voluntà, but in the domain of

²⁵⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 155 = Filarete, *Treatise* (Spencer, trans. and ed.), I:69.

²⁵⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 25 = Filarete, *Treatise* (Spencer, trans. and ed.), I:10: [...] necessità

per la vita de l'uomo. ²⁵⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 42 = Filarete, *Treatise* (Spencer, trans. and ed.), I:16: [...] fagli utile e onore. E questo solo a due fini: uno pella utilità e l'altro per fama.

building. Architectural ideas require impetus drawn from the patron's voluntà for their realization, but they do not imitate it as such.

The architect who views his task as fundamentally mimetic, then, is confronted with something of a dilemma. He may imitate the models bequeathed to him by history, but if the mandate he receives from his patron demands some sort of response not well anticipated by previous builders, he has no recourse to nature for refreshment, since the essential forms of architecture do not imitate those of nature. In Plato's seminal account of mimetic making, however, a craftsman does not imitate either nature or an extant model.²⁵⁷ In the first half of Book X of his Republic (595c-603d) Plato argues instead that a craftsman imitates an είδος (Latinized as eidos) or ίδέα (Latinized as idea), which terms were in Plato's day "more or less synonymous." As I purport to show below, Plato's account is problematic, because the overall structure of his reasoning is circular. He explains making in general—poesis in Greek—by calling it a kind of mimesis, but he then explains mimesis by calling it a kind of poesis. Such circularity suggests that the theory of imitation is able to illuminate human facture only when complemented by exogenous and unacknowledged explanatory concepts. Importantly for our purposes, Socrates conflates in his discussion of poesis insights drawn from three kinds of facture—from manufacture, from painting, and from (Homeric) poetry. While Socrates's arguments seem fairly secure when he ponders the products of painting and poetry, his assertions seem much more problematic when applied to the case of manufacture. Although Plato does discriminate between poesis as manufacture—the making of buildings falls under this case—and poesis as painting or poetry, he does not attend very carefully to the specific character of manufacture. And yet, Socrates opens his discourse by with the case of making couches, which

²⁵⁷ Cf. Summers's tersely articulated, but wide-ranging, reflections on the same issue in *The Judgment of Sense*, 261-62.
²⁵⁸ H. C. Baldry, "Plato's 'Technical Terms," *The Classical Quarterly* 31, 3/4 (1937): 141, esp. n. 2.

effectively posits tangible manufacture as the primordial form of poesis. We grasp the meaning of painterly and literary imitation, in other words, by comparing them to handicraft, which illuminates them by dint of its greater simplicity. I will show that Plato's theory of imitation does not make sense for the case of manufacture—and *eo ipso* for architecture—unless we reformulate our conventional interpretation of the Ideas in line with the findings of a philological study of the basic terms of Plato's account.

Poesis and Platonic Mimesis

The first half of Book X of the *Republic* comprises a dialectical dialogue between Socrates and Glaucon, in which the principal subject is an exploration of the meaning of μίμησις (Latinized as *mimesis*). Socrates launches his investigation of mimesis by establishing the notion of a natural *eidos* or *idea*:

[Socrates:] "For we are, presumably, accustomed to set down some one particular form [εϊδος] for each of the particular 'manys' [πολλά] to which we apply the same name. Or don't you understand?"

[Glaucon:] "I do."

"Then let's now set down any one of the 'manys' [πολλών] you please; for example, if you wish, there are surely many couches and tables."

"Of course."

"But as for ideas [$\dot{l}\delta\acute{\epsilon}\alpha$ l] for these furnishings, there are presumably two, one of couch, one of table." ²⁶⁰

Each *eidos* or *idea* finds natural expression in language through an abstract name (or noun). The world—which comprises both things found *sui generis* in nature (men, women, trees, stones,

²⁵⁹ All of my citations are to the second edition of Allan Bloom's excellent English translation of sections 595c-603d of Book X of Plato's *Republic* (pp. 277-87). While I have left Bloom's text unchanged, I have inserted crucial Greek terms and phrases in square brackets immediately after the respective English terms that Bloom has used to translate them. I focus on terms having to do with making, imitation, ideality, and appearance.

etc.) as well as things made by humans (couches, urns, houses, etc.)—divides naturally into classes or kinds that correlate with nominal distinctions in language. We recognize such natural classes or kinds, and are therefore able to name them, on the basis of their phenomenal appearance or "look."

In Plato's time, according to Gerald Else, the Greek terms *eidos* and *idea* both meant "originally and predominantly *visible form or figure*, especially that of a living creature; not, however, in the limited sense of 'body,' but including the whole external guise or appearance – shape, complexion, look, manner, actions."²⁶¹ The original meaning of *eidos* and *idea* meant something close to "likeness," although in a quite particular—and exquisitely subtle—sense. Else indicates this primary meaning through triangulation, using the terms *guise*, *form*, and *token* serving as vertices. While the basic sense is clear enough, I find that the English term *look*—as in the colloquial phrases, "the look of a thing," and "that's a good look for you"—most closely approximates this first meaning. A child need not don an authentic monkey pelt in order to imitate a monkey. Rather, she can "become" a monkey simply by imitating the most saliently typical behavior, manner, and expression of such monkeys as she has seen (or seen imitated by others). What she is imitating is not the monkey itself, but rather the monkey's *look*.

Else also identifies a second meaning of the words *eidos* and *idea*, which belonged to the technical lexicon of Hippocratic medicine, in which they "meant *species*; but by a natural extension they were applied also to the genera themselves, and so could be used to mean 'a natural class,' 'a kind of thing.'" Mushrooms would be a naturally occurring kind or class of thing—the abstraction of which would constitute an *eidos* or *idea* in its own right—but of course such a class obviously admits of subdivision. Morels, chanterelles, and portabellas, as naturally

²⁶¹ Gerald Frank Else, "The Terminology of the Ideas," *Harvard Studies in Classical Philology* 47 (1936): 18-19. ²⁶² Else, "The Terminology of the Ideas," 19.

occurring subspecies of mushroom, have their own respective looks—their own eide and ideai. In the Hippocratic sense, the rubrics of *eidos* and *idea* do not refer to the things themselves. The eidos or idea of morels does not mean the closed, complete, and material set of all the molecules that comprise all the earth's morel mushrooms. Rather, this sense of eidos or idea means the open set of things that, because they share a common look, constitute a natural subset or kind, where the naturalness of the set lies at the crux of the conception. An eidos or idea does not consist in some list of material differentiae that would make it possible to articulate exactly those ways in which, say, a morel is not a chanterelle. Again, the eidos or idea of a morel consists in its look, which in the Hippocratic sense concerns the fact that eide or ideai are abstract in that many particular things can share one look. The practical test of the distinctness of an eidos or idea in this respect is that morels are specifically findable; mushroom hunters can find and gather morels while avoiding all other kinds of mushrooms. ²⁶³ Else summarizes this second meaning with the term "species,' with the extended and vaguer sense of 'kind of thing,' 'natural class.'",264

The subtleties of these meanings, which figured crucially in the development of Plato's notion of the Ideas, have become obscured beneath centuries of commentary that have tended to treat Plato's exposition as definite and his authority as definitive. A comparatively recent concept—not extant in Plato's day—that clarifies the original meaning of eidos and idea is that of quality. H. C. Baldry surveys the whole development of Plato's epistemology in its lexical context and concludes,

²⁶³ When author Michael Pollan goes hunting for morel mushrooms for the first time, he does not have to study photographs of morels or memorize a list of the mushroom's distinctive physical traits. Instead, he must habituate his looking, his seeing, to the eidos or idea of morels, where such an eidos or idea is understood as an indivisible and unanalyzable unity. See Michael Pollan, The Omnivore's Dilemma: A Natural History of Four Meals (New York: Penguin Press, 2006), 378-90. An eidos or idea is neither an anatomy nor a mental picture; it is a kind of situation or circumstance in which the forest, the morel, the eye, and the mind all participate—a situation that has its psychological unity in the basic, prereflective capacity of the eye to "find" things. ²⁶⁴ Else, "The Terminology of the Ideas," 20.

[W]hen we remember the Greek tendency to regard value as a matter of symmetry or balance or form, and the Pythagorean habit of representing numbers by patterns, it becomes credible enough that Plato should have set 'the good' or 'the just' or especially 'the beautiful' alongside 'twoness', 'threeness', and so on, not at this stage identifying the numbers and the values, but looking on both alike as perfect patterns, different, as Socrates had shown values to be, from any of the phenomena of sense, but open to contemplation as objects of the mind. And to fit such 'quality-patterns' he could find no more suitable terms than $\epsilon i\delta o \varsigma$ and $i\delta \epsilon \alpha$.

Construing the ethical concepts so interesting to Socrates (the Pious, the Just, and so on) as analogous to the numbers so interesting to the Pythagoreans (where each number is taken to mean something like "twoness" or "threeness"), Plato articulates a unified ontology of *qualities* able to ground both ethics and quantity. The suitability of the terms *eidos* and *idea* for refinement into keystone concepts in Plato's philosophy reposes firstly upon the supposed naturalness of the classes or kinds that they indicated, and secondly upon the hypothesis that the cosmos consists not in things themselves, but in the *qualities* that things express.²⁶⁶

With this philological context in mind, let us return to Socrates and Glaucon, who have just agreed that *eide* and *ideai* constitute natural, or least customary, classes. Socrates begins his consideration of *mimesis* by creating an equivalence—achieved through a somewhat tendentious use of the verb ποιεϊσθαι ("to make," "to fabricate"; Latinized as *poeisthai*)—between the concrete making of a couch, the "making" of images by one who carries around a mirror, and the painting of pictures. After introducing this equivalence, Socrates immediately admits that his use of the verb *poeisthai* for all three cases is not entirely fair, and he suggests that the verb μιμεϊσθαι ("to imitate," "to represent"; Latinized as *mimeisthai*) be used to distinguish the activity of the painter and the catoptromaniac from that of the craftsman. The painter and the catoptromaniac do not make fully realized things; they only make the phenomenon

²⁶⁵ Baldry, "Plato's 'Technical Terms," 144.

²⁶⁶ Following the interpretation here outlined, Plato's theory of the Kinds can accurately be described as a natural ontology of quality. Such a description aligns my interpretation of Plato's metaphysics with that advanced by Robert Pirsig in his *Zen and the Art of Motorcycle Maintenance: An Inquiry into Values* (New York: Morrow, 1974).

[φαινομένην]—the (visual) *appearance*—of a thing, as distinct from its truth or being. Even after positing this distinction, however, Socrates maintains that "in a certain way the painter too does make [ποιεϊ] a couch." Socrates, in short, defines *mimesis* as a kind of *poesis*—specifically, as the making of *phenomena* or (visual) appearances.

Having defined mimesis as a kind of poesis, Socrates goes on to consider the activity of the poets, and more specifically the case of Homer. (The primary meaning of the term *poet* is, of course, "maker"—one who practices *poesis*. ²⁶⁸) Socrates explicitly identifies Homer as "the maker of the phantom [εϊδωλον δημιουργός], the imitator [μιμητήν]."²⁶⁹ Plato thus defines an imitator succinctly as a kind of craftsman or maker, who by definition practices a kind of *poesis*. The basic definitions that Plato has developed end up generating, in the case of poetry at least, an apparent paradox. He defines *mimesis* as a kind of *poesis*—imitation means the making of appearances—even while defining poetry (i.e., *poesis*) as a kind of *mimesis*—the poet uses language to imitate real things. But perhaps Plato intends that we should treat the two main definitions of *poesis*—namely, "making" and "poetry"—as distinct semantic fields. Berthold Hub has convincingly shown that Plato's opinion of the ontological and epistemological status of poetry, particularly as articulated in the text under consideration, is representative of his position vis-à-vis the arts in general, but this may be beside the point. ²⁷⁰ Plato's main goal, as the tradition of commentary teaches us, seems to be the establishment of an ontological hierarchy that has Ideas, which are real and true, at the top. The Ideas serve as the primary point of reference for the

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²⁶⁷ Plato, *The Republic of Plato*, 279 = 596e.

²⁶⁸ LSJ, s.v. "ποι-ητής."

²⁶⁹ Plato, *The Republic of Plato*, 284 = 601b.

²⁷⁰ See Berthold Hub, "Platon und die bildende Kunst: Eine Revision," *Plato* 9 (2009), electronic article: http://gramata.univ-paris1.fr/Plato/spip.php?article87. Hub's argument revolves around Plato's parallel conceptions of painting and poetry (and indeed all representative arts) as producing "the μίμησις of a μίμησις." As further evidence in favor of Hub's reading, I submit Plato's failure in Book X of the *Republic* to discriminate disciplinedly among various kinds of material making. Fabricating a couch, holding up a mirror, painting, generating animals, composing poetry, making phantoms, and even creating the cosmos are all defined using a highly homogenous lexicon. Any given verb might be used to describe one, several, or all of these activities.

craftsman, the secondary point of reference for the painter, and the secondary or even tertiary point of reference for the poet. Plato thus praises the Ideas, equivocates concerning crafted objects, condemns painting, and utterly scorns poetry.

The situation of the couch-maker (who belongs to the same class as the builder), who works at a single remove from the Ideas, remains obscure. As Plato has it, the poet, the painter, and even the catoptromaniac (in his way) all "make" phenomena in the sense that they make something (which is not materially present) appear to others.²⁷¹ The couch-maker, on the other hand, quite literally makes a real couch, and so we can reasonably call such activity mimetic only to the extent that the actual couch produced also counts as a phenomenon. In Socrates's account, the couch-maker's production is guided by some perception or knowledge of the general Idea of a couch. "Aren't we also accustomed to say that it is in looking to the idea [ίδέαν] of each implement that one craftsman [δημιουργός] makes [π οιε \tilde{i}] the couches and another the chairs we use, and similarly for other things? For presumably none of the craftsmen [δημιουργών] fabricates [δημιουργεϊ] the idea [ίδέαν] itself.",272 The couch-maker uses an Idea to orient his facture, but he does not make that Idea. 273 When Socrates says that the couch-maker "looks to the Idea" of the couch, we know that he is speaking figuratively, for the Idea of the couch is by definition not phenomenal—not available to sense perception. A painter who paints an idealized landscape, however, or a poet who recounts an ideal drama both work, as it were, from an extant

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²⁷¹ The flaccidity of my attempt to describe in general, concise, and anodyne terms what it is Plato's "imitators" actually do shows just how subtle these issues are. The whole force of Plato's argument depends on the elasticity of the verb *poeisthai*—to make—which literally refers to material manufacture, and which he has here used to describe both the painterly production of visual similitude and the literary induction of mental images. In his defense, one uncommon meaning of the English verb *to produce* is "to make appear," as we might say that a magician has "produced" a handkerchief when we mean simply that he has made it appear, not that he wove its fabric or sewed its seams. It is clear that the meanings of literal production and causing to appear are deeply entangled, but this does not, of course, imply their identity.

²⁷² Plato, *The Republic of Plato*, 278 = 596b.

²⁷³ While the question of whether or not—to say nothing of how—the craftsman can be said to make his own mental models is slippery, we can affirm with certainty that no individual craftsman ever invented the concept of *couch* or *table*. However unrefined, these concepts and others like them must have belonged collectively to a culture and its associated language before any individual craftsman could use them productively.

matrix, from tangible things whose appearances are adjusted or embellished. The theory of imitation can thus provide a credible mythology of origins for painting and poetry, because a painter or poet can always refer to a schematic model that he did not make. The first painting of a tree and the first poem describing a tree certainly had actual models available for imitation. If there was assuredly a first couch, then there was equally assuredly a first couch-maker. Since we must, however, presume that the maker preceded his product, we must also assume that our mythical couch-maker worked without a tangible model. To say that the first couch *resembled* some extant Idea renders the meaning of the verb *to resemble* impossibly vague. Ultimately, the theory of imitation cannot provide a credible mythology of origins for the craftsman, precisely because it cannot satisfactorily explain, as we might say nowadays, where or how the inventor of the first couch found his idea.

Further, the manifest fact that couches differ among themselves suggests that whatever a Platonic Idea is, it cannot be either a precise blueprint or a detailed description. ²⁷⁵ Even beyond such negligible differences as applied decoration, minor variances in proportion, assorted materials, and the like, couches can differ to the extent that the only commonality would be a mere inkling of similar *use*—reclining, perhaps. And if we transpose the discussion to the more

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²⁷⁴ A sharp observation by P. G. Walker, quoted to memorable effect by Carlo Cipolla, seems relevant here: "Because we see the machine reshaping society and changing men's habits and ways of life, we are apt to conclude that the machine is, so to speak, an autonomous force that determines the social superstructure. In fact, things happened the other way around.... The reason why the machine originated in Europe is to be found in human terms. Before men could evolve and apply the machine as a social phenomenon they had to become mechanics" (P. G. Walker, "The Origins of the Machine Age," *History Today* 16 (1966), 591-92, quoted in Carlo M. Cipolla, *Before the Industrial Revolution: European Society and Economy, 1000-1700*, trans. Marcella Kooy and Alide Kooy (Norton: New York, 1976), 171).

⁽Norton: New York, 1976), 171).

275 In her discussion of the human production of a durable world of artificial objects, Arendt asserts that "[t]he actual work of fabrication is performed under the guidance of a model in accordance with which the object is constructed. This model can be an image beheld by the eye of the mind or a blueprint in which the image has already found a tentative materialization through work. In either case, what guides the work of fabrication is outside the fabricator and precedes the actual work" (Arendt, *The Human Condition*, 140). Arendt goes on to cite Book X of the *Republic* in order to suggest that her "mental models" are more or less equivalent to Platonic Ideas. Arendt's "mental models" exhibit two clear analogies with Plato's Ideas: firstly, mental models exist independently of any particular craftsman, and secondly, mental models are ontologically stable, such that they are not "used up" when they are apprehended. Arendt's unselfconscious use of eidetic terms such as "image," "eye," and "blueprint" shows how thoroughly modernity has interpreted Plato's Ideas as mental images.

telling and more germane example of houses, we see that they can differ among themselves so markedly that it would be extremely challenging—not to say impossible—to define the category concisely. Even a single builder or architect can vary ad infinitum the houses that he makes, and indeed, we generally consider it a preeminent mark of excellence for an architect to vary his works intelligently and sensitively according to the various exigencies of the situations in which he works. An architect who always built the same house, or even who always built more or less the same house, making only superficial changes, would hardly merit his professional title. We do not, as a rule, view architectural variety as the result of architects memorizing large catalogs of possible buildings, which unflatteringly presumes that architects operate rather like blueprint vending machines. On the contrary, we suppose that architects curate a small collection of highly versatile schemata, and that they select an appropriate one and adapt it in response to the situation of the project at hand. The problem of novelty, of how a human maker can find a model that can orient his introduction of something new into the world, thus turns out to be coextensive with the problem of variety, of how a human maker can use a model to orient his making of any one of an infinite number of possible incarnations.

Creating Variety

The issue of variety leads us back to Filarete, for one of the longest passages in the *Libro* that reflects on the general underpinnings of architecture focuses precisely on the origin and meaning of variety. Filarete begins, intriguingly, with the biological fact of *human* variety: "No one can deny that there are many different kinds [*generazioni*] and persons and *qualità*: the beautiful and the less beautiful, the more beautiful, and the rich and the poor, the poorer and the richer, the old and the young and the middle aged, and the deformed and the lame, and many

various manners and states and forms." The physical and the social constitute the two great fields of human variety for Filarete, although the final clause of this remark suggests an inclination to be ecumenical should other axes of human variety present themselves. Throughout the passage as a whole, Filarete insists that no matter how great the apparent difference between two men—even men of the same tribe—close examination will ultimately reveal differences. In essence, Filarete posits as a certainty the existence of some observable distinction between any two given individuals. Filarete interprets visible or phenomenal distinction as evidence of ontological distinction, so that atomic human variety makes manifest an inexorable, theological truth: "I believe that God made it for greater beauty: that is, [God made] so many kinds [generazioni] of men who are and have been and will be, [who] do not resemble one another completely in every particular." God varies humans first and foremost for "greater beauty" [più bellezza], but there are other reasons as well: "I believe that God showed this variety and dissimilitude in human generation, as also in animal [generation], to demonstrate his great power and wisdom, and also, as I have said, for greater beauty."²⁷⁸ The diversity manifest throughout God's creation (although Filarete admits that the individuals of some species of animals are difficult to tell apart) testifies to the creator's "power and wisdom."

Natural variety evidences divine intention in the divine creation of the cosmos, which makes it a crucially important guide for human makers. "God therefore wished that man, as he was made in the image of [God's] likeness, participate [therein] by making something in his

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²⁷⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 25 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: Non si può negare che sono molte e varie generazioni di persone e qualità: e di belli e di men belli, di più belli, e di ricchi e di poveri, di più poveri e di più ricchi, di vecchi e di giovani e di mezzo tempo, e di contrafatti e di zoppi, e di molte varie maniere e stati e forme.

²⁷⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 25 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: [C]redo che Idio lo facesse per più bellezza, cioè che tante generazioni d'uomini che sono e sono stati e saranno non si somigliano l'uno l'altro totalmente in ogni particularità.

²⁷⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 26 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: Sì che credo che Idio, come che mostrò nella generazione umana e anche nelli animali brutti questa variatà e dissimiglianza per dimostrare la sua grande potenza e sapienzia, e anche, com'io ho detto, per più bellezza.

[own] likeness through the intellect that [God] has granted him."²⁷⁹ Several aspects of this seemingly innocuous assertion are noteworthy. Firstly, while Filarete gives the standard trope of man being made in God's image—the paradigmatic example of mimetic making in the Judeo-Christian tradition—he does so in a context that celebrates the atomistic diversity of human individuals. Filarete portrays God as having created infinite human variety on the basis of a single "image." Secondly, Filarete claims that humans participate in their own similarity to God (by which I understand him to mean approximately, "to actualize their latent divinity") by *making*, and more specifically by making as God makes: producing variety on the basis of a single model. And thirdly, Filarete identifies as the mental faculty by which a maker apprehends and evaluates likenesses the intellect, the faculty of *understanding*.

In this instance, Filarete seems to use the term *intelletto* as a synecdoche for the whole human psyche, for while he generally grants the intellect the power to grasp similitudes, he specifically credits "human *ingegno*" with the power to generate variety, which at bottom equates to the power to generate novelty. "[God] has thus granted to human *ingegno*, since man does not know whence he comes, that no building has yet been made that is totally like another." The obscurity of the prehistorical origins of human culture, coupled with the final mystery that occludes the origin of each individual human life, together constitute a universal human condition: the uniqueness of every human situation demands a unique, and therefore

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²⁷⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 26 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: Volse adunque Idio che l'uomo, come che in forma la immagine sua fece a sua similitudine, così <e> partecipasse in fare qualche cosa a sua similitudine mediante lo 'ntelletto che gli concesse.

²⁸⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 26 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: [C]osì ha concesso allo ingegno umano, messo che l'uomo non sa da che si venga, che non sia fatto ancora uno edificio che totalmente sia fatto propio uno come un altro.

novel, response.²⁸¹ For Filarete, the paradigmatic human response to the condition of diversity is making; and building is the most epitomic—or at least the most useful—kind of human making.

I explained to you [that] the building is to be made in human form and likeness [similitudine], so that you see in buildings the same effect. You will never see any building, or truly, any home or habitation, which is totally like another, whether in similitude or form or beauty. One is large, one is small, one is middling [sized], one is beautiful and one is less beautiful, one is ugly and one is extremely ugly, like man himself.²⁸²

The variety of human buildings derives from, and thereby makes manifest, the divinely ordained condition of human diversity.

Filarete pushes further, identifying within these diversities a more refined economy of correlations. In his view, certain varieties of buildings—that is to say, identifiable species within the genus "buildings"—correspond to certain varieties of humans. The Architect explains:

"[T]here are many qualità of buildings just as there are many qualità of men, as was said earlier. You [already] understand well what is of higher [maggiore] qualità and more dignified. As there are men who are more worthy than others, so likewise with buildings, according to their inhabitants and uses; and as men should be dressed and adorned according to their dignity, so likewise with buildings."²⁸³

The correlations that Filarete highlights here are neither functional (for example, correlating students with schools), nor religious (Muslims with mosques), nor even nationalist (Arabs with minarets). Rather, they are based on a fusion of aesthetic norms (of beauty), social norms (of

Arendt argues against construing human freedom in terms of *choice*, urging instead that it should be construed in terms of entrepreneurship, in beginning something new. For Arendt, free action depends upon the two biological facts of human natality—all humans are born into an extant world—and human plurality (a close approximation of variety as Filarete understood it)—each human is perfectly unique. "The new beginning inherent in birth can make itself felt in the world only because the newcomer possesses the capacity of beginning something anew, that is, of acting" (Arendt, The Human Condition, 9). The newcomer, however, can begin something novel only because she is herself an original: "The fact that man is capable of action means that the unexpected can be expected from him, that he is able to perform what is infinitely improbable. And this again is possible only because each man is unique, so that with each birth something uniquely new comes into the world" (Arendt, *The Human Condition*, 177-78). ²⁸² Filarete, *Trattato* (Finoli and Grassi, eds.), 26 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: Così ti do lo edificio sotto forma e similitudine umana essere fatto; e che così sia tu vedi nelli edifici questo medesimo effetto. Tu non vedesti mai niuno dificio, o vuoi dire casa o abitazione, che totalmente fusse l'una come l'altra, né in similitudine, né in forma, né in bellezza: chi è grande, chi è piccolo, chi è mezzano, chi è bello e chi è men bello, chi è brutto e chi è bruttissimo, come ne l'uomo propio.

283 Filarete, *Trattato* (Finoli and Grassi, eds.), 189-90 = Filarete, *Treatise* (Spencer, trans. and ed.), I:84.

wealth and class), and ethical norms (of human goodness). In subsuming all of the qualitative axes that Filarete appears to have in mind beneath a single rubric, one is tempted to risk the adjective *moral*, with the caveat that it be taken in its least restricted meaning of cultural mores (a meaning still alive in the modern French word *moeurs*). Given the ponderous freights with which Protestantism has loaded the English term *moral*, however, it is important to provide some ballast by following the clue contained in Filarete's nickname, which suggests a meaning more concerned with the ethics of personal excellence than with normative standards of behavior. In Aristotelian ethics, the Greek term φρόνησις ("practical wisdom," Latinized as *phronesis*) refers to the key intellectual faculty that enables human excellence.²⁸⁴ Interested primarily in architecture that conduces to and celebrates human excellence, Filarete views the job of the architect as the *phronetic* management of the variation that naturally occurs in manufacture so that it correlates appropriately with human variety.

Much of the architect's task, given this ontological situation, consists in coordinating the appropriate variety of building and the appropriate variety of person: "All of these buildings are dedicated to various kinds [generazioni] of persons and should be built variously according as propriety [proprietà] dictates." Insofar as this insight constitutes something like a theory, we might well agree with John Onians's assertion that "[t]he strength of Filarete's theory resides in its foundation on the simple premise that the forms and relationships found in architecture

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²⁸⁴ While the overall contours of Aristotle's ethical theory are well known, the reader who desires an overview of or a refresher on the subject may refer to Rosalind Hursthouse, "Virtue Ethics," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, http://plato.stanford.edu/archives/sum2012/entries/ethics-virtue/. For some indications of the crucial linkages between phronesis and making, see Alberto Pérez-Gómez, "Ethics and Poetics in Architectural Education," in *Architecture, Ethics, and the Personhood of Place*, ed. Gregory Caicco (Lebanon, NH: University Press of New England, 2007), 123-25.

²⁸⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 49 = Filarete, *Treatise* (Spencer, trans. and ed.), I:20: Tutti questi edificii sono dedicati a varie generazioni di persone e variamente debbono essere edificati secondo che la proprietà richiede.

correspond to and depend on similar forms and relationships in man and society." The ontotheological fact of a moral correspondence between buildings and humans requires that the architect, who aims to produce a work that coordinates their interaction, have at his disposal a moral standard. Just so, Filarete subjects the edificatory and communicative exigencies of architecture to the mandate of *propriety*—a synonym for the cardinal rhetorical canon of decorum, which refers to the rhetor's responsibility for finding words suitable to the kairos.²⁸⁷ Filarete's reference to propriety creates a moral hinge between his onto-theological observations about variety and his implicit valorization of the architect as similar to God in his ability to make. Such a position provides a theological ground for Vitruvius's observation that "the perfection of all works depends on their fitness [proprietate] to answer the end proposed, and on principles resulting from a consideration of nature itself." Propriety is one of the essential canons of human making, but where both Vitruvius and Filarete take cues from nature, Filarete reads the visible order of nature as an indelible symbol of God's creative intention. Filarete thus claims that humans inevitably make as God makes, which is to say, variously—but human making becomes good proportionally as it appropriately correlates humanly made variety (e.g., houses) with divinely made variety (i.e., persons).

Renaissance Idealism and Invention

It is important to stress that Filarete was not alone during the Quattrocento in reflecting on the issue of variety. Kemp's wide-ranging study of Quattrocento diction concerning artistic activity shows how the constitutive vocabulary of that discourse shifted over the course of the

²⁸⁶ John Onians, "Filarete and the « Qualità »: Architectual and Social," AL XVIII, 38/39 (1973): 191.

²⁸⁷ On the Renaissance assimilation of the Vitruvian term *decor* into the rhetorical concept of *decorum*, see Payne, *The Architectural Treatise*, 53 ff.

²⁸⁸ Vitruvius, *On Architecture*, 216-17 = IV.ii.6: Omnia enim certa proprietate et a veris naturae deducta moribus transduxerunt in operum perfectiones.

century away from (the classical) lexicon of imitation and toward (the more Romantic) lexicon of invention and imagination. 289 Kemp rightly assesses Filarete's treatment of fantasia or imagination as a crucial contribution to this shift. But Filarete's assessment of variety—as simultaneously an empirically verifiable, theologically ordained fact and a signal of the phronetic character of human facture—constitutes another important contribution. The concept of variety played important roles in both rhetorical and artistic contexts in the Quattrocento. In the second book of his treatise on painting, for example, Alberti stresses the importance of "variety" and "copiousness" (varietas and copia in Latin) as crucial qualities of a good painting—and more particularly of a good *istoria*. ²⁹⁰ In his learned study of Alberti's work as an architect, Anthony Grafton discusses at some length the great humanist's conceptual and lexical debts to rhetoric, mentioning by name the principles of "variety" and "copiousness." One broad conclusion of Grafton's study is that much of Alberti's innovativeness results from his adaption of rhetorical terms and concepts for use in discussing artistic practices and works. Alberti's invocation, in the domain of painting, of variety and copiousness as prophylactics against the aesthetic fault of taedium ("tediousness") stems directly from analogous recommendations to orators that were of long standing in the rhetorical tradition. ²⁹² Filarete's interpretation of variety thus reads quite convincingly as an attempt to replant a concept native to pagan rhetoric in a Christian ontology. The crucial difference is that for Filarete, variety in architecture does not merely defend against visual or kinetic tedium, but reflects and respects divine precedent.

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²⁸⁹ Kemp, "From 'Mimesis' to 'Fantasia.""

²⁹⁰ Leon Battista Alberti, *On Painting*, trans. John R. Spencer, Rev. (New Haven: Yale University Press, 1966), 75-77 and 82.

²⁹¹ Anthony Grafton, *Leon Battista Alberti: Master Builder of the Italian Renaissance*, (New York: Hill and Wang, 2000). 116.

²⁹² For a concise summary of the classical tradition of the concept of *varietas*, see Mary J. Carruthers, "*Varietas*: A Word of Many Colours," *Poetica: Zeitschrift für Sprach- und Literaturwissenschaft* (2009): 35-37, esp. n. 5.

Still, Filarete remains rather vague about how the architect is able to create multifarious buildings in imitation of God's creation of multifarious humans, simply naming human ingegno, without further comment, as the faculty of formal architectural generation. Filarete often uses the term *ingegno*, as he does in this case, rather casually in the sense of "ability" or "talent," but the word plays several other roles in the *Libro*, the set of which makes for a fascinating semantic constellation. As I shall scrutinize Filarete's notion of *ingegno* in Chapter 7, it is sufficient at this point to know that the Latin word ingenium—the root of the Italian word ingegno—played a pivotal role in humanist discussions of poetic and rhetoric. Michael Baxandall has shown how, in the Renaissance discourse on literary production and criticism, the Latin term *ingenium* ("inborn talent") became indissolubly paired with the Latin term *arte* ("art"), such that the former took on a more restricted meaning of "inborn literary talent" and the latter a more restricted meaning of "literary training or education." The bond between this pair of terms was so strong that praising an author's *ingenium* without also praising his *arte* was tantamount to criticizing the latter. The *ingenium-arte* pairing was further aligned with the venerable distinction between res—the subject or matter of a speech—and verba—the words or form in which the orator clothes the res. The rhetorical canon of *Inventio* treats the res most directly, while the canon of Elocutio treats the verba most directly. The finding or discovery of viable arguments and "things to say" upon a subject was therefore strongly associated with natural talent, while the "clothing" of one's point in suitably styled words was associated with formal training. Since Baxandall demonstrates that the the *ingenium-arte* pairing passed into the vernacular²⁹⁴, we may suppose

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²⁹³ Michael Baxandall, *Giotto and the Orators: Humanist Observers of Painting in Italy and the Discovery of Pictorial Composition, 1350-1450* (Oxford: Clarendon Press, 1971), 15-17. Baxandall's overall objective is to show how the rhetorical concept of *compositio*—which controls *varietas* and *copia* so that they do not simply amok and become chaotic and disorderly, thereby defeating their very purpose—was able to leap to the domain of painting and the visual arts more generally. The modern meaning of the *composition* of a painting, image, or collage descends from rhetoric via a concern to manage the infinite variety available to the human maker.

²⁹⁴ Baxandall, *Giotto and the Orators*, 16.

that Filarete's citation of *ingegno* as the source of formal architectural diversity would have struck his intended audience as an attempt to explain the generation of architectural variety as primarily a function of the architect's personal talent.

Although Filarete uses the terms *ingegno* and *invenzione* with moderate frequency in his *Libro*, his professional successor in Milan, Francesco di Giorgio Martini, uses the same terms with great zeal and regularity in his *Trattati*, which argues strongly for reading Filarete's work as part of a larger cultural development in which rhetorical terms evolve into core artistic and architectural concepts. Appealing to the aforementioned study by Baxandall, Pari Riahi situates Francesco's terminology for architectural ideation within precisely the same intellectual tradition that I have situated Filarete's—namely, the tradition of rhetoric. ²⁹⁵ Francesco's adaptation of rhetorical terms was both freer and fiercer than Filarete's in that he nominates *invenzione* as the autonomous mental faculty that enables artists and architects to generate infinite variety. ²⁹⁶ The power of *invenzione*, for Francesco, reposes atop the intellect's ability to discern salient differences, the cleavages of which essentially determine the structure of the world. In so many words, Francesco argues that *invenzione* depends upon the incisive discernment of Ideas, in the latter term's original pre-Platonic sense of essential "look" or "species."

Not all differences or varieties count in this regard. Kemp explains that Francesco distinguishes sharply between the pseudo-architectural works of animals such as swallows, bees, and spiders (in which considerations he is following Thomas Aquinas, who is in turn glossing Aristotle) such that "animal products are invariable and stereotyped, unlike the inventions of

²⁹⁵ Riahi, "Ars et Ingenium," esp. 86-99.

²⁹⁶ For a rich discussion of Francesco's original and important conception of "infinite" inventiveness, see Kemp, "From 'Mimesis' to 'Fantasia,'" 353-55.

man's intellect which are 'quasi infinite, infinito varia' ['almost infinite, infinite variety']."²⁹⁷ Certainly each spider-web is absolutely and radically unique in the way Filarete insists that each house differs from all other houses. Notwithstanding the technical virtuosity each web demonstrates in spanning a particular gap in a particular way, however, spiders construct their webs precisely without regard to the *propriety* of the overall situation. Spiders do not build differently in response to, say, different sorts of prey (the web being, perhaps, indoors rather than outdoors), different weather patterns (following the season), the presence of potential hazards for the web (such as birds or deer), or potential viewers of the web (hikers being more willing, perhaps, to spare a more beautiful web). The spider's making, in short, shows no awareness of the historical contingencies and circumstantial probabilities in which it unrolls in time—no evidence of a phronetic understanding that might promote the mutual improvement of both production and situation. Francesco's "infinite variety," restricted to its proper context of human making, thus means variety manufactured in accord with the infinitely fine requirements of appropriateness, as discerned and pondered by phronesis. If we view Francesco's conception of architectural *invenzione* as a development of some of the more interesting lines of Filarete's thinking, the *Libro* appears as a watershed work in which the artisanal tradition receives one its dispositive justifications in both theological and rhetorical terms.

Res, Verba, and Kairos

For Filarete, good building means the production of atomistic diversity disciplined by the canon of decorum, such that each building suits its owner, its site, the available materials, the

²⁹⁷ Kemp, "From 'Mimesis' to 'Fantasia,'" 354-55, quoting Francesco di Giorgio Martini, *Trattati di architettura ingegneria e arte militare*, ed. Corrado Maltese (Milano: Il Polifilo, 1967), 2:505. Kemp provides the relevant citations in Aristotle (*Physica* 2.8.199a) and Aquinas (*Physicorum Aristoteles Commentaria* 2.13).

skills of the workmen—to sum it all up with one word, its *situation*.²⁹⁸ Contemporary architectural theorists have in recent years adapted the philosophical notion of a hermeneutical situation as a more robust and more nourishing alternative to the comparatively pointed and brittle concept of site. 299 It is important to stress, as David Leatherbarrow does, that "[t]he situation [and] not the setting is the constant human possibility."³⁰⁰ The physical locale or environment constrains a situation along one axis, but a situation's significance extends into additional dimensions as well. The hermeneutic concept of situation attempts to account for the fact that we always find ourselves emplaced within a particular constellation of circumstances. We can extricate ourselves from any particular situation, but we always inhabit *some* situation. Recognizing the inevitability of human situated-ness, contemporary hermeneutics teaches that our sensory horizon, interpretive prejudices, and cultural milieu must have a constructive character, for they constitute the materials out of which we construct our understanding in the first instance. Vesely emphasizes the fulsomeness of a situational approach thusly: "Situations represent the most complete way of understanding the condition of our experience of the surrounding world and the human qualities of the world. Situations also endow experience with durability in relation to which other experiences can acquire meaning and can form a memory

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²⁹⁸ Payne reconstructs nearly the same generative tension between invention—treated under the rubric of *licentia* ("license," as in "poetic license")—on the one hand, and decorum on the other (Payne, *The Architectural Treatise*). Payne nominates *ornament* as the privileged site of contention between *licentia* and decorum, which perhaps provides a partial explanation for why she does not treat Filarete's *Libro* as a primary source, though she does mention it several times in passing. The characters in the *Libro* mention ornament often enough, but few of their comments on the subject are reflective or general. On the contrary, when the term *ornamenti* ("ornaments") appears in the *Libro*, it does so in close conjunction with adjectives like *molti* ("many"), *varii* ("varied" or "various"), and *altri* ("other," as in "[...] and other ornaments"). The singular *ornamento* ("ornament") on one occasion follows *tanto* ("so much") and on another follows *più* ("more"). The overall attitude toward ornamentation expressed in the *Libro* might be most conveniently thematized by the phrase "and so on." Invention for Filarete—and for Francesco as well—concerns the whole conception of building, and although ornamentation comprises an integral part of the building, its relative importance vis-à-vis the whole varies project by project.

The writings of Hans-Georg Gadamer (1900 – 2002) provide the tonic note for the strain of philosophical hermeneutics preferred by most modern architectural theorists. For a sufficiency of references to Gadamer's writings on the subject of situation, especially those relevant to architecture, see Vesely, *Architecture in the Age of Divided Representation*, 372-82.

³⁰⁰ David Leatherbarrow, *The Roots of Architectural Invention: Site, Enclosure, Materials* (Cambridge, U.K.: Cambridge University Press, 1993), 5.

and a history." Situations embody and imply human possibilities in all their fullness, characteristic patterns of constraint, and ultimate unpredictability. Architectural projects modify situations in fundamental ways, so that a situational approach to architectural creation entails not only a responsibility to respect the intricate structure of a situation as given, but also a responsibility to discover within that situation a superabundance of opportunities for amelioration.

One key difference between sites and situations, which Vesely points out, is that the latter actively engage with the issue of time. An authentically human encounter with a site or setting means a thoroughly temporal event—an occasion saturated with the contributions of memory, history, and expectation. The rhetorical concept of kairos, with its specifically temporal tang, again suggests itself as useful. The practical value of the concept of kairos for rhetoric lies in its power to correlate, under the aegis of expedience, the orator's intentions with the momentary particularities of the actual, lived event of the speech as experienced by the audience. Time plays the lead role because speeches themselves are temporally ephemeral. Every oration (and indeed all speech in general)—achieves its effects ex tempore, out of the time it participates. Although tangible, architecture is similarly temporal. In one of his incisive considerations of the materiality of architecture, Leatherbarrow observes that "time is the medium within which the process of [material] articulation is worked out." A kairos refers to a temporality that recognizes not causes, but opportunities—potential beginnings whose uncertainty must be "worked out" in cooperation with non-human powers. As I touched upon in Chapter 3, Filarete holds that astrology is useful for architecture because it finds a propitious moment to begin a project. A good architect, "[w]hen ordering and making something, [should] see that it begins

³⁰¹ Dalibor Vesely, "Architecture and the Poetics of Representation," *Daidalos* 25 (1987): 32.

³⁰² Leatherbarrow, *The Roots of Architectural Invention*, 222.

[principiare] under [a] good planet and under [a] good constellation."³⁰³ The science of astrology supervenes upon architecture insofar as they both participate a temporality of *beginnings* and *endings* as opposed to a temporality of causes and effects.

The several crucial scenes in the *Libro* that involve archeology—a word that literally means, it will be remembered, the reasoned discourse of "principles" or beginnings"—evince the same preoccupation with beginnings and endings, though focused on earthly rather than celestial circumstances. The characters in the *Libro* treat archeological discoveries as an inheritance, which simultaneously figures antiquity as both the origin of and ultimate foil for their own culture. But Filarete also has his characters place a time capsule in the foundations of Sforzinda, which evidences a clear intention to become a similar origin for a future culture. Just as the Golden Book—symbol of a unified notion of antiquity—provides a wealth of worthy beginnings (in the form of architectural ideas) that Filarete's characters continue to "work out" in their own terms, so the analogous Bronze Book is meant to seed the greatness of a future age. Filarete's concern with architectural beginnings finds a counterbalance in his concession of the inevitability of architectural endings. One treasure that Filarete's characters place in the time capsule is a vase decorated with the three Fates, and "upon the vessel is nothing but these two words, namely 'life and death,' [for] this world is nothing but living and dying, and because in the end a city consists only in the term that it has been granted." Filarete, like the rest of the Renaissance, was excruciatingly aware that buildings, and even cities, are in the end as transient as speeches and the events that occasion them. For Filarete, every building emerges ex tempore,

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³⁰³ Filarete, *Trattato* (Finoli and Grassi, eds.), 429 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: «[...] perché quando ordina e fa una cosa, che guardi a principiare su buono pianeto e su buona costellazione.»

³⁰⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 104-05 = Filarete, *Treatise* (Spencer, trans. and ed.), I:45: «[...] in sul

³⁰⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 104-05 = Filarete, *Treatise* (Spencer, trans. and ed.), I:45: «[...] in su vaso non è altro se non queste due parole scritte, cioè «vita e morte», che altro non è questo mondo che vivere e morire, e perché in una città non consiste altro per infino che gli è concesso il suo termine.»

out of the *kairos* that occasions and situates its making. This truth holds equally for the buildings of ages past, the buildings of the current age, and the buildings of ages to come.

Again, a rhetorical *kairos* correlates authorial intentions, which measure their relevance using the subject matter of a speech as the module, with the unity of local and momentary circumstances, which are epitomized by and embodied in the audience. In practical terms, the ability of orators to deliver the "same" speech on different occasions, to different audiences, in different circumstances, depends upon orators being able to *vary* their delivery. Further, orators can also vary their arguments, thereby delivering different speeches on the "same" subject. To conceptualize a *kairos* means to formalize the constraints entailed by the unique constellation of the audience's local and momentary circumstances. A rhetor need not formally articulate the *kairos* of his speech in order for such a concept be effective, because the general concept of a *kairos* merely suggests that the rhetor may improve his performance by attending to the audience's circumstances with an eye to making *use* of the preconceptions and prejudices he is certain to find therein.

The rhetor's ability to vary both his expression and his argumentation relies upon the elemental and traditional rhetorical distinction between the *res*—the subject matter—and the *verba*—the specific words—of a speech. Essentially, rhetoric teaches speakers how to coordinate their intentions and their self-expression by reifying the distinction between the two and then formalizing their relationship. The rhetor is trained to begin by inventing and arranging what he wishes to say, and then to compose a tangible means of expressing that intention, which he can vary as he pleases. The possibility for infinite variety implicit in human manufacture reflects, I would submit, precisely this same distinction between intention and expression. While

³⁰⁵ Another source of variety among the products of human manufacture is what the Renaissance called *maniera* ("manner," as specifically related to the *mano* or "hand" of the artist), which encompasses what we would call

Vitruvius of course does not use the term *verba* (which naturally refers to literary production), he nevertheless endorses the same distinction between authorial intention and means of expression. "As indeed in all things, but especially in architecture, these two [things] belong: what is signified [*quod significatur*] and what signifies [*quod significat*]. The signified is the proposed matter about which we speak; that which signifies nevertheless is a well-ordered demonstration [of what is signified] with well-grounded [*doctrinarum*] reasons." Since the basic distinction between intention and expression is endogenous to traditional architectural practice, my proposal to read it through the rhetorical distinction between *res* and *verba* undoubtedly represents an inflection, but it is hardly an imposition.

While I above cited philosophical hermeneutics as the source of an important insight into the nature of human situated-ness, I want here to change grounds. Hermeneutics addresses authorial intention from the perspective of the *audience*, treating the work itself as a given. From the perspective of the audience, a work arrives as a *fait accompli*—a fixed, kaleidoscopic lens through which the rhetor's animating intention appears refracted in respect, as we might say, to the hermeneut's interpretive angle. Rhetoric, on the other hand—understood as the discipline of effective communication—addresses authorial intention from the perspective of the *rhetor*, who composes and modulates the work in an attempt to bridge the gap between himself and his audience.³⁰⁷ From the perspective of the rhetor, a work represents the culmination of a process

"personal style." I have bracketed this issue for the current discussion, because it speaks to a source of variation that expressly *resists* intention. That is, an artist's products betray his *maniera* irrespective of his conscious intentions. Filarete discusses *maniera* briefly, but he interprets it (rather dismissively) as further evidence of human variety. See Filarete, *Trattato* (Finoli and Grassi, eds.), 28 = Filarete, *Treatise* (Spencer, trans. and ed.), I:12.

³⁰⁶ Vitruvius, *On Architecture*, I:6-7 = I.i.3: Cum in omnibus enim rebus, tum maxime etiam in architectura haec duo insunt, quod significatur et quod significat. Significatur proposita res, de qua dicitur; hanc autem significat demonstratio rationibus doctrinarum explicata.

³⁰⁷ Aristotle famously defines rhetoric as "an ability [δύναμις], in each [particular] case, to see the available means of persuasion" (Aristotle, *On Rhetoric: A Theory of Civic Discourse*, trans. George Alexander Kennedy, 2nd ed. (New York: Oxford University Press, 2007), 37 = I.ii.1 = 1.1.1355b25-26). In Aristotle's own time, however, rhetoric was customarily taught as a techne—a productive art. His definition was—and remains—eccentric to the core of the rhetorical tradition. For some engaging philological conjectures as to his motivations in defining rhetoric

that treated it as the plastic expression of a more or less fixed intention. The distinction between res and verba—between matter and expression—is a maker's distinction. Native to rhetoric, which always employed imitation as one of its preferred pedagogical techniques, the distinction between res and verba also competes on a speculative level with the distinction between model and copy that characterizes the philosophical theory of imitative production.

I hinted earlier that if Filarete's conception of architectural production were essentially mimetic, it might well entail what an unorthodox understanding of mimesis. Filarete obviously holds that architects develop, by some means, what I have called architectural ideas, and that these architectural ideas must be communicated to the workers so that the process of building can proceed toward a unified goal. A building can be built in imitation of a drawing prepared beforehand only because, as I have argued, both artifacts derive from the same architectural idea. Such a drawing is not, however, a copy or imitation of some picture or blueprint in the architect's mind. According to Filarete, the craftsman's ability to use a single model to produce infinite variety corresponds to God's creation of infinitely and atomistically varied humans in his own image. Human manufacture cannot avoid producing variety, but it operates under the obligation to manage its capacity for infinite variety using the canon of appropriateness. The basic generative dynamic that Filarete has described—in which a single model engenders multifarious expressions of itself, the potentially limitless variety of which requires disciplining by decorum—parallels the generative dynamic traditionally recognized as rhetorical.

as he did, see Ekaterina Haskins, "On the Term 'Dunamis' in Aristotle's Definition of Rhetoric," Philosophy and Rhetoric 46, 2 (2013).

In any event, Aristotle's immense authority has been to little avail in this case, since the rhetorical tradition as a whole has more or less ignored his definition, citing it perfunctorily perhaps, but in all significant ways treating rhetoric as a productive art. Indeed, recent scholarship has mustered a number of convincing arguments that demonstrate not only that rhetoric was understood as a techne in Aristotle's day, but that the Peripatetic himself almost certainly viewed it that way was well. See, e.g., Janet M. Atwill, Rhetoric Reclaimed: Aristotle and the Liberal Arts Tradition (Ithaca: Cornell University Press, 1998), ch. 7, and esp. 195, as well as Alan G. Gross, "What Aristotle Meant by Rhetoric," in Rereading Aristotle's Rhetoric.

Notwithstanding the pedagogical utility of imitating the great authors of previous ages, rhetoric in general describes the relationship between model and product using the terms *res* and *verba* rather than original and copy. While it does not *prima facie* greatly illuminate architectural ideas to call them *res*, Mary Carruthers's incisive colloquial interpretation of rhetorical *res* as "gists" transitively clarifies how such seemingly elemental architectural notions as "house" and "monument" and "ornament" and "door" might admit of bold and varied expression. The architect and the patron come up with a *gist*, which undergoes conceptual refinement and material realization in parallel processes that are both thoroughly communicative. Crucially, architectural gists must be understood neither as mental pictures nor as catalogues of differentiae, but rather as *qualitative* inflections of typical human situations.

We make a mistake when we interpret Plato's Ideas as substances in the same way that material bodies are substances. Rather, as we have seen, the Platonic Ideas are (*pace* Baldry) generic *qualities* of human experience. So when Plato says that a couch-maker "looks" to an Idea to orient his facture, we can understand him to mean that the couch-maker refers to the generic experience of *couch-ness*. Used to refer to the overall aspect or look of a thing, the terms *eidos* and *idea* possess indelibly visual connotations. I interpret the visual character of our customary language for discussing ideas functions as a synecdoche for the most salient quality of visual experience, which is the capacity to discriminate among gestalts. Vision is the sense whereby humans find it possible to discriminate most finely among gestalts, but all of the senses are capable of such discriminations, and the unified apparatus of human perception often makes "eidetic" distinctions based upon complexes of sensation irreducible to any one sense. The quality of *couch-ness* admits of reduction to a picture—mental or material—only insofar as that

³⁰⁸ Carruthers introduces the interpretation in *The Book of Memory*, 91. She continues using the term "gist" without much explication in subsequent writings, but a casual perusal of one or two passages in which it appears suffices to grasp the basic notion. See, e.g., Carruthers, *The Craft of Thought*, 36-39 and 119-20.

picture is subsequently apprehended as a synecdoche that *symbolizes* or *evokes* the fully synaesthetic and situated experience of *couch-ness*. Plato's assertion that poesis consists in "imitating" an Idea is not equivalent to insisting on a rigid isomorphism between some "picture" of a couch in the mind of craftsman and some perspectival "view" of the couch once it has been fabricated. Whatever their ontological "remove" from the Ideas, paintings and poems have the power to conjure much of the psychic force of reality, which they accomplish by evoking the gestalt of a typical human situation. A chair suggests sitting, and so too does the painting of a chair, and likewise a poem in which a chair is described. The reality and truth from which all the products of human making draw their virtue is not the material universe of *things*, but the qualitative cosmos of *typical human situations*. The base meaning of the "ideality" of any product of human art is thus its perceived *salience* vis-à-vis some typical human situation.

To say that a builder imitates the Idea of *house-ness* means that he orients his facture in accord with the expectations of a person familiar with how houses are typically used in those situations where houses are typically found. In the context of human facture at least, Platonic Ideas must be understood as canons of *right use*, which is why Plato has Socrates argue that "the virtue [άρετή], beauty, and rightness of each implement, animal, and action [are] related to nothing but the use for which each was made, or grew naturally."³⁰⁹ Deliberate making presumes a typical situation that it aims to *inflect* in accord with the desire—whether hypothetical or explicit—of the *user*: beds are made to be comfortable *because* a comfortable bed is apposite for restful sleep; winter clothes are made to be warm *because* warm clothes are apposite for wearing when it is cold.³¹⁰ Competent craftsmen, of course, make things that respond sensitively to the

Plato, The Republic of Plato, 284 = 601d.

³¹⁰ Cf. Leatherbarrow, *The Roots of Architectural Invention*, 5: "Architectural topics are places where fundamental human experiences are coordinated with typical settings in the articulation of recurring human situations." Cf. also

particularity as well as to the typicality of situations. The Idea of, say, temple-ness does not mean the set of material objects customarily called "temples." Rather, temple-ness refers to a typical human situation in which the canon of current use—in the broad sense of what people actually do and feel as opposed to the narrow sense of what is instrumentally effective in the achievement of an isolated purpose—serves as the overarching guide for the correlate objects. Traditional architectural features such as altars or vaulted ceilings are means by which conventional practices, such as sacrifice and prayer, and expected attitudes, such as reverence and quietude, have been interpreted. Such qualities as temple-ness are thus naturally informed primarily by a culture's traditions, because current, colloquial practices and attitudes are the fruit of cultural history. Formal novelty in architecture is in general useful only when it enriches the dialogue between the gravity of traditional expectations and the urgency of contemporary circumstances. An architect can make a wide variety of houses precisely because he takes his orientation not from a blueprint, but from those typical human situations in which he knows houses to play an important role as well as those uses to which houses are most often put. Vitruvian orthographia, iconographia, and scenographia are not "views" of buildings, but rather symbols of the human situations that give buildings their sense. In Leatherbarrow's illuminating locution, "architecture imitates some human possibility,"311 where human possibilities refer to the potentialities inherent in a given situation—a kairos with full allowance made for both topographical and temporal considerations.

It may be true, as Socrates avers, that no individual architect can make *house-ness*, but no student of history can deny that the Ideas associated with the products of human artifice change in response to the tectonic gyrations of culture. *House-ness*—a place appropriate for human

Vesely, *Architecture in the Age of Divided Representation*, 368: "Paradigmatic situations are similar in nature to institutions, deep structures, and archetypes."

³¹¹ Leatherbarrow, *The Roots of Architectural Invention*, 215.

dwelling—manifestly means something quite different in Solomonic Jerusalem, Augustan Rome, Renaissance Florence, and modern-day suburbia. 312 It is precisely here that Platonic Ideas have less currency than a real architect's particular ideas, because in order to adapt a house to its intended situation, the architect must begin by adapting his own idea of a house. It is the special province of the architect to craft architectural ideas. Two of the most unmistakable marks of skill and experience in an architect are the adroitness with which he adapts his ideas according to the circumstances and the acuity with which he refines his architectural ideas as he learns from experience. Indeed, we would regard as embarrassingly mediocre an architect who did not seize every reasonable opportunity to improve the building he happened to be working on at the moment. And we would regard as hopelessly incompetent an architect who did not refine his basic working set of architectural ideas as his career progressed. Even further, we hold in the highest esteem those architects who imaginatively combine and reformulate their ideas in order to plan and produce buildings graced with especially useful, beautiful, and apposite features, or who (as rarely happens) develop ideas for buildings for which we have to create new categories. Broadly speaking, an architect's ideas can resist somewhat the workaday vicissitudes that lead to unpredictability in the activity of making, so that if he starts out making a house, he never ends up with, say, a rocking horse. But an architect's ideas cannot ignore altogether the extant conditions of his work, meaning that he must improvise to a certain extent as unexpected developments arise, and he must learn from experience. The specific tools through which the architect adjusts, adapts, refines, and in general works upon his architectural ideas are the primary concerns of Chapter 5.

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³¹² We might thus say that while no individual human could generate an Idea, humans generate the Ideas of artificial objects collectively. The Ideas are coeval with both language and the self-conscious remaking of nature in conformity with human preferences—the latter of which is one possible definition of architecture.

CHAPTER 5:

MISURA AND DISEGNO

Scienza in the Libro

Misura and disegno—"measurement" and "drawing"—insinuate themselves into nearly every aspect of Filarete's discourse on architecture and building. Given the ubiquity of misura and disegno in the Libro, Tigler is surely correct to highlight them as two of the work's most crucial themes. According to Tigler, they serve as the primary "theoretical principles" [theoretischen Prinzipien] that undergird Filarete's characterization of architecture as a scienza. "For Filarete architecture has the character — and thereby also the social and intellectual status — of a science, because it is based on certain theoretical principles, among which the principle of 'measure' ('misure') and the principle of 'drawing' ('disegno') have primary importance." Filarete undoubtedly hoped that his Libro should contribute to the cultural revaluation of architecture currently underway during his lifetime. However, when the Architect explicitly speaks of the "scienza of architecture" a formulation that appears only once in the entire Libro—he is clearly citing Vitruvius's definition of architecture as a scientia in his De

³¹³ Tigler, *Die Architekturtheorie des Filarete*, 33: Für Filarete hat die Architektur den Charakter - und damit auch den sozialen und geistigen Rang - einer Wissenschaft, da sie auf gewissen theoretischen Prinzipien beruht, unter denen das Prinzip der »Maße« (»misure«) und das Prinzip der »Zeichnung« (»disegno«) die erste Stelle einnehmen. ³¹⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 557 = Filarete, *Treatise* (Spencer, trans. and ed.), I:257: scienza della architattura. See also Filarete, *Trattato* (Finoli and Grassi, eds.), 46 = Filarete, *Treatise* (Spencer, trans. and ed.), I:19: Dico che l'architetto dee essere onorato e premiato di degno salario conveniente di tale scienza [...].

architectura. To the extent that Filarete intended to formulate the practice of architecture so as to enhance its prestige, he could not borrow credibility from the as-yet undreamed hegemony of modern experimental science. The most accessible source of cultural cachet in his day was the backward-looking project of humanism. It remains, in any case, difficult to discern what the term *scienza* means in Filarete's lexicon, since his usage of it seems quite relaxed. Given the overpowering connotations that cling to the modern term *science*, which Filarete could not possibly have intended to invoke, I have left the Italian term *scienza* untranslated rather than suggest that Filarete's notion of *scienza* was a premeditated forerunner of the modern concept.

Near the beginning of the *Libro*, Filarete frames the relationship between architecture and *scienza* by heaping scorn upon "those who know how to put a stone in lime and daub it with mortar, thinking themselves to be great masters of architecture. If you were to revive Archimedes or Daedalus, who made the labyrinth, [these pretenders] would think themselves more worthy. That which they do, if they do anything, is more [a result] of their practice [*pratica*] than of such *scienza* of *disegno*, of letters, or of *misure* as they may have." Here, Filarete identifies not architecture, but rather its constitutive competences and bodies of knowledge—as it would seem we are meant to take them—as *scienze*. The true architect possess a special kind of knowledge—namely, *scienza*—of *disegno*, of classical letters (which is to say, of the Latin language and its literature), and of *misure*. Pretenders may succeed at producing laudable buildings or architectural features some of the time, but their success comes about not through *scienza*, but through *pratica*, where the difference between the two is that the former achieves its desired ends with greater reliability. At first glance, Filarete's opposition of *scienza* and *pratica* seems to align

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³¹⁵ Vitruvius, *On Architecture*, 6-7 = I.i.1: Architecti est scientia [...].

³¹⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 12-13 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6: [...] questi, come sanno mettere una pietra in calcina e imbrattarla di malta, pare loro essere ottimi maestri d'architettura; e se risucitasse Archimede o Dedalo, che fece il laberinto, pare a loro essere più degni. E quello che fanno, se pure alcuna cosa fanno, è più per una loro pratica che per scienza di disegno o di lettere o di misure che abbino.

neatly with the traditional Aristotelian distinction between deductive knowledge (*episteme*) and practical knowledge (*phronesis*). However, neither drawing ability, nor competency in Latin, nor knowledge of measures qualifies as either episteme or phronesis. On the contrary, within an Aristotelian framework these are all examples of productive knowledge (*techne*). Turther, later on in the *Libro*, when the visiting Lord discuses the reasons for the concomitant decline and rise of antique letters and antique building practice, he argues that the *scienze* associated with building suffered when they fell into disuse, thereby implying that they should be understood as *practices*. "[B]ecause no great buildings were built, because Italy was poor, men were no longer very practiced [*si esercitavano*] in such things. Not being practiced [*esercitati*] men, they did not sharpen their knowledge, and so the *scienze* of these things were lost." It was for lack of *exercise*—that is, for regular *practice*—and not for a lack of sound principles or powers of inference, that "the *scienze* of these things were lost." *Scienza* may be distinct from *pratica*, but Filarete implies that the latter both animates and controls the former.

Careful study of Filarete's use of the rubric of *scienza* throughout the *Libro* reveals that he does not accord it a particularly strict definition, let alone a technical one. He sometimes uses the rubric quite broadly to refer to those arts, disciplines, and crafts that contribute to human civilization. Chapter XVII of the *Libro*, for example, is dedicated to the description (narrated directly from the Golden Book) of the physical form and institutional structure of a school intended to house and nurture twenty to twenty-five children. At the school would be taught "all

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³¹⁷ For a superlative exegesis of these categories of activity and knowledge, see Joseph Dunne, *Back to the Rough Ground: Practical Judgment and the Lure of Technique*, 2nd ed. (Notre Dame, Ind.: University of Notre Dame Press, 1997), ch. 8.

³¹⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 381-82 = Filarete, *Treatise* (Spencer, trans. and ed.), I:175-76: «[P]erché di questi grandi edifizii non si facevano, per cagione che Italia era povera, gl'uomini ancora non si esercitavano troppo in simili cose. E non essendo gli uomini esercitati, non si assottigliavano di sapere, e così le scienze di queste cose si perdono.»

kinds [generazioni] of scienze and exercises [esercizii]."³¹⁹ The list of subjects to be taught includes not only disciplines usually taught at the universities of the time, such as law, medicine, rhetoric, and poetry, but also every kind of craft, practice, and art, including painting, fencing, carving, glassmaking, ceramics, and so on. Although one might think that Filarete means to distinguish between academic scienze and non-academic esercizii, he actually conflates the two. He sums up the school's syllabus by claiming that "there will be one [instructor] from each faculty of scienza, so that the boys, as I said, would be more apt to train [esercitare] in scienza." Scienza (in the singular) here seems to mean the unified body of all human knowledge, of which there are many "faculties," and although some are more dignified than others, they are all of a piece. To acquire any part of scienza, one must "exercise" or "practice" it. Pratica operates, in this ample conception, as the primary means whereby one masters a unified body of human knowledge, the totality of which is *scienza*.

In several other instances, Filarete uses the rubric of *scienza* to refer to the liberal arts, although he is not dogmatic about which arts merit inclusion. Early on, for example, Filarete summarizes Vitruvius's daunting list of disciplines that the architect must master as, quite simply, "the seven scienzie." As Filarete surely knew, however, Vitruvius tasks the would-be architect with learning not seven, but nine domains of knowledge—namely, letters, drawing, geometry, history, philosophy, music, medicine, law, and astrology. The Roman architect also adds several others (such as optics and arithmetic) during his subsequent discussion and defense of his list. In this instance, the "seven liberal arts" are not a fixed list of subjects, but rather a

³¹⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 494-95 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: «[...] tutte queste generazioni di scienze ed esercizii.»

Filarete, Trattato (Finoli and Grassi, eds.), 494-95 = Filarete, Treatise (Spencer, trans. and ed.), I:228: «[...] di tutte le facultà di scienza glie ne fusse uno, e secondo che questi putti, come ho detto, lo 'ngegno fusse più atto a quella scienza farlo esercitare.»

³²¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 14 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6: [...] le sette scienzie. Vitruvius provides his intimidating list of requirements for a good architect, with some discussion of selected disciplines, in Vitruivus, *On Architecture*, 6-17 = I.i.3-10.

unified synecdoche for all worthwhile human learning. When, later in the Libro, Filarete produces his own list of disciplines that the architect must master, it clearly echoes Vitruvius's. According to the Golden Book, the architect "needs to know letters, because without letters he cannot be a perfect artificer [artefice]. In addition to this he needs know the art of disegno. He needs to know Geometry, Astrology, Arithmetic, Philosophy, Music, Rhetoric, Medicine. He must also understand civil law, as well as history. He needs [to know] all these scienzie, or at the least participate in them, if he cannot know them perfectly." Filarete reproduces very nearly a twin of Vitruvius's list. Such fidelity to the content and expositive format of the list found in De architectura suggests that the one time that Filarete characterizes architecture as a scienza, he does so not to insist upon a strict definition, but simply in deference to Vitruvius's characterization. Overall, Filarete's overall usage of the Italian word scienza corresponds to the meaning, in his day, of the Latin word ars: a cognitively disciplined, and therefore teachable, approach to the achievement of a certain genus of ends.

James Ackerman has meticulously studied the late medieval meaning of the Latin term scientia—with particular attention to its relationship to the Latin term ars—in the context of the construction of the Milan cathedral. Briefly, Ackerman claims that in a late medieval context, "scientia may [...] be called a theory of consistent relationships," 323 where the relationships he has in mind are geometrical or arithmetical, or in one word, numerical. Since numerical relationships can be harmonized without reference to any external factor, Ackerman argues that the late medieval practice of building entails "a compromise of ideal formulae and practical know-how. The medieval builder is evidently concerned with the problem of balancing theory

The Art Bulletin 31, 2 (1949): 105.

³²² Filarete, *Trattato* (Finoli and Grassi, eds.), 428 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: «[...] bisogna che sappia l'arte del disegno, bisognagli sapere Geumetria, Astrologia, Arismetrica, Filosofia, Musica, Rettorica, Medicina. Ancora gli bisogna ch'egli 'ntenda di ragione civile, bisogna ancora sia storiografo; di tutte queste scienzie lo bisogna per lo meno sia participe, se pure nolle sapesse in tutta perfezzione.» ³²³ James S. Ackerman, "'Ars Sine Scientia Nihil Est': Gothic Theory of Architecture at the Cathedral of Milan,"

(or *scientia*) and practice (or *ars*)."³²⁴ The builder first uses *scientia* to develop a preliminary plan that exhibits the invariance characteristic of celestial motions, musical harmonies, geometrical figures, and arithmetical operations, after which he *adjusts* his plan so that it fits into the changeable and irregular world in which humans live. Ars manages the tension between the abstract knowledge embodied by *scientia* and the concrete and contingent reality of human existence. On Ackerman's reading, a well-built late medieval edifice would sublimate the irresolvable tension between the sublunar world of becoming and the superlunar world of imperishable being into durability, utility, and beauty.

In insisting so strongly upon its numerical character, Ackerman perhaps establishes too narrow a scope of concern for late medieval *scientia*. The numerical represents the most conspicuous—but not in all cases the most important—aspect of the *mathematical*. Martin Heidegger points out that the term *mathematical* derives from the classical Greek expression *ta mathēmata*, which "are the things insofar as we take cognizance of them as what we already know them to be in advance, the body as the bodily, the plant-like of the plant, the animal-like of the animal, the thingness of the thing, and so on." *Mathēmata* refers to the perceptible aspects of things, known not as the tenets or deductions of doctrine, but as immediately obvious and inevitable—precisely as *qualities* in Baldry's sense, which I explicated in Chapter 4. Insofar as

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³²⁴ Ackerman, "Ars Sine Scientia Nihil Est," 107. Ackerman's equation of the late medieval distinction between *scientia* and *ars* with the modern distinction between *theory* and *practice* is highly tendentious in that it minimizes the central importance of general concepts and rules in *ars* (empirically discovered, but universally applicable). Still, I can think of no pair of modern terms that would serve better. It might be best, in such cases, simply to leave such terms untranslated.

³²⁵ Alberto Pérez-Gómez, glossing Vitruvius's discussion of "optical correction," explains that in the traditional understanding of architecture, "ideal" plans must be adjusted to "real" circumstances in such a way that the ideal origins of the plan remain perceptible. "Because human perception, particularly vision, depended on the body's position in the world, the essential proportions and geometry of a building needed to be 'adjusted.' Doing so enabled the ideal order to appear in the real building, both bridging and celebrating the gap between 'matter' and 'form' present in all other areas of human experience" (Pérez-Gómez, *Built Upon Love*, 72). See also Alberto Pérez-Gómez, "Hermeneutics as Discourse in Design," *Design Issues* 15, 2 (1999).

³²⁶ Martin Heidegger, "Modern Science, Metaphysics and Mathematics," trans. W. B. Barton and Vera Deutsch, in *Basic Writings*, ed. David Farrell Krell (New York: Harper and Row, 1977), 251.

the Ideas correspond to generic qualities, they might be read as Plato's interpretation of *ta mathēmata* as the metaphysical foundation of human experience. At the heart of Heidegger's exposition of the mathematical, consonant with the essential meaning of the terms *eidos* and *idea*, lie the notions of *salience* and *primordiality*. "The mathematical is that evident aspect of things within which we are always already moving and according to which we experience them as things at all, and as such things." The numerical is not synonymous or coextensive with the mathematical, but only the most conspicuous mode in which it manifests. "Numbers are the most familiar form of the mathematical because, in our usual dealing with things, when we calculate or count, numbers are the closest to that which we recognize in things without deriving it from them." The mathematical ultimately corresponds to the most essential and typical qualities of human experience, of which the numerical represents a special case. The medieval builder's preliminary reliance upon number does not restrict his work to robotic calculation, but rather belies a concern for the whole cosmos insofar as a cosmos means a fabric of qualities that is immediately, inevitably, and universally perceptible to humans.

Misura as Number and Qualità

Filarete views *misure* as self-evidently numerical, but he argues that much of their architectural utility derives from their capacity to imply non-numerical qualities. Filarete's reflections on *misura*, introduced as the first properly architectural subject in the *Libro*, explicitly reference, update, and extend Vitruvius's discussions of measure, proportion, and the columnar orders. Immediately after introducing the notions of *misura* and proportion, Filarete cites Vitruvius's insistence on the importance of the liberal arts for the architect. Notwithstanding the

Martin Heidegger, "Modern Science, Metaphysics and Mathematics," 253-54.

³²⁸ Martin Heidegger, "Modern Science, Metaphysics and Mathematics," 253.

obliquity of the segue, Filarete's mention of Vitruvius's name invites comparing the former's notion of *misura* with the latter's definition of *symmetria*. ³²⁹ Unsurprisingly, Filarete's definition of *proportion*—which he treats as a more functional synonym for *misura*—parallels Vitruvius's definition of symmetria in all meaningful respects. According to Vitruvius, "[s]ymmetry is a harmonious agreement between the members of the work itself and relation between the different parts and the whole general scheme, in accordance with a certain part selected as standard."330 For both Filarete and Vitruvius, the human body serves as the primal matrix for any misura. Vitruvius idealizes the human body in order to generate a unified system of proportions among its members. Filarete takes up more or less unchanged the Vitruvian notion that the human body, its members, and their numerical interrelations provide the fundamental modules for all other measurement. Filarete's basic notion of proportion is likewise frankly Vitruvian. But for Filarete there are five generic human bodies, of which three correspond to the proportions of the Vitruvian columnar orders. There being for Filarete more than one set of generic human proportions means that for him, the architect must judge which misura—which proportion—to use for which building. Variety, as we saw in Chapters 2 and 4, informs all aspects of God's creation, natural as well as artificial. For Filarete the architect must judge the proportionate in contingent human terms as well as in absolute numerical terms.

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³²⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 14 = Filarete, *Treatise* (Spencer, trans. and ed.), I:6.

³³⁰ Pavlos Lefas, "On the Fundamental Terms of Vitruvius's Architectural Theory," *Bulletin of the Institute of Classical Studies* 44, 1 (2012): 193. This is Lefas's elegant translation of Vitruvius, *On Architecture*, I:26-27 = I.ii.4: Item symmetria est ex ipsius operis membris conveniens consensus ex partibusque separatis ad universae figurae speciem ratae partis responsus. According to Lefas, *symmetria*, far from being the "master concept" in Vitruvius's notion of architecture, as has often been argued, instead "depends on the notion of consensus applied to mathematical relations of purely technical character" (Lefas, "On the Fundamental Terms," 195). *Symmetria*, in other words, governs the technical establishment of numerical proportions within a specific building, but it does not act either to relate the building to its immediate context or to establish a link between the building and the cosmos.

Filarete's text shows little evidence that he was impressed by the Roman's wearying elaboration of edificatory nomenclature and pompous litany of proper ratios for building parts.³³¹ Far more interesting from Filarete's point of view are the stories of the origins of the various columnar orders, as well as Vitruvius's comments on their ornamental tenors and appropriate uses. After describing the derivation of the Ionic order from the Doric, for example, Vitruvius summarizes: "Thus two orders were invented, one of a masculine character, without ornament, the other bearing a character which resembled the delicacy, ornament, and proportion of a female." ³³² In Vitruvius's account, the Doric and Ionic both exhibit a particular numerical proportion among their elements while also corresponding to an aesthetic mood and a particular "gender" (genre or genus) of person. His discussion of the Corinthian order continues in a similar vein. "The third species, which is called Corinthian, resembles in its character, the graceful elegant appearance of a virgin, in whom, from her tender age, the limbs are of a more delicate form, and whose ornaments should be unobtrusive." 333 Where the masculine Doric and feminine Ionian derive their characters from natural categories (i.e., male and female), the virginal Corinthian derives its character from a category that, although arguably functional, is perhaps best read as social.

Although Filarete does not greatly amplify or adjust the basic Vitruvian meanings of measurement and proportion, he interprets Vitruvius's system of ideal human proportions by reference to the biological reality of variety among human bodies. He also adjusts the proportions of the columnar orders considerably, though this may be explained firstly by the

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Filarete quite explicitly sets Vitruvius's terms to one side, calling them "obscure" [oscuri] (Filarete, Trattato (Finoli and Grassi, eds.), 244 = Filarete, Treatise (Spencer, trans. and ed.), I:109).

³³² Vitruvius, *On Architecture*, 206-07 = IV.i.7: [...] ita duobus discriminibus columnarum inventionem, unam virili sine ornatu nuda specie, alteram muliebri subtilitate et ornatu symmetriaque sunt mutuati.

³³³ Vitruvius, *On Architecture*, 208-09 = IV.i.8: Tertium vero, quod Corinthium dicitur, virginalis habet gracilitatis imitationem, quod virgines propter aetatis habet teneritatem gracilioribus membris figuratae effectus recipiunt in ornatu venustiores.

manifest difference between Vitruvius's recommended proportions and the real proportions of the many columns extant in Filarete's day, and secondly by the preeminence long accorded to the pseudo-Varronian canons of human measure in the artistic workshop. 334 Filarete posits five categorical misure for human bodies, organized by overall size, with each misura distinguished by the proportion of the head to the rest of the body. The Doric, with a head to body ratio of 1:9, Filarete calls "large"; the Ionic, with a head to body ratio of 1:7, is "small"; and the Corinthian, with a head to body ratio of 1:8, is "median." The smallest and the largest misure of humans Filarete dismisses as "dwarfs" and "giants." Each size represents not only a typical misura (which encompasses the concept of proportion), but also a kind or genus of humans.

As John Onians demonstrates, Filarete interprets Vitruvius's meager aesthetic comments as license to introduce the highly generic concept of qualità, which he equates to misura and proportion, into the foundations of his notion of architecture. 336 Like its modern English cognate quality, the Quattrocento Italian term qualità admits of ascription to nearly anything—clothes, building materials, and most importantly, to persons (especially as regards their social status). 337 Filarete self-consciously adopts Vitruvian nomenclature in order to empower and extend Vitruvius's basic concepts. "Because Vitruvius calls them thusly, so we will follow [his] ordering of them: we will call Doric, Ionic and Corinthian these *misure*, proportions, and *qualità*,

³³⁴ John Onians incisively observes that Filarete's use of the head as the module for architectural measurement conflates neo-Platonic and workshop traditions. "Only in the neo-Platonic tradition and in the canons of workshop practice was the head treated as specially significant. But nothing in such writers as Augustine or Cennini prepares us for Filarete's discussion of the subject" (Onians, "Alberti and ΦΙΛΑΡΕΤΗ," 108), Although Onians is keen to emphasize the neo-Platonic contribution, I find it more difficult to set aside Cennini's comments on perfect human proportions, which not only prioritize the head, but indicate precisely three principle misure. See Cennino d'Andrea Cennini, Il libro dell'arte: o, Trattato della pittura, originally composed a. 1396., rpt. eds. Gaetano and Carlo Milanesi (Firenze: Felice Le Monnier, 1859), 50-51= LXX.

³³⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 15 = Filarete, *Treatise* (Spencer, trans. and ed.), I:7: [...] nani [...] giganti.
³³⁶ Onians, *Bearers of Meaning*, 118-20.

³³⁷ Summers suggests that Filarete's alignment of particular proportions to certain social classes echoes the so-called "wheel of Vergil,' according to which the Aeneid, Georgics, and Bucolics were ranked at once according to style and the status of the persons represented" (Summers, Michelangelo and the Language of Art, 337).

and we will explain them as much as possible."³³⁸ Filarete follows Vitruvius in defining each order by a specific and measurable numeric proportion, which means that it can be described, drawn, and schematized. Yet Filarete also takes Vitruvius's aesthetic remarks to mean that such descriptions, drawings, and schemas imply a broadly applicable *qualità*. The particular value of columns is that they instantiate the unity of *misura* and *qualità*, which unity applies to persons as well as buildings. Thus, "columns are parts pertaining to certain *qualità* of buildings. As the building derives from man as well as from human *misure* and *qualità* and form and proportions, so the column also derives from man."³³⁹ As Onians (glossing Aquinas) neatly summarizes it: "Qualities are measured by quantities."³⁴⁰ Thus, when the Architect describes his plans for the palace of a generic gentleman (from the upper class), he first gives the *misure* of the foundations and then continues:

[C]oncerning the front part, where the façade has to be: in the middle there has to be a door, which will be four *braccia* wide [and] eight [*braccia*] high. All of its members will be proportional to this *misura*—that is, all the other doors will be two squares, and these will be of the Doric *qualità* and *misura*, which is large. I do this because the *qualità* of the one who will possess it, who will be from the upper class [*de' maggiori*], [for] the [proportions] of buildings should derive from the universal number [i.e., the proportion] of the persons who inhabit them.³⁴¹

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³³⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 16-17 = Filarete, *Treatise* (Spencer, trans. and ed.), I:7: [...] [P]erché ancora esso Vetruvio così l'appella, seguiteremo adunque l'ordine d'essi, e così noi Doriche, Joniche e Corinte appelleremo le dette misure, proporzioni e qualità, e così le dichiareremo quanto a noi sarà possibole.

³³⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 215 = Filarete, *Treatise* (Spencer, trans. and ed.), I:95-96: [...] le colonne sono parte appartenenti a certe qualità d'edificii; essendo così come l'edificio deriva da l'uomo e da misura e qualità e forma e proporzione umana, la colonna ancora da esso uomo diriva.

³⁴⁰Onians, "Filarete and the « Qualità »," 118. Onians cites Aquinas, *Commentary on Aristotle Physics*, III.v.1.
³⁴¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 323 = Filarete, *Treatise* (Spencer, trans. and ed.), I:146: [...] nella parte dinanzi, dove ha a essere la facciata, nel mezzo d'essa ha a essere la porta, la quale di larghezza sarà braccia quattro, l'altezza sarà otto; e così tutti i suoi membri verranno proporzionati a questa misura, cioè tutti gli altri usci a due quadri saranno, e questi saranno della qualità e misura dorica, cioè grande. Questo fo, perché la qualità di chi l'ha a possedere, secondo l'universale numero delle persone, sono de' maggiori, sì che così debbono conseguire li edifizii <da loro> abitati.

The concept of *qualità* forms a hinge between architectural measures and social hierarchies, so that, as Onians puts it, "the forms and relationships found in architecture correspond to and depend on similar forms and relationships in man and society."³⁴²

For Filarete as for Ackerman's medieval builder, *misure* mean numbers and proportions. Too, both Filarete and the medieval builder view numbers and proportions as implicate in and indicative of a higher order. For Filarete, however, the *misure* that describe a building explicitly correspond to—and so invoke—a human *qualità* that inheres in artifacts, situations, and persons. Filarete in fact launches his whole discussion of variety with the observation that "[n]o one can deny that there are many different kinds [generazioni] of persons and qualità.",343 We classify persons, that is, precisely according to their qualità. Quantitative misure interoperate with other qualities in the conception and construction of a building for the simple reason, as I argued above, that numbers are themselves qualities, albeit of a special kind.³⁴⁴ Thus Ackerman's medieval builder would have admitted that numbers have qualities, but he would have maintained that the ideal qualities associated with numbers can only supervene upon the human world—they do not arise within it. For Filarete, however, the products of human manufacture bear manifestly social as well as cosmological meanings. Quantity and quality are reciprocal for both the medieval builder and for Filarete, but for Filarete the exchange has currency in human as well as mathematical terms.

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³⁴² Onians, "Filarete and the « Qualità »," 119. See also Onains, *Bearers of Meaning*, 165-70.

³⁴³ Filarete, *Trattato* (Finoli and Grassi, eds.), 25 = Filarete, *Treatise* (Spencer, trans. and ed.), I:11: Non si può negare che sono molte e varie generazioni di persone e qualità [...].

³⁴⁴ Summers quotes Vincenzo Danti (1530 – 1576) as writing in his *Trattato* (1567), "True measure depends on quality" (Summers, *Michelangelo and the Language of Art*, 327). Danti's conception of *qualità* seems very close in spirit to Filarete's—and indeed, Summers cites the *Libro* as a minor watershed for artistic thinking about *qualità* during the early Renaissance. Summers assigns this conception of *qualità* to a lineage that he traces back to the Stoic distinction between activity and passivity, where pure matter is equated with pure passivity, so that *qualità* becomes a principle of activity, motion, and thus life in general. See Summers, *Michelangelo and the Language of Art*, 328 ff and 34 ff.

Seeing and Drawing Misure

The tight correlation between *misure* and *qualità* makes the schematic nature of Filarete's descriptions more intelligible. When Filarete provides the *misure* of a project in a description, he communicates not only the building's material dimensions, but also some indication of its qualità. The majority of the descriptions of building plans in the Libro comprise raw measurements for the foundation, compartition, and fenestration of a building; basic notes on structure and structural ornaments (vaulting, columns, pilasters, arches, arcades, and so on); and schematic—if sometimes complexly so—programs for the decoration of the planned spaces. Materials are only sometimes specified, sites are quite often maddeningly indistinct, and the Architect often explicitly leaves most of the details to the excellent *maestri* he has hired. Descriptions of architectural ornament in particular rarely push past the schematic, in which case they either dovetail with the programs for sculptures and paintings or slip into a discussion of drawings of ornaments, few enough of which actually appear in the margins. 345 The verbal descriptions in the *Libro*, typically comprising numerical *misure* and schematic decorative programs, thus aim not to control the minute details of the material realization of a project, but rather to inform the project's overall qualità in the sense of its "whichness"—its character as against a limited range of possibilities. Just so, when the Architect chooses one of the maestri to liaise with the other workers, his primary criterion for the choice is competence to understand and communicate "the *voluntà* and the *misure* that [the Architect] gives him day by day." The misure provide a numerical and qualitative template, the unique details of which the craftsmen work out in accord with their traditional modes of practice and the general drift of the patron's

³⁴⁵ For a particularly vivid example of a discussion of ornament shifting into a discussion of drawing, see Filarete, *Trattato* (Finoli and Grassi, eds.), 207-08 = Filarete, *Treatise* (Spencer, trans. and ed.), I:92-93.

³⁴⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 43-44 = Filarete, *Treatise* (Spencer, trans. and ed.), I:17: [...] la volontà e le misure che dì per dì lui gli dà.

voluntà. Similarly, when the Architect and the Lord's Son visit the Lord in order to discuss a project, the Lord naturally "want[s] to understand each thing in detail," and the Architect fulfills the request for detailed understanding by "narrat[ing], in order, all of the *misure* and the members and the places." A building's *misure* both formalize its materials dimensions and imply its essential character.

Filarete acknowledges that the relationship between a list of abstract measurements and an actual building is difficult to grasp. Fortunately, *misure* are not utterly anathema to perception. Filarete's characters occasionally describe themselves as simply seeing the misure of a building. When the Architect invites the Lord to inspect the beginnings of the work on the towers emplaced in Sforzinda's city walls, for example, he says, "My Lord, they are here. Let us go and we will see their form and misura.",348 The characters do not take out a measuring stick and measure a tower; they simply see its misura. In the three so-called libri di disegno at the end of the Libro, the Architect argues explicitly for just such a strict and direct link between misura and vision. (It should be noted that in the *libri di disegno* Filarete makes especially intensive use of the formulations contained in Alberti's book on painting, dutifully repeating many of the humanist's assertions and instructions. ³⁴⁹) Filarete prefaces his exposition of *disegno* with an abstract account of the relationship between vision, number, and misura that opens, "Everything done by hand is founded upon the order and mode of disegno. For it has been found that number is a very necessary thing, and one cannot do anything without number, as likewise one cannot do anything without order. Without it [that is, number] we would be almost like brute animals." 350

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³⁴⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 272 = Filarete, *Treatise* (Spencer, trans. and ed.), I:123: [L]ui volle intendere particularmente ogni cosa, e tutte le misure e 'membri e 'luoghi per ordine gli comincia a narrare.

³⁴⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 134 = Filarete, *Treatise* (Spencer, trans. and ed.), I:59: «Signore, elle sono quelle quivi. Andiamo e vedrete la forma e la misura.»

³⁴⁹ See Filarete, *Treatise* (Spencer, trans. and ed.), I:296, n. 1 and Gambuti, "I « libri del disegno »."

³⁵⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 639 = Filarete, *Treatise* (Spencer, trans. and ed.), I:296: «[O]gni cosa che di mano si faccia è fondata sotto questo ordine e modo di disegno. Come che di numero è cosa molto necessaria,

Disegno facilitates manufacture by highlighting and ramifying the numerical basis of human manufacture. Following Alberti, Filarete explains the relationship between *disegno* and number by referring to geometry. "A point," explains the Architect, "is the beginning [principio] of drawing," and "[a]s one is the beginning of every number and does not make number by itself but only when many of them are added together, so a point in itself is little, and many of them added together make a line." After adducing the principle that a plurality of points makes a line just as a plurality of unities makes a number, Filarete ventures a few pedagogical recommendations that are notable for their emphasis on geometrical construction. That is, Filarete recommends the making of geometrical figures with a compass and straightedge as a primary means for comprehending the abstract notions he has just advanced.

After his brief discussion of geometrical surfaces, the Architect moves on to a crabbed treatment of optics, in which he concisely states that "[t]he philosophers say that [...] the eyes measure every surface by means of rays." Since, in Filarete's view, the eyes measure things directly, the visual link between *misura* and *disegno* appears untrammeled, leaving the reader unsurprised by the Architect's claim at the end of chapter XXII, "This line and point can be put to another purpose [ragione], to measure and to delimit [terminerà] all those things that you might wish to do with *disegno*, such as buildings, figures, and animals, and other things that you could not do well without these limits [termini]." Drawings, which comprise lines, give

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e non si può fare sanza questo numero, come che sanza l'ordine non si può, per questo è stato trovato; ché sanza esso quasi come animali bruti saremo.»

³⁵¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 639 = Filarete, *Treatise* (Spencer, trans. and ed.), I:297: «[...] il punto è principio di disegno.»

³⁵² Filarete, *Trattato* (Finoli and Grassi, eds.), 639 = Filarete, *Treatise* (Spencer, trans. and ed.), I:296: «Come che uno è principio d'ogni numero, e per se medesimo non fa numero e agiugnerne più che uno lo fa, così uno punto per se medesimo è poco, e agiugnerne più insieme fa linea.»

³⁵³ Filarete, *Trattato* (Finoli and Grassi, eds.), 647 = Filarete, *Treatise* (Spencer, trans. and ed.), I:301: «[...] dicono i filosofi che [...] gli occhi ogni veduta superfice si misura mediante e' razzi.»

³⁵⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 649 = Filarete, *Treatise* (Spencer, trans. and ed.), I:302: «Pure si metterà questo punto e linee per altra ragione, col quale si misurerà e terminerà tutte quelle cose che afare per

directly to the eyes measured, though continuous, quantities. When the Architect later on repeats his earlier claim about the ability of the eyes to measure things directly, he adds the concept of quantity: "'It is said that rays from the eye measure the quantity of the thing viewed.",355 Lines express continuous numerical quantity—which means misura—in a visible form. Although it seems at first as though Filarete means to dissolve the bond between misura and qualità established earlier in the *Libro*, this bond ultimately proves indissoluble. "[T]he rays pull to the eyes the viewed surface, whatever its qualità, and the eye carries [it] to the intellect in such a way [in modo] that you can understand what kind of thing it is that the eye is showing you, if you are capable of understanding [it].",356 Qualità remains the correlate of misura because it serves as the ultimate arbiter between the eyes—which measure—and the intellect—which understands. "Thus every form of these *qualità*—whether square, or round, or concave, or whatever *qualità* it might be—is delimited [terminata] by and made of distended points made into lines." The intellect understands lines as numerical only through the offices of qualità. The eyes may see misure, but only the intellect may grasp the numerical qualità of the form that such misure compose.

Although Filarete claims in the *libri di disegno* that the eyes measure things simply and directly, severa; episodes in the narrative part of the *Libro* suggest a more ticklish relationship. When the Architect explicitly takes the precise measures of a bridge, for example, he distinguishes the act of measuring from the act of seeing. "I have seen, as I said, the bridge and

disegno vorrai, come sono casamenti, figure, e animali, e altre cose che bene sanza questi termini non si possono

³⁵⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 648 = Filarete, *Treatise* (Spencer, trans. and ed.), I:301: «E dice ch'e' razzi estrinsichi con esso occhio misura la quantità della cosa veduta.»

³⁵⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 648 = Filarete, *Treatise* (Spencer, trans. and ed.), I:301: «[...] e' razzi tirano a li occhi le vedute superfice, di quale qualità sia, e l'occhio porta a l'intelletto in modo poi che tu intendi quella cotale cosa essere quello che l'occhio ti dimostra, se ne se' capace d'intendere.»

³⁵⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 649 = Filarete, *Treatise* (Spencer, trans. and ed.), I:302: [...] [O]gni forma de' quali qualità, o quadra, o tonda, o concova, o di qualunque qualità sia, è terminata e fatta di punti distesi in linee fatte.

measured it and made a drawing [of it]. It was in this form. I took it to my Lord [for him] to see. And [when he] saw it, it pleased him, and he said, 'I wish you to tell me the *misure*.'**, Having seen and measured the bridge—presumably using some sort of concrete ruler or module—the Architect produces a drawing (fig. 11). The drawing, however, does not automatically communicate the precise *misure* of the bridge, so that the Lord needs to ask for them in verbal form. In another instance, the Lord's Son and the Architect send a communiqué to the Lord concerning their plans for a bridge they wish to build. Their letter contains "two drawings [of bridges already built] and all the *misure* included in such a way that he [the Lord] could clearly understand everything. The drawings again do not communicate the *misure* directly. Of course, both of these episodes involve the Lord, who is not practiced in *disegno*, which means that his intellect is not practiced in understanding drawings. Still, it seems clear that Filarete believes that the special relationship between *disegno* and *misure* does not thereby render drawings in all cases sufficient to bear the full communicative load for the initiation and nurturance of a building project.

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³⁵⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 360 = Filarete, *Treatise* (Spencer, trans. and ed.), I:164: Io ho veduto, come ho detto, il ponte e misuratolo e honne fatto uno disegno e stava in questa forma e porta'lo a vedere al Signore. E vedutolo gli piacque e disse: «Io vorrei che tu midicessi le misure.»

³⁵⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 366 = Filarete, *Treatise* (Spencer, trans. and ed.), I:167: [...] i due disegni e tutte le misure conteneva in modo poteva intendere chiaramente ogni cosa.

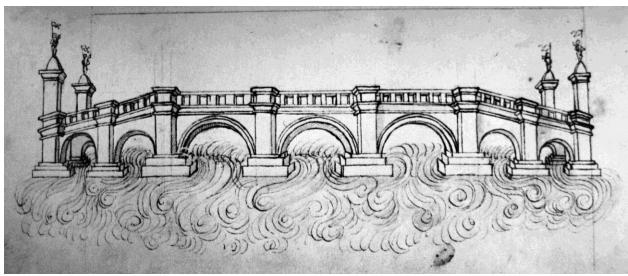


Figure 11: Roman bridge (Magl., 93v)

The use of drawings as communicative tools represents a ubiquitous theme in the *Libro*, as the characters again and again turn to drawings to sharpen their understanding of architectural ideas. After the Architect describes the origins of the Corinthian capital, for example, the Lord's Son exclaims, "'I would dearly like to see one drawn in order to understand it better." The Lord's Son clearly expects the communicative powers of the drawing to complement the communicative powers of the description. Further, drawings fill a crucial communicative lacuna since, as the Architect himself admits at the end of a torturous description that mixes bare measurements, condensed accounts of architectural elements, and vague announcements of figurative intention, "[i]t is impossible to explain these aspects of [the practice of] building, if they are not seen drawn, and even in the drawing it is difficult to understand." *Misure* may imply the basic character of a building, but a drawing often expresses that character better than a verbal listing of the *misure*. For example, when the Architect makes preparations for the

³⁶⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 217 = Filarete, *Treatise* (Spencer, trans. and ed.), I:97: «Per certo io arei caro di vedere uno disegnato per intendere meglio.»

³⁶¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 157 = Filarete, *Treatise* (Spencer, trans. and ed.), I:70: È impossibile a dare a intendere queste cose dello edificare, se non si vede disegnato, e nel disegno ancora è difficile a 'ntendere.

construction of the great "temple" in the city of Sforzinda, he first explains to the *maestri* working beneath him how he wants the basements and cornices prepared, after which he "again show[s] their form in *disegno*, so that one can see and understand their *misure* and proportions." The drawing gives *misure* and *qualità* directly to the *maestri's* eyes. Or later, during his description of the House of Vice and *Virtù*, the Architect declares that the Lord has "understood the *misura* and form as [they] appear in the drawing" (apparently in reference to the plan reproduced as fig. 4). It may be only a small stretch to say that for Filarete, *misure* constitute the crucial difference between a building and a mere pile of stones, and that the practice of *disegno* is the best training for understanding and articulating *misure*.

Several commentators note that Filarete differentiates, with uncharacteristic lexical discipline, among several different kinds of drawings, including *disegno nella mente* ("in the mind"), *lineamento* or *lineato* ("lined"), *di grosso* ("rough" or "sketched"), *proporzionato* ("strictly proportioned"), *in braccia piccolo* or just *piccolo* ("to scale"), *misurato* ("[strictly] measured"), *de legname* ("wooden"), and *rilevato* ("in relief," which is to say, a model). ³⁶⁴ These various kinds of drawings compass, in their various combinations, a continuum that stretches from the architect's mind ("*nella mente*") to a wooden model ("*legname rilevato*"), with its "extent" measured by the relative level of refinement and polish of both the architectural idea and its expression. When the patron and the architect, in Filarete's famous sexual analogy, generate a building together, the architect at the end of the project's period of gestation "gives birth, that is, he makes a scale wooden model [*disegno piccolo rilevato di legname*], measured

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³⁶² Filarete, *Trattato* (Finoli and Grassi, eds.), 241 = Filarete, *Treatise* (Spencer, trans. and ed.), I:107: [...] le loro forme mosterrò ancora in disegno, in modo si potranno vedere e intendere e loro misure e proporzioni [...].
³⁶³ Filarete, *Trattato* (Finoli and Grassi, eds.), 536 = Filarete, *Treatise* (Spencer, trans. and ed.), I:247: Hai inteso la

misura e la forma come per lo disegno appare [...].

³⁶⁴ See esp. Grassi, introduction to Filarete, *Trattato* (Finoli and Grassi, eds.), LXI-LXXVI; Giordano, "On Filarete's *Libro Architettonico*," 62-64; and Hubert, "In der Werkstatt Filaretes: Bemerkungen zur Praxis des Architekturzeichnens in der Renaissance"; but also Tigler, *Die Architekturtheorie des Filarete*, 147-63; Pérez-Gómez, "Filarete's Sforzinda"; and Baldasso, "Filarete's *Disegno*," 42.

and proportioned as it has to be made."³⁶⁵ While drawings at the rougher end of the continuum are not measured or proportioned precisely, those at the more refined end certainly are. Some drawings reflect and render visible meticulous measurement while others do not, according to the task for which each is intended. Neither *misura* nor *disegno* itself implies, without additional qualification, a level of precision that goes beyond giving a general idea or "gist."

Filarete's readers confront the same challenges to understanding the architectural ideas presented in the Libro as do his characters, which provides a partial explanation for the wealth of illustrative drawings in the physical margins of the *Libro's* pages. The persona that narrates the Libro (usually the Architect, though Filarete not infrequently writes more or less in his own voice) sometimes breaks out of the fiction to refer directly to such drawings, typically using expressions like, "[...] as seen here drawn." Since the narrator himself draws our attention to many of these marginal illustrations, it seems inarguable that they, like their many fictional analogues in the narrative, aim to communicate misure. On a few occasions, the narrator refers to drawings which are not to be found in the Maglibecchiana copy, or indeed in any extant copy. Further, as Spencer and S. Lang have meticulously demonstrated, discrepancies often exist between the proportions given in the textual descriptions and the measured proportions of the marginal drawings in the Maglibecchiana codex. 367 Since Vasari avers that the illustrations found in the *Libro* are "by his [the author's] own hand," Spencer proposes that the discrepancies may "indicate an illustrator trained in copying but not in architecture." But whatever the skills of the copyist may have been, I can personally attest that the Maglibecchiana copy is carefully

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³⁶⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 40 = Filarete, *Treatise* (Spencer, trans. and ed.), I:16: [...] farne uno disegno piccolo rilevato di legname, misurato e proporzionato come che ha a essere fatto [...].

³⁶⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 138 = Filarete, *Treatise* (Spencer, trans. and ed.), I:61: [...] come vedete qui disegnato.

³⁶⁷ Spencer, "Filarete and Central-Plan Architecture" and Lang, "Sforzinda, Filarete and Filelfo."

³⁶⁸ Vasari, *Vite*: II:457: [...] di sua mano.

³⁶⁹ Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xvii.

ruled, copied in a fine hand, sturdily bound, headed with marginal rubrics, decorated with illustrations that use line drawings and washes in at least four different colors, and adorned with lavishly illuminated chapter initials dressed in gold leaf. It is manifestly the product of a painstakingly planned and expensively realized process of manufacture—entirely understandable given that it was intended to make a crucial impression on an important patron. The fineness of the object and the status of its recipient both lend credit to the supposition that Filarete scrupulously—even anxiously—supervised the whole process of manufacture. Further, Genoni has examined all extant manuscripts, fragments, photographs, and other visual records of the Libro, and she has concluded that whatever their differences, the overall program for the marginal illustrations of all the known copies of the *Libro* are of a piece.³⁷⁰

If we presume that Filarete maintained tight control over the copying of his book illustrations as well as text—we can only conclude that he took no issue with the discrepancies between the measures given in the text and the proportions of the marginal drawings.³⁷¹ We can easily account for such nonchalance in two ways. Firstly, we can suppose that Filarete viewed the marginal drawings in the Maglibecchiana as lying toward the rougher end of the continuum of disegno, so that their allotted task did not require precise measures. Secondly, Filarete was surely aware that his control over the fate of the marginal drawings was quite limited, for "the elaborate visual apparatus of [his] treatise would be preserved only if a resourceful court assumed the responsibility of producing properly illustrated copies." Notwithstanding the risk that the illustrations might suffer degradation or even elision in subsequent copies, Filarete

³⁷⁰ Genoni. "Filarete in Word and Image," ch. 2.

³⁷¹ Although drawings were used to communicate intentions in the fifteenth century, they were not in Filarete's day used to manage building processes in any strict or technical sense. For a convincing argument that Philip II's (1527 - 1598; reigned 1554 - 1598) construction of the massive monastery-palace El Escorial (1563 - 1584) represented the first instance in which drawings were used in a disciplined and self-aware way to manage a building process, see Catherine Wilkinson, "Building from Drawings at the Escorial," in Les Chantiers de la Renaissance: actes des colloques tenus à Tours en 1983-1984, ed. Jean Guillaume (Paris: Picard, 1991). ³⁷² Baldasso, "Filarete's *Disegno*," 43.

evidently believed that his readers would most easily develop the ability to interpret architectural drawings correctly if they were to see real ones with their own eyes. In addition to their function as supplements to the text, the marginal drawings prompt the reader to exercise his intellect and judgment by imagining how such plans and façades might be elaborated as concrete edifices.

Disegno between Hand and Mind

Given the centrality of drawing in modern architectural practice, Filarete's notion of *disegno* could hardly be more attractive as a target for modern academic inquiry. Earlier authors had pioneered the combination of words and pictures for the presentation of didactic demonstrations and proofs in texts concerned with geometry, astrology, logic, and mechanics, but the *Libro* was the first illustrated book on architecture in the European tradition, which lends to the drawings themselves the distinction of disciplinary precedence. State in a several modern studies argue persuasively that Filarete's marginal drawings—and indeed some of his architectural ideas more generally—influenced subsequent authors and artists. State in a state in the position that Filarete's remarks on *disegno* in the *Libro*, and particularly his *libri di disegno*, constitute not a slavish reproduction of Alberti's opinions, but rather an appropriation of and response to those opinions. Most recently, Renzo Baldasso's careful study concludes that Filarete portrays *disegno* as a highly practical discipline that depends upon manual practice. In contradistinction to Alberti's rather ethereal notion of *disegno*, for Filarete "*disegno* is much more than a set of abstract and mathematical principles of visual representation or a term

³⁷³ Baldasso, "Filarete's *Disegno*," 41, n. 14.

³⁷⁴ See José Alcina Franch, "Ideas estéticas de Antonio Averlino," *Revista de ideas estéticas* 13 (1955); Spencer, "Filarete and Central-Plan Architecture"; Licht, "L'influsso dei disegni del Filarete"; Ruffini, "L'Invenzione Umanistic del Teatro"; Moffit, "Il Filarete and Inigo Jones"; Beltramini, "Le illustrazioni del *Trattato*"; and Hub, "Filarete and the East."

³⁷⁵ See Tigler, *Die Architekturtheorie des Filarete*; Gambuti, "I « libri del disegno »"; Genoni, "*Vedere e 'ntendere*"; and esp. Baldasso, "Filarete's *Disegno*."

confined to the formal dimension. The issues of functionality, naturalism, and viewer's response are intrinsic to Filarete's *disegno*."³⁷⁶ Filarete's care in discriminating among different kinds of drawings speaks to a thoroughly practical sensitivity concerning how a given drawing responds both to the intention it expresses and the audience it addresses. Insofar as a drawing serves communicative ends, the notion of *disegno* that underwrites its production would seem to align with the traditional understanding of images as mimetic representations of a preconceived idea. In the first half of Book X of the *Republic* (as I elaborated in Chapter 4), Plato equates precisely the "making" of (poetic) verbal descriptions—which we to this day call "images"—and painting—which I here interpret, like Filarete and his contemporaries, as an analogue to *disegno*.³⁷⁷ The communicative capacities of drawings complement the communicative capacities of both verbal descriptions and numerical *misure* because, according to this line of reasoning, all three communicative instruments "imitate" a single, unified Idea (in the meaning developed in Chapter 4 of a typical human situation).

In the *Libro*, drawings are most commonly drafted and presented for the purpose of communicating architectural ideas, but communication is not the sole end for which the characters practice *disegno*. After the Architect's complaint (cited above) about the difficulty of understanding architectural matters, even when aided by drawings, there follow several crucially revealing remarks. The whole passage merits quoting in full:

It is impossible to explain these aspects of [the practice of] building, if they are not seen drawn, and even in the drawing it is difficult to understand. One who does not understand *disegno* cannot properly understand [these aspects], because it is more difficult to understand the drawing than it is to draw it. This seems contrary to reason, because many who draw as a practice [pratica] do not understand what they are doing. No one should marvel at this, that I have seen many who are held to be good *maestri* of *disegno*—that is,

³⁷⁶ Baldasso, "Filarete's *Disegno*," 46.

³⁷⁷ See Filarete, *Trattato* (Finoli and Grassi, eds.), 157 = Filarete, *Treatise* (Spencer, trans. and ed.), I:70, where Filarete identifies "*maestri* of *disegno*" as "painters and also *maestri* of other arts related to *disegno*" [*dipintori e anche d'altra arte che apartiene al disegno*].

painters and also [maestri] of other arts related to disegno (without which one could not perform these arts)—and if you ask him, 'For what reason have you drawn this building, or do you mean figure, or animal, or whatever it is?' he will not be able to tell you.³⁷⁸

A maestro practiced in disegno might be able to draw a building—as Filarete might say—con ragione ("with reason" or "according to reason"), but such manual skill does not equate to an articulate understanding of the reason why things are drawn as they are. We must resist the temptation to cite the *building*—that is, the object being depicted—as the drawing's *raison d'être*, because the link between the building and the drawing is, as Filarete indicates, neither straightforward nor transparent.³⁷⁹ Particular features of the drawing correspond to particular features of the building, but this correspondence presumes a transference or transformation. Filarete holds that if we wonder, after glancing from drawing to building and back again, how such a distance has been traveled, we shall discover our vehicle to be none other the misure and qualità that constitute the essence of both drawings and buildings. But the perception of identity between the *misura* and *qualità* of a building and the *misura* and *qualità* of a (competent) drawing of that same building is not automatic. Rather, such a perception of identity is guaranteed by an active, articulate, and above all *practical* grasp of the intricacies of the semantic transfer between the drawing and what it depicts—between the conventions and latencies of disegno, the embodied experience of moving in and around buildings, and working knowledge of how to make buildings.

³⁷⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 157-58 = Filarete, *Treatise* (Spencer, trans. and ed.), I:70: È impossibile a dare a intendere queste cose dello edificare, se non si vede disegnato, e nel disegno ancora è difficile a 'ntendere. E non lo può bene intendere chi non intende il disegno, perché è maggiore fatica a 'ntendere il disegno che non è il disegnare. E questo pare che sia contro alla ragione, perché molti disegneranno per una pratica, e non intenderanno quello che faranno. Non si maravigli nessuno di questo, ch'io ho veduti molti essere stati tenuti buoni maestri di disegno, cioè dipintori e anche d'altra arte che apartiene al disegno, neanche sanza esso si può fare simili arti, e se tu gli domandi per che ragione hai tu disegnato questo casamento, o vuoi dire figura o animale o quello si sia, non te lo saprà dire.

379 Cf. Evans, "Translations."

Later in the *Libro*, speaking to the same difficulty faced by one who wishes to understand architectural matters, the Architect remarks to the Lord that "these things [...] are in themselves unpleasant to understand, and especially for one who does not know how to draw.",380 The issue of knowing the reason why does not appear here. The Architect claims simply that knowing how to draw—by which he seems to mean practical competence in the manual skill of drawing makes architectural matters easier to understand. Where above Filarete seems to oppose understanding to practical knowledge, he here emphasizes the dependence of the former on the latter. In yet another instance, the Architect proposes a building project to the Lord, who approves and orders construction to begin. The building is soon completed, and the Architect addresses the reader directly: "It turned out to be a beautiful building, which those who have not seen it can understand here in this book through this drawing, which shows only the front wall, but [anyone] who has any understanding of disegno or pratica of these things will understand and comprehend it as if seeing it modeled, or actually built." It is either "understanding of disegno" or "pratica of these things" (by which Filarete seems to mean practical knowledge of how to build) that bridges the gap between seeing the drawing and seeing the building as if it were fully materialized. In this passage, practical, manual know-how is represented as essential to full understanding. Overall, Filarete views reasoned knowledge (i.e., knowledge of the why) not as the opposite of practical knowledge, but rather as an extension or perfection of it. Some people only learn how to draw, while others additionally learn why disegno works as it does. A person blessed with both practical skill and speculative understanding possesses the best possible facilitators for grasping the identities between a drawing of a building, the hypothetical

³⁸⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 216 = Filarete, *Treatise* (Spencer, trans. and ed.), I:96: «[...] [Q]ueste cose [...] sono spiacevoli a 'ntendere, e massime a chi non sa disegnare.»

³⁸¹Filarete, *Trattato* (Finoli and Grassi, eds.), 255 = Filarete, *Treatise* (Spencer, trans. and ed.), I:115: [...] [L]o quale riuscì uno bello edificio, il qual dificio chi non l'ha veduto il può comprendere qui in questo libro mediante questo disegno, il quale dimostra solo la facciata dinanzi, ma chi arà alcuno intendimento di disegno o di pratica di queste cose, lui intenderà e comprenderà come se lo vedesse proprio rilevato, o veramente il proprio.

experience of encountering that building, and the putative process of making such a building. So when the Lord's Son notes somewhat wistfully that he would like to understand better the modes and measures of columns, the Architect replies, "This you will understand well when you have learned to draw a little better. And you will also understand it well [because] I will explain it to you", by means of an analogy between antique and modern letters). The capacity to understand architectural matters develops atop a competence in *disegno*, which in turn can lead to a more abstract knowledge of *disegno's* principles and reasons.

Making as Learning

Broadly speaking, Filarete views a drawing as providing a matrix or schema that the understanding supplements or "fills in," so that the actual building, absent though it may be, can be "seen" as though actually present. The kind of "seeing" at stake here—which makes absent things appear as though present—represents the special province of the cognitive faculty of *fantasia* or *immaginazione* ("imagination"). Traditional faculty psychology, with some support from traditional literary theory, holds that imaginative "seeing" can, under certain conditions, provide a virtual substitute for actually seeing the building with one's own eyes. For Filarete, both of these kinds of seeing—the imaginative and the fully embodied—communicate meanings that can exceed the capacity of words and drawings to express. After recounting the construction of the amphitheater, arena, and naval theater of Plousiapolis, the Architect waxes effuse: "It was much more beautiful and much more stupendous to see them made than either drawings or words could demonstrate." Neither verbal descriptions nor graphic depictions can capture the plentitude of experience constituted by embodied vision. The wise architect thus respects the

³⁸² Filarete, *Trattato* (Finoli and Grassi, eds.), 220 = Filarete, *Treatise* (Spencer, trans. and ed.), I:98: «Questo lo 'ntenderete bene, quando arete un poco meglio imparato a disegnare.»

³⁸³ Filarete, *Trattato* (Finoli and Grassi, eds.), 341 = Filarete, *Treatise* (Spencer, trans. and ed.), I:155.

limitations of his communicative instruments, because architecture entails precisely the use of words and drawings to orient the making of real buildings. Architecture, that is, inherently and inevitably relies upon a capacity to manage the gaps between the "mental image" communicated by a description, a picture drawn upon a surface, and the plenary encounter between a person and a building. Architectural competence consists largely in the ability to use instruments (namely, descriptions and drawings) that, though they correlate imperfectly with both the intended product (namely, a building) and with each other, nevertheless conduce to bringing about encounters between the finished building and its inhabitants that accord substantially with a preliminary intention.

Rather than the imagination, however, Filarete nominates the intellect—which he identifies (as we saw earlier) as the psychological faculty of understanding—as the mental power capable of extrapolating an imaginative analogue of real experience from descriptions and drawings. When describing features of the Lord's castle designed to confuse would-be attackers, the Architect remarks, "These things cannot be expressed in words, and it is even difficult to explain them well through *disegno*, although whoever sharpens [assottigliare] his intellect a little can comprehend them." One "sharpens" one's intellect for the purposes of architecture, as we have seen, firstly through the development of practical knowledge of how to build, and secondly through the perfection of one's competence in *disegno*. The intellect, for Filarete, is thus not absolutely divorced from manual practice. The intellect can and does learn through engagement with the exigencies of *pratica*. Such training means developing the capacity to explicate more fully, *ex hypothesi*, the intention symbolized by a description or drawing. After describing the basic arrangement of a mercantile piazza in Sforzinda, the Architect pronounces, "[E]verything

³⁸⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 377 = Filarete, *Treatise* (Spencer, trans. and ed.), I:172: «Queste cose esprimere in parole non si può, e anche per disegno è difficile a poterlo ben dare ad intendere, pur si può comprendere chi vuole un poco assottigliare lo 'ntelletto.»

will be done in order, and again in the execution [things] will be made better than can be shown in a drawing, nor with words could one describe these things as they will be done, if the one who makes [them] knows how to order them.'" So long as the maker "knows how to order" things, the final result will be "better" than any possible verbal description or drawing could represent. Drawings and descriptions help to establish the communicative space in which a group of people coordinate and unify their work.

Ultimately, the products of manufacture depend most directly on the practical knowledge that guides the maker's hand. In the middle of his description of a typical merchant's house, the Architect observes, "It is true that, in the making, many things can be accommodated to the needs and comforts of habitation which cannot be described, because making [il fare] teaches many things, and because not everything can be fully narrated here." One learns how to make precisely by making. The actual making of material objects "teaches many things" that go beyond the abilities of verbal description—and, we may add, of disegno—to represent. The essence of this kind of practical knowledge consists in an ability to adjust or refine preliminary plans such that they are "made better," such that the starkly rigid misure and highly generic qualità with which Filarete always begins are "accommodated to the needs and comforts of habitation." The subtle knowledge required to integrate misure and qualità, no matter how appropriate in the first instance, into the plenitude of a kairos does not inhere simply or only in the hand. For Filarete, practice in actual making "teaches" many things even as it also "sharpens"

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³⁸⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 282 = Filarete, *Treatise* (Spencer, trans. and ed.), I:128: «[...] per ordine si farà tutto, e ancora nel fare si faranno meglio che per disegno non si può mostrare, neanche a parole si possono dire queste cose come quando si fanno, se colui che fa le sa ordinare.»

³⁸⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 329 = Filarete, *Treatise* (Spencer, trans. and ed.), I:149: «Vero è che nel fare molte cose si possono acomodare al bisogno e comodità dell'abitare che non si possono dire, perché il fare insegna molte cose e perché a pieno none ogni cosa qui si narra.»

the intellect.³⁸⁷ The technical challenges inherent in a given craft are, in Filarete's view, whetstones against which the intellect hones itself to a finer edge, so that its perspicacity and judgment become ever more incisive. Practical competence is for Filarete an alloy of intellectual perspicacity, imaginative agility, visual perceptiveness, and manual dexterity.

Insofar as *disegno* consists in the manual practice of making drawings, it likewise serves to inform or train the intellect in its capacity to understand. Filarete's discussion of geometry is, as I mentioned above, remarkable for its emphasis on the use of geometrical construction as a means to understand geometrical principles. Learning how to make actual drawings of geometrical figures with a compass and straightedge—which involves a certain amount of experimentation as the student grapples with the challenges of mastering the instruments and following the instructions provided by the teacher—means learning not only how to make figures, but also how those figures are susceptible to representation. The drawing of geometrical figures demonstrates— in the sense of *proving* as well as the sense of illustrating—the invariance of geometrical relationships, which further demonstrates—again in a double sense—the truth of geometry's underlying principles.³⁸⁸ Just so, after his serial descriptions of how to construct a variety of geometrical forms, the Architect reminds his student, "You have understood the way [modo] to [draw] round, square, and polygonal buildings. Now you need to study every way

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³⁸⁷ Filarete provides in his *Libro* one early and somewhat idiosyncratic variation of that fateful marriage between practical knowledge and abstract intellection that would bear fruit in the form of modern science. The practical and pedagogical slant of Filarete's comments suggest that it would be difficult to overrate the importance of the artisanal workshop tradition—within which Filarete, in contradistinction to Alberti, received his formative training—as a source of a working conception of a "practical intellect."

³⁸⁸ In the *Meno*, Socrates argues for the eternity and universality of geometrical principles by leading a slave through an *exercise* in geometric construction. Whatever the ontological status of the relationship between the length of a square's edge and its area, Socrates leads the slave to see and understand that relationship by having him witness the drawing of real lines in the earth. Filarete's pedagogy echoes that of Socrates in many respects, except that Filarete advises his student to draw the figures with his own hand.

exercise your hand at *disegno*."³⁸⁹ The student comes to know and understand the abstract precepts of geometry, which are the basis of *disegno*, not through contemplation or reflection, but through working and exercising his *hand*. To put it provocatively, the hand teaches the intellect how to understand what the eyes see. The mathematical underpinnings of optics cannot guarantee understanding, on Filarete's account, absent a particular kind of intellectual "sharpness" or "subtlety" that can only be developed through manual practice.

Modern writings on architectural representation too often pass over in silence—where they do not actively denigrate—the intimate interdependence of mind and hand that Filarete holds as essential to the learning and practicing of any handicraft. Some recent authors, however, have sought to articulate and valorize the kind of cognition embodied in and activated by manual practice. Matthew Crawford, for example, argues thoughtfully for the revalorization of manual work on the grounds that such work confronts myriad challenges that must be viewed as intellectual. ³⁹⁰ Crawford argues convincingly that all manual work—whether art, craft, trade, or mere *bricolage*—involves a form of problem-solving cognition that is unmistakably rational. Another author interested in defending the intelligence implicit in manual work is Juhani Pallasmaa, who observes that the hands of the craftsmen who realize an architect's design serve as "surrogates" for the architect's own intelligent hands. Such surrogacy implies that "the hand is not only a faithful, passive executor of the intentions of the brain; rather, the hand has its own intentionality, knowledge and skills." The hand is the mind's *partner*—not the mind's slave.

More pertinently, Jonathan Foote advances a reading of Filarete, strongly congruent with my

³⁸⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 656 = Filarete, *Treatise* (Spencer, trans. and ed.), I:305: Hai inteso il modo a fare i casamenti tondi, e quadri, e affacciati. Ora ti bisogna a ogni modo studiare a disegnare, ché questi precetti che t'ho dati non saperesti perciò fare, se none adoperassi ed esercitassi la mano al disegno.

³⁹⁰ Matthew B. Crawford, *Shop Class as Soulcraft: An Inquiry into the Value of Work* (New York: Penguin Press, 2009), esp. 11-36

³⁹¹ Juhani Pallasmaa, *The Thinking Hand: Existential and Embodied Wisdom in Architecture* (Chichester, U.K.: Wiley, 2009), 15.

own, that for the Florentine architect "disegno is the medium by which architects transmit an idea to both patrons and builders alike, prying open the interpretive space of the architect's imagination." For Foote, Filarete's conception of disegno highlights the character of architectural expertise as "handed knowledge," which is to say, knowledge derived from and enacted as manual practice.

Filarete's valorization of "manual" thinking (a notion that he does not actively defend but rather seems to take for granted) interestingly illuminates Alberti's famous remark that "the carpenter [fabri] is but an instrument in the hands of the architect." Modern commentators have tended to interpret this remark as evidence of Alberti's desire to arrogate to the architect absolute control over the craftsman whose work he supervises. While Alberti certainly viewed the relationship between architect and worker as hierarchical, Filarete's contemporaneous position suggests that Alberti's dictum should be understand as simultaneously asserting the worker's inalienable competence and intelligence. Hierarchy does not imply absolutism. The challenges that confront the architect may well differ in kind and prestige from those confronting the builder, but architectural thinking can only ever arise in response to the exigencies of manual work. Too radical a distinction between the mental and the manual—so characteristic of post-Cartesian accounts of human being and doing—obscures the fact that the architect's characteristic mental competencies can grasp and ameliorate the practice and products of manufacture only because they are themselves rooted in manual practice.

³⁹² Jonathan Foote, "The Rhetorical Hands of Filarete: A Vitruvian Interpretation of 15th Century Disegno," Lecture (Morgan State University School of Architecture: 2008),

http://www.academia.edu/3771430/Filarete_and_disegno>.

³⁹³ Foote, "The Rhetorical Hands of Filarete."

³⁹⁴ Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, Mass.: MIT Press, 1988; repr. paperback, 1997), 3.

Inventive *Disegno*

Filarete argues that one learns the principles of *disegno*—which descend genetically from the principles of geometry—through manual practice, so that *disegno* in general falls within the jurisdiction of *pratica*. Nevertheless, *disegno* occupies a special place among manual practices. Firstly, as Filarete asserts several times in the *Libro*, disegno "is the foundation and way [via] of every art done with the hand." Since a mastery of *disegno* is obviously not categorically necessary for most craftsmen in the practice of their respective crafts, Filarete can only mean that disegno makes manifest the kind of thinking that guides manufacture. Along just these lines, Baldasso suggests that Filarete views drawings as "graphical means for reasoning," which is to say, as graphical arguments. For Filarete, drawings demonstrate or prove the depicted idea—in the sense of winning the viewer's assent for the depicted idea's correctness—even as they illuminate the link between original intention and finished product, imaged in the quote above as a "via"—a way or path. Since disegno descends from geometry, the unimpeachable demonstrative authority of geometrical figures bequeaths a similar authority to the products of disegno. Secondly, drawings function most often in the Libro (and in modern architectural practice generally) as communicative instruments. A craftsman makes couches for sitting, but he makes drawings most often to communicate his intentions. Although communicative drawings are themselves the products of human manufacture, they are brought into being principally to point beyond themselves.³⁹⁷ Drawings are thus both poetic *and* mimetic, both expressions of a specific intention and intermediate symbols of further intentions—and the craftsman is not so much caught on the horns of this amphibious ontology as empowered by it. The hand practiced

³⁹⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 10-11 = Filarete, *Treatise* (Spencer, trans. and ed.), I:5: «[...] è fondamento e via d'ogni arte che di mano si faccia.»

³⁹⁶ Baldasso, "Filarete's *Disegno*," 42.

³⁹⁷ Cf. Vitruvius's distinction between intention [quod significatur] and the expression of that intention [quod significat], as well as Plato's distinction between poēsis and mimesis—both of which were discussed in Chapter 4.

in *disegno* can make an object that, in its plenary engagement with its own real situation, *further* refers to a hypothetical situation. Thirdly and finally, the consanguinity of *disegno* and geometry means that drawings—like geometrical figures—exist both as concepts and as material objects. When Filarete compares the architect to a mother, carrying the building within himself, he of course does not mean that there is a literal, material building somewhere within the architect's body. Rather, he means that the architect carries it *nella mente* ("in the mind"). Filarete can envision a single building passing from mind to materialization lagely because *disegno*, the various forms of which range from the mental to the wooden model, covers precisely that same ontological range.

The notion of an ability to "draw in the mind" derives from the artistic workshop tradition, as evidenced by the fact that Cennino Cennini (c. 1370 – c. 1440), whose *Libro dell'arte* (after 1390) represents the first known Renaissance craft handbook, identifies just such an ability as the mark of an experienced practitioner of *disegno*. Like Filarete, Cennini vaunts the ability to draw in the mind as the fruit of extensive manual practice: "Do you know what will happen to you, practicing drawing with a pen? You will become expert, practiced, and capable of much *disegno* within your head." Cennini's boast derives from a confidence—identical to Filarete's—that the practical experience of drawing leads to an acquaintance with the principles governing its potentialities. Making many drawings teaches that certain kinds of things are easy to draw, while other kinds are difficult. Some kinds of things can be drawn, but not built, while other kinds of things can be built, but not drawn. A practitioner familiar with the underlying

³⁹⁸ The natural philosophy and medical thinking of Filarete's day held that perception resulted in actual impressions or marks made in the physical substance of the brain, with the recurring analogy—originating with Aristotle (*De Anima* II.12 = 424a.17-20)—being an impression made in wax. The consistency of the analogy—present even today in our habitual use of the philosophically and psychologically important phrase "sense impression"—is historically remarkable. The impressing of sense images upon the brain must be understood, however, as producing a physiological result closer to sculptures made in *bas-relief* than to either line drawings or three-dimensional models. ³⁹⁹ Cennini, *Il libro dell'arte*, 9 = ch. XIII: Sai che ti avverrà, praticando il disegnare di penna? che ti farà sperto, pratico, e capace di molto disegno entro la testa tua.

"logic" of *disegno*—its *ragione*, as Filarete might say—can predict how a particular attempt to draw something is likely to play out. An intellect honed by practice can project, *ex hypothesi*, the intricate interplay between the practitioner's mental intentions, level of manual skill, and the general constraints of the practice.

Given that one obviously does not literally draw a stylus across a planar surface in one's mind, the habit of referring to the mental operation in question as a kind of disegno is highly significant. The difference between the Italian term disegno—with its philological linkages to semiotic verbs such as "to signify" and "to designate"—and drawing, the English term most often used to translate it—which at bottom means simply "to pull"—illuminates rather starkly the semantic tension implicit in using a single term to refer to both a manual practice and a mental act. The phrase disegno nella mente describes a certain kind of thinking—what we would today call a certain kind of cognition—namely, the kind of thinking that one practices when actually drawing. Both Cennini and Filarete are contributing to the elaboration of a generalized psychological account of artistic practice. Given the historical precocity of their works, it would be well to bear in mind a crucial caveat highlighted by David Summers: "A Renaissance artist interested in discussing his aims in psychological terms did not simply have recourse to the reality of his own mind; rather, he had the possibility of access to a varied and culturally definite language about the reality of his own mind." 400 Words always operate as partisan intermediaries; they never refer to anything without inflecting the reference in some way. A primary aim of Filarete's *Libro* is to compass and valorize an *architectural* form of thinking—one which facilitates the production of superior buildings. The ability to think architecturally, which

⁴⁰⁰ Summers, *The Judgment of Sense*, 15.

consists largely in the ability to *design*—more or less in the modern sense of the term—in the mind, represents the architect's most essential skill.⁴⁰¹

The subsumption of a form of cognition beneath the otherwise practical and tangible rubric of *disegno* implies that the manual practice of *disegno* does not reside uniquely in the hand. The use of the hand entails in each art a characteristic form of self-conscious cognition that develops in tandem with the unselfconscious dexterity that characterizes the master practitioner. The astonishing insouciance with which *disegno* (as Filarete understands it) ignores the metaphysical membranes between body and soul means that the veteran practitioner need not do anything special in order to permit either his mental reflections to inform his manual practice or the exigencies of his manual practice to inform his inventive thinking. ⁴⁰² Unlike the philosopher, who engages images only mentally, the artist practices *disegno* with both hand and mind. It is manual practice that teaches that material

[i]mages do not (and cannot) have a simple precedent mental cause, that making an image in a certain way is not a matter of duplicating a mental image in material, but rather a matter of knowing what to do in order to make an image of a certain character. In principle no distinction may be drawn between duplicating a mental image and knowing how to make an image and, in fact, the insistence upon the precedence of the mental image simply continues the old idealist assumptions of the history of art as the history of imagination. 403

While a drawing might serve in a communicative context as a kind of anchor for an architectural idea, it is never equivalent to that idea. Rather, the drawing implies both an intended quality of encounter between a visitor and the building depicted as well as something like a recipe for how

⁴⁰¹ I am intensely aware of the dangers of anachronism involved in using a modern term to describe a form of cognition only dimly adumbrated in the writings of Renaissance artists, but I can think of no other word in any modern language, other than *design* (and its cognates), that captures with anything close to adequacy what it is the experienced architect can do.

⁴⁰² Such a doctrine, which makes out the intellect as a malleable faculty susceptible to the formative influence of manual experience, interestingly and importantly contradicts directly the fundamental and (at the time) long-standing law of Augustinian psychology that the body cannot be a cause of anything in the soul.

⁴⁰³ David Summers, "Conditions and Conventions: On the Disanalogy of Art and Language," in *The Language of Art History*, eds. Salim Kemal and Ivan Gaskell (Cambridge, U.K.: Cambridge University Press, 1991), 207-08.

to make the building. The precision with which an architect can express his architectural ideas through drawings increases as he more fully "knows what to do in order to make" both the drawing and the building it depicts. A viewer is likely to find that a drawing illuminates the bridge from intention to building precisely in proportion as he possesses an analogous knowledge.

Disegno nella mente both underlies and underwrites the practice of manual disegno, so that although the image on the page and the intention in the artist's mind are not identical, the artist nevertheless develops both using a unified cognitive process. We nowadays hold that an architect's production of tentative sketches actually constitutes a special kind of thinking—what we like to call "design thinking"—that cannot be dissociated from the manual practice that both generates and exercises it. 404 The putative identity of the underlying psychological process justifies the use of the single term disegno to denote what seem to be distinct activities. While disegno nella mente manifests most straightforwardly during the making of rough and ready sketches, however, the most striking interaction between mind and hand occurs in the making of drawings that are prepared deliberately as prompts to further design thinking.

Drawing Commonplaces

The dominant trait of the drawings of architectural elements in so-called Renaissance "sketchbooks" such as the Coner Codex and the Codex Barberini is not roughness, but rather *incompleteness*. ⁴⁰⁵ According to Cammy Brothers, the Coner Codex in particular, attributed to the Florentine carpenter, Bernardo della Volpaia (c. 1475 – 1521), who worked closely with

⁴⁰⁴ Cf. Pallasmaa, *The Thinking Hand*, 71-105.

⁴⁰⁵ For descriptions, discussions, and reproductions of the images in the Coner Codex, see T. Ashby, "Sixteenth-Century Drawings of Roman Buildings: Attributed to Andreas Coner," *Papers of the British School at Rome* 2 (1904): 1-88.

members of the Sangallo family, "is characterized by a high degree of organisation, a consistency of representation and composition on the page, and an analytical focus on details."406 In the Coner Codex, "[a]ncient and modern bases, capitals, and entablatures are placed side by side,",407 suggesting that the sketcher viewed them not merely as models, but as *alternatives*. Even in the less systematic Codex Barberini, which has been attributed to Giuliano da Sangallo (c. 1443 – 1516), elements appear in proximity to others that belong to the same genus—building façades being prominent example. 408 The sketcher's primary interests appear to be the classification and comparison of functionally similar elements, which argues for viewing these drawings not as working sketches, but as *studies*. Architectural studies not only record the salient aspects of potential models, but also teach both drawer and viewer which aspects of a given element type are salient, thereby highlighting promising sites for variation. An architect who wants to resolve the form of a given cornice can consult this kind of sketchbook in order to map out a number of possible itineraries toward a more finished conception. The fact that the makers of these sketchbooks habitually drew juxtaposed elements at the same scale provides additional evidence that they viewed as potential alternatives for addressing recurring architectural situations. 409 Further, elements in the sketchbooks are often stripped of their context, and "[t]he disjunction of the detail from its source implies that the nature of the building it adorned was

⁴⁰⁶ Cammy Brothers, "Architecture, Texts, and Imitation in Late-fifteenth- and Early-sixteenth-century Rome," in *Architecture and Language*, 96. On the Coner Codex in particular, including its principle attribution (it contains drawings in two hands, though most of the drawings are in one), see Chen Liu, "Between Perception and Expression: The Codex Coner and the Genre of Architectural Sketchbooks" (Ph.D. diss., Princeton University, 2011).

⁴⁰⁷ Brothers, "Architecture, Texts, and Imitation," 98.

⁴⁰⁸ Brothers, "Architecture, Texts, and Imitation," 88-89.

⁴⁰⁹ Brothers, "Architecture, Texts, and Imitation," 96-98.

irrelevant." To represent elements without their context treats them as fragments, as components susceptible to reformulation within a novel configuration.⁴¹¹

Brothers elucidates the habits of presentation in the Coner Codex by citing Alberti's famous recommendation that all serious students of architecture keep a sketchbook.

I would have him [the architect] take the same approach as one might toward the study of letters, where no one would be satisfied until he had read and examined every author, good and bad, who had written anything on the subject in which he was interested. Likewise, wherever there is a work that has received general approval, he should inspect it with great care, record it in a drawing, note its numbers, and construct models and examples of it [...] and should he find anything anywhere of which he approves, he should adopt and copy it; yet anything that he considers can be greatly refined, he should use his artistry and imagination to correct and put right."412

An architectural sketchbook serves firstly as a tool for studying buildings (and parts of buildings) generally or personally recognized as excellent, where the goal of the investigation is to tease out and record the reasons for that excellence. The sketchbook inventories outstanding buildings and fragments, which are thereby rendered available for use as first-class models for imitation. Alberti does not mean that the architect should record integral wholes that must be copied slavishly. Rather, the architectural studies in such a book function as high quality starting points for further elaboration. As well, the practice of studying and recording excellent architecture amounts to exercising one's ability to discern architectural excellence in all its guises, thereby training one's taste and perspicacity. An Albertian architectural sketchbook, in short, both inventories—records, analyzes, and organizes—an architect's observations and hones his powers

⁴¹⁰ Brothers, "Architecture, Texts, and Imitation," 98.

⁴¹¹ See Payne, "Ut poesis architectura," 145. Liu cites the manifest attention given to fragments in the Coner Codex as evidence of a fundamental bias, in favor of "the flexibility of isolated details over adherence to classical cannons" (Liu, "Between Perception and Expression," 10), whose most outstanding champion was Michelangelo. On Michelangelo's use of disegno as an inventive practice, see Cammy Brothers, Michelangelo, Drawing, and the *Invention of Architecture* (New Haven: Yale University Press, 2008), esp. 64-69. Alberti, *On the Art of Building*, 315-16 = IX.10.

of *invention*. It is not a coincidence that the modern English words *inventory* and *invention* both descend from the Latin word *inventio*. 413

Brothers cites Alberti in order to frame the Renaissance practice of architectural sketching as an adaptation of a literary practice, for the architectural sketchbooks that Alberti recommends obviously emulate the literary commonplace-books that were the kingpost of humanist pedagogy. The humanist practice of making commonplace-books, as Ann Moss carefully documents, was intended to concretize the practice of piecemeal literary imitation into a copious repository of alternatives organized by thematic or argumentative applicability, which could then be used to generate unified literary works. 414 Renaissance readers were taught to collect quotations from approved authors and organize them by theme (the Seven Virtues, for example, were among the most commonly used themes). 415 These themes were the notebook's "common places" in that they contained and categorized quotations. When an author needed an authoritative citation on a subject, his commonplace-book provided a ready-to-hand stock of excerpts. Such a practice treats quotations as literary fragments, which may be used either as self-standing adages or as literary tokens that conjure the larger work from which they were extracted. The architectural sketchbook thus adapts a thoroughly literary practice to architecture, thereby suggesting that Alberti views architectural thinking as discursive, for "[t]he dividing up of things into parts that are then recombinable as wholes is, in essence, discursive thinking."⁴¹⁶ Alberti commends the practice of sketching architectural fragments, in short, because it trains the

⁴¹³ On the interdependence of invention and inventorying, see Carruthers, *The Craft of Thought*, 11-13.

⁴¹⁴ Ann Moss, *Printed Commonplace-Books and the Structuring of Renaissance Thought* (Oxford: Clarendon Press, 1996), esp. 165-66.

⁴¹⁵ Alberti himself studied at the famous school of Gasparino da Barzizza (c. 1360 – c. 1431), whose terse treatise on literary imitation articulates the only known general reflections on the subject between the death of Petrarch (1304 – 1374) and the infamous dispute between Angelo Poliziano (1454 – 1494) and Paolo Cortesi (1465 – 1510). For a summary of the version of imitation advocated by Barzizza, as well as a translation of his Latin text, see Pigman, "Barzizza's Treatise." For a commentary on Poliziano's position in the history of the theory of imitation, including remarks on his debate with Cortesi, see Greene, *The Light in Troy*, 147-70.

⁴¹⁶ Barkan, "The Heritage of Zeuxis: Painting, Rhetoric, and History," 104.

sketcher to *think* architecturally even as it equips him with an inventory of architectural schemata that may be inventively amplified and refined.⁴¹⁷

Filarete's *Libro* contributes to a larger tradition in the Renaissance that views *disegno* as a catalytic aid to invention, where one of the primary methods of invention is understood as consisting in the identification, elaboration, and evaluation of alternatives. Several generations after Filarete, summarizing the essentials of Renaissance art, Vasari would write that "the best thing is to draw men and women from the nude and thus fix in the memory by constant exercise the muscles of the torso, back, legs, arms, and knees, with the bones underneath. Then one may be sure that through much study attitudes in any position can be drawn by help of the imagination [fantasia] without one's having the living forms in view."418 The manual practice of disegno fixes forms in the memory, not as integral wholes, but as articulate—and therefore analyzable and reconfigurable—compositions of elements or fragments. The advanced practitioner of disegno is able to recombine remembered fragments as he pleases, in his mind and on the page. Learning to draw human figures thus means learning how to analyze bodies into component parts, memorizing those parts, and developing a facility for recombining them in various attitudes. Aligned with this position, Paul Akker argues that Florentine disegno "was primarily concerned with the possibility of varying the positions of the body." The defining character of the Renaissance sketchbook is the susceptibility of the fragments drawn therein to recombinatory experimentation—drawings made as fodder for later conjecture or investigation.

⁴¹⁷ Brothers characterizes Michelangelo's integration of the works of others into his own as cognate with the rhetorical practice of speaking *ex tempore*, which invariably creatively imitates and reworks material from others. Indeed, she cites no lesser an authority than Quintilian on the subject (Brothers, *Michelangelo, Drawing, and the Invention of Architecture*, 42).

⁴¹⁸ Giorgio Vasari, *Vasari on Technique*, trans. L. S. Maclehose (London, 1907; rev. ed. New York, 1960), p. 210, quoted in Paul van den Akker, "'Out of Disegno Invention is Born' – Drawing a Convincing Figure in Renaissance Italian Art," *Argumentation* 7, 1 (1993): 63.

⁴¹⁹ Akkers, "Out of Disegno Invention is Born," 60.

Brothers interprets the extraordinary inventiveness of Michelangelo's architecture, to cite a pivotal example in architectural history, as based upon his practice of *disegno*. She notes that Michelangelo's figural drawings "often include small variations on a limited number of themes," effectively corroborating Akker's characterization of *disegno* as a practice of variation through recomposition. Michelangelo's figure studies showcase variation as a basic feature of the Florentine practice of *disegno*, and Brother's cites similar figural drawings from many of the era's most famous artists, including Leonardo da Vinci, Lorenzo Ghiberti, Filippino Lippi (c. 1457 – 1504), Antonio Pollaiuolo (1429/1433 – 1498), Domenico Ghirlandaio (1449 – 1494), Luca Signorelli (c. 1445 – 1523), and Sandro Botticelli (1445 – 1510). Ests] out a range of possibilities across the page. Escause they are on a single page, the multiple studies play not only against each, but also with each other, interacting in a variety of ways that may stimulate and suggest further refinements.

To return to our principle subject, when Filarete asserts the similitude of buildings and humans, deriving the *misure* and proportions of buildings from those of the human body, he lays the ground for viewing architectural invention as based upon a kind of anatomy of buildings. ⁴²⁴ In an architectural context, inventive *disegno* thereby becomes a practice interested in "the possibility of varying" the configurations and articulations of *buildings*. Along precisely such lines, Filarete represents the Architect as responsible not only for teasing out the edificatory

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⁴²⁰ Brothers, Michelangelo, Drawing, and the Invention of Architecture, 10.

⁴²¹ Brothers, *Michelangelo*, *Drawing*, and the Invention of Architecture, 11-11.

⁴²² Brothers, Michelangelo, Drawing, and the Invention of Architecture, 14.

⁴²³ For an exposition of how Michelangelo's deliberate practice of repetitive variation played out in the Sistine Chapel, see Brothers, *Michelangelo, Drawing, and the Invention of Architecture*, 22-39.

⁴²⁴ While the importance of anatomical studies in the Renaissance is too well known to need defending here, I may gesture to Erwin Panofsky's evocative description of Leonardo's groundbreaking attitude and methods in dissection and anatomical drawing as evidence of the importance of the notions of *misure* and *disegno* in the thinking and work of Filarete's successors. See Panofsky, "Artist, Scientist, Genius: Notes on the 'Renaissance-Dämmerung," in *The Renaissance: Six Essays*, ed. Wallace K. Ferguson (New York: Harper & Row, 1962), 140-66.

ramifications of the Lord's voluntà, but also for proposing alternatives that help the Lord to grasp better what he truly wants. When discussing the towers for Sforzinda's city wall, for example, the Architect says, "I will tell you how I have drawn it in my mind to make it. If you like it, we will do in this form, if not, in the form that you want to make it." And the Lord replies, "In good time. Say how you have drawn it [in your mind], and then I will see it." The Architect, having first grasped the basic contours of the Lord's *voluntà*, then proceeds to develop it by "drawing it in his mind." He develops it to a certain level of refinement and complexity (and we may presume that the more adept the practitioner, the more elaborately he can develop his "mental drawings"), and then verbally describes his "mental drawing"—his design, as we would say nowadays—which the Lord interprets as one option among several. In another instance, while discussing the basic arrangement of Sforzinda with the Lord, the Architect remarks, "I will describe two ways [modi] we thought to arrange [scompartirla] and order it. Then, as seems best to you, so it will be done." The Architect expressly sets forth options to serve as touchstones against which the Lord can compare his voluntà. The Architect's capacity to compose and articulate such descriptions derives from his ability to extrapolate the consequences of a hypothetical architectural arrangement—his ability, that is, to "draw it in his mind."

Of course, the Architect is able to present alternatives as actual drawings, too. The Lord's Son, after hearing of two possible arrangements for a building, says, "I like the one and the other, but if you please, make a drawing of [both] the one and the other, and then we will show them to

⁴²⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 130-31 = Filarete, *Treatise* (Spencer, trans. and ed.), I:57: «Io vi dirò com'io l'ho disegnata nella mente mia di farla: se a voi piacerà, la faremo in questa forma, se none, in quella forma che vorrete voi si farà.»

[«]In buon'ora sia. Di' pure come tu hai disegnato, e poi lo vedrò.»

⁴²⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 165 = Filarete, *Treatise* (Spencer, trans. and ed.), I:74: «[I]o dirò come in due modi avemo pensato di scompartirla e ordinarla, e poi, secondo a voi parrà che stia meglio, così si farà.»

the Lord my father, and the one that pleases him most will be made." The principle difference between the two options is that one has one court while the other has two courts. The "mental images" communicated by descriptions cannot be compared unless all options are held, as it were, side by side in the mind. Actual drawings, however, can be placed quite literally side by side so as to facilitate a direct comparison. In the above example, the actual drawings contemplated are nothing like photographs or isomorphic representations of pictures in the Architect's mind, but rather symbols or symptoms of the most salient aspects of two architectural realizations of the Lord's *voluntà*.

With the Lord's *voluntà* as a kind of steady wind, inventive *disegno* navigates toward its destination, proceeding not straightforwardly, but rather experimentally and interrogatively, though without being merely aleatory. Renaissance sketches are anything but *random*; but neither are they mechanically algorithmic. The middle ground between the aleatory and the algorithmic has received from modern psychologists the designation *heuristic*. The modern

⁴²⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 222 = Filarete, *Treatise* (Spencer, trans. and ed.), I:99: «L'una e l'altra mi piace, ma se ti pare, fa' il disegno dell'una e dell'altra, e poi le mosterremo al Signore mio padre, e quella che a lui piacerà più, quella si farà.»

⁴²⁸ Brothers argues that Leonardo was the first artist to believe that "the purpose of drawing was not only to render ideas in the artist's mind but also to generate new ones (Brothers, *Michelangelo*, *Drawing*, *and the Invention of Architecture*, 12). Leonardo's notebooks are perhaps best understood, however, not as the *source* of a modern notion of drawing as an inventive practice, but rather as the *culmination* of an insight long implicit in the Florentine workshop tradition. Both of Leonardo's predecessors in Milan—namely, Filarete and Franceso di Girogio Martini—had training in Florentine *disegno*, and both wrote books that evidence an intense concern with artistic and architectural invention.

⁴²⁹ It might be helpful to reproduce here the conclusions of Janice Lauer's study of the modern origins of the English term *heuristics*, which psychologists use in reference to a specific kind of cognition: "Another term that emerged in the 1960s was *heuristics*, the study of the processes of discovery. Psychologists characterized heuristic thinking as a more flexible way of proceeding in creative activities than formal deduction or formulaic steps and a more efficient way than trial and error. They posited that heuristic strategies work in tandem with intuition, prompt conscious activity, and guide the creative act but never determine the outcome. Heuristic procedures are series of questions, operations, and perspectives used to guide inquiry. Neither algorithmic (rule governed) nor completely aleatory (random), they prompt investigators to take multiple perspectives on the questions they are pursuing, to break out of conceptual ruts, and to forge new associations in order to trigger possible new understanding. Heuristic procedures are thought to engage memory and imagination and are able to be taught and transferred from one situation to another. While students typically use heuristics deliberately while learning them, more experienced creators often use them tacitly, shaping them to their own styles" (Janice M. Lauer, *Invention in Rhetoric and Composition* (West Lafayette, Ind.: Parlor Press, 2004), 8-9).

English word *heuristic*, which refers generally to the study of the cognitive processes of discovery, derives from the Greek verb ευρίσκειν ("to find," "to discover"; Latinized as *heuriskein*). Crucially, *heuriskein* translates into Latin as *invenire* ("to find," "to discover"), which is the verbal cognate of the noun *inventio*. Following Alberti, Filarete conceptualizes the practice of *disegno* using a discursive frame, likening certain of its powers to those that animate literary invention. As I will discuss in greater detail in Chapter 6, rhetorical *Inventio* is called such because it is nothing other than the "finding" of possible arguments. As we have seen, one pole of Filarete's spectrum of *disegno* concerns precisely scaled drawings and proportioned models that serve principally communicative ends, while the other pole concerns drawings that traverse the boundary between mind and matter, and that multiply possibilities in order to test them against a variety of criteria.

Filarete thus strikingly depicts the core responsibilities of the architect, mirrored in the spectrum of *disegno's* potentialities, as the discovery, development, and communication of architectural ideas. In this regard, Filarete's account of architectural practice closely parallels classical accounts of rhetorical practice, which approach oration not from the standpoint of criticism or interpretation, but rather from the standpoint of *production*. The most influential of the classical guides to rhetoric, which are uniformly pedagogical in character, guide an orator from the assignment of a subject on which to speak to the performance of the resulting speech *in situ*. The five canons of rhetoric, in short, envision the orator as one who produces

⁴³⁰ For recent arguments demonstrating that rhetoric has always been understood and taught as a productive art, see Atwill, *Rhetoric Reclaimed*, ch. 7 and Gross, "What Aristotle Meant by Rhetoric."

⁴³¹ It is important to emphasize that rhetorical *Inventio* traditionally focused on the explication rather than the identification of the subjects on which an orator would speak. Subjects for speeches were given rather than found, assigned rather than chosen freely. Speeches were delivered to an audience expecting the treatment of a predetermined subject: the case for going to war, the innocence of the defendant, the personal excellences of a recently deceased friend, and so on. The processes according to which the orator found himself on one side or another of an issue differ in kind from the processes through which the orator works out what he is going to say in support of his assigned position.

something—as a *maker*. The first canon is *Inventio*, which corresponds closely to the looser, more experimental uses of *disegno*, which are precisely heuristic or inventive. Architectural theorists have recently attempted to recuperate and elucidate precisely this inventive power of *disegno*, which is able to "make the potential field of possibilities present and available." The deliberately incomplete drawings that I have called *studies* provide an inventory of useful starting points of inventive thinking, effectively channeling the viewer's inventive powers. In our own time as in Filarete's, architects deploy particular practices of drawing and model making in order to discover architectural ideas and organize them for later development. Invention defines the perigee between rhetoric and architecture, for just as rhetorical *Inventio* refers to the process whereby an orator discovers and collates a manifold of things that it is possible to say about his subject, so architectural invention—with *disegno* serving as the primary catalyst—refers to the process whereby an architect discovers and collates a manifold of possible things to build.

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⁴³² Vesely, Architecture in the Age of Divided Representation, 13.

⁴³³ Pallasmaa, *The Thinking Hand*, 60.

CHAPTER 6:

ARCHITECTURAL INVENTION

To Delight and Instruct

Filarete's modern commentators have often viewed the Libro as a work divided against itself, with the text's syncretic literary form—typically understood as an amateurish pastiche of genre conventions—lying skew to the essential meaning of the text—typically understood as straightforward architectural theory. Tigler, to highlight a representative example, argues explicitly that the text cannot be understood unless and until one extracts the propositional pith from the literary husk. As I discussed in Chapter 1, Tigler attempts to develop a coherent "theory" of architecture by winnowing Filarete's "theoretical statements" from the rest of the work, which he regards as decorative chaff. Whether explicitly or implicitly, most modern commentators hew to Tigler's line of interpretation, dismissing portions or aspects of the *Libro* as superfluous. Among the possible targets for such exclusion, no parts of Filarete's Libro could be more tempting in their apparent frivolity than the episodic digressions that Spencer refers to collectively as divertimenti ("diversions"). Including epitomes of classical texts, historical and personal anecdotes, sylvan adventures, bucolic encounters, feasts, and hunts, the divertimenti often appear to have very little—if anything at all—to do with architecture or building. While it would seem that Spencer does not wish simply to reject out of hand the integrity of the text as

⁴³⁴ Tigler, *Die Architekturtheorie des Filarete*, IX: [...] theoretischen Äußerungen.

given, he nevertheless reflexively interprets the *divertimenti* by starkly opposing them to the *Libro's* "content" properly speaking. "The exposition of the new architecture that Filarete advocates is the true core of the treatise. All the rest is only peripheral. However, the peripheral matter—the flights of fancy, the allegorical conundrums, and the digressions—tend to obscure the true aim of Filarete's treatise." Describing and advocating the Florentine brand of "new architecture" (an ironic description given that Filarete sees himself as an evangelist for the "ancient mode of building") constitutes in Spencer's view the central objective of the *Libro*. The *divertimenti* not only fail to contribute constructively to this "true aim," but actively "obscure" it. The reader therefore accesses the "true core" of the *Libro* only by actively identifying and disregarding "the peripheral matter."

Spencer's reading is considerably more nuanced than this rather austere statement suggests, though the nuance tends to appear somewhat disconcertingly under the form of self-contradiction. Since, according to Spencer, Filarete's main objective is "to convert both patron and artist to his own point of view," it is eminently reasonable that the *Libro* should proceed by "exposition" and "advocacy." Filarete elucidates his notion of architecture in order to urge his reader to embrace it. Spencer develops his interpretation of the *divertimenti* in line with his highly cogent view that Filarete's main objective in the *Libro* is the persuasion of the reader.

At intervals approximating the probable attention span of his noble audience [Filarete] provided respite from an avalanche of architectural projects by interjecting a *divertimento*. The partly imaginary trips to explore the territory around Sforzinda or to seek out materials are part of the total fabric of the treatise, yet they contain episodes designed to delight the taste of the audience for hunts, bucolic interludes, and allegory. A modern reader may consider such digressions as unnecessary decoration or as medieval anachronisms. In reality they serve a definite purpose in the treatise and they are quite revealing of fifteenth-century tastes in literature. Filarete's frequent references to antiquity seem designed to flatter the reader's interest in antiquity and to cloak the practice of architecture with enough erudition to make it one of the liberal arts. He also

⁴³⁵ Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xix.

⁴³⁶ Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xxxvi.

requires an occasion to present his own credentials as a humanist-artist. [...] These are all literary matters, however, that are tangential to Filarete's aim of instructing his reader. They serve the useful function of amusing him while he is being taught. 437

Spencer here argues eloquently against a strictly propositional reading of the *Libro*, advocating instead a more integrated reading that views all elements and aspects of the work as part of a more or less harmonious whole. The *divertimenti* are neither "unnecessary decoration" nor "medieval anachronisms." Rather, they constitute "part of the total fabric" of the work, which means that they "serve a definite purpose in the treatise," flattering "the reader's interest in antiquity" and providing Filarete "an occasion to present his own credentials as a humanistartist."

As respites from the often dry descriptions of building projects, the *divertimenti* manifestly aim to achieve what rhetoricians call *captatio benevolentiae*—the securing of the goodwill of the audience. For pedagogical simplicity, this function was usually discussed as the special province of the *exordium* or introduction of a speech, but a practiced orator could of course actuate it at any time. Also, by demonstrating the author's classical learning, the *divertimenti* magnify the stature of Filarete's rhetorical *ethos*—the credibility and authority of the persona who speaks. The goodwill of the audience and the authority of the speaker provide essential bases for persuasion in a given rhetorical *kairos*. Without some measure of the audience's goodwill and the requisite standing in the audience's eyes, no argument—no matter the soundness of its construction or the deftness of its delivery—can exert its full persuasive force. After this generous and sophisticated exegesis, however, Spencer incongruously concludes

⁴³⁷ Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xix-xx.

⁴³⁸ Pseudo-Cicero, *Rhetorica ad Herennium*, 20-21 = I.7.11.

⁴³⁹ Cicero, *De inventione*, 42-47 = I.xv.21-xvi.23.

⁴⁴⁰ In his *Rhetoric*, Aristotle famously identifies three potential sources of persuasion, of which the speaker's *ethos* is only one; the other two are *logos*—"reason" or "discourse"—and *pathos*—"emotion." See Aristotle, *On Rhetoric*, 38-39 = I.ii.2-6 = 1356a.

that the *divertimenti* are merely "literary matters," useful because they are "amusing," but in the final analysis "tangential to Filarete's aim."

Notwithstanding his bald—even overemphatic—assertions of the irrelevance of the divertimenti, on the whole Spencer seems reluctant to perform the surgery that separates the Libro's "literary" aspects from its "architectural" aspects. Spencer's ambivalence may arise in part from the fact that his basic thesis—that the "exposition of the new architecture that Filarete advocates is the true core" of the *Libro*—dovetails neatly with some *divertimenti*, but not with all. The epitomes of ancient texts, allegories, and festal meals—the ensemble of which I shall call, for lack of a better descriptor, the *classical divertimenti*—often illuminate or extrapolate some insight into architecture or building by establishing a connection to classical letters, whether through direct citation (the epitomes), expository method (the allegories), or dramatic setting (the festal meals). For example, while excavating the foundations of the arsenal at Plousiapolis, the workers find a cup with an inscription that reads, "I, Queen Demiramisse, send you this cup from which you will be pleased to drink, and when you see it, remember your Demiramisse." 441 Kenneth Hayes observes that the name is a syllabic anagram for Semiramis, the great queen of antiquity made famous by the biography in Diodorus's *Library of History*. In Diodorus's account, the great-willed Semiramis dominates every man she meets—including her eventual husband, King Ninus—and guides them to success in their endeavors with her wise counsel. 442 Among her projects is the construction of a great city in Babylonia, for which she hires the best architects and conscripts millions of men as workers. Hayes astutely comments that "Semiramis, the city builder of great virtue, is not the model for Francesco Sforza, but the model

⁴⁴¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 589 = Filarete, *Treatise* (Spencer, trans. and ed.), I:270: Io, Regina Demiramisse, ti mando questa tazza colla quale ti piaccia di bere, e quando tu la vedi ricordati della tua Demiramisse.

⁴⁴² Diodorus, *The Library of History*, I:357-91.

Filarete adopted for himself.",443 Having early in the *Libro* compared, as we saw in Chapter 2, the architect to the "mother" of the building, Filarete with the trope of the cup extends and deepens the resonance of his analogy by referencing a great female builder of the ancient past, whose great virtù secured the lasting fame of her husband. The reader's mental keenness and knowledge of classical literature are flattered when he penetrates the intentionally thin veil that obscures the reference, even as he thereby comes to view Filarete's claims about architecture in connection with a classical author of unimpeachable reputation. While the story of the archeological find is certainly entertaining, it is no *mere* diversion. This is highly sophisticated writing that diverts the reader by inviting him to speculate about the power of building along numerous interpretive circuits, every one of which links Filarete's basic claims about architecture to time-honored sources of authority. Such divertimenti provide "respite from the avalanche of architectural projects" presented in the *Libro* even while they illuminate, illustrate, and valorize Filarete's central claims about architecture in general.

The Forest, the Quest, and the Hunt

In showing how the classical divertimenti act subtly "to make the reader's mind receptive", 444 to Filarete's otherwise forthright lionization of antiquity, Spencer contributes no constructive insight into the other kinds of divertimenti—the hunts, exploratory expeditions, and sylvan episodes—the ensemble of which I shall henceforward call the venatic divertimenti. 445 The acuity of Spencer's argument that Filarete deploys the classical divertimenti in a

⁴⁴³ Hayes, "Machiavelli's Architect," 86.

Spencer, introduction to *Treatise*, by Filarete (Spencer, trans. and ed.), I:xx.

⁴⁴⁵ I do not mean to insist upon an absolute and mutually exclusive division between classical *divertimenti* and venatic divertimenti. My distinction responds primarily to Spencer's comments, which provide an excellent account of the classical divertimenti, but which pass over all other divertimenti in silence. The fact that some divertimenti (such as the archaeological excavation of the foundations of Plousiapolis) belong to both classes poses no real problems, since my interpretation of the venatic divertimenti does not oppose Spencer's arguments for the importance of the classical *divertimenti* so much as parallel them.

sophisticated way militates for interpreting all of the *divertimenti* as similarly sophisticated. Whereas the classical *divertimenti* relied upon tacit support from the intense fascination with antiquity that pervaded fifteenth-century Italian culture during Filarete's lifetime, the venatic *divertimenti* relied upon tacit support from the fact that hunting was among the most widely and intensely cultivated pleasures of the aristocracy in the Renaissance. Filarete makes constant and apparently quite conventional reference to the "pleasure" taken in the various hunts described in the *Libro*. Of signal importance in late medieval and early modern societies was the socioeconomic fact that unimaginably vast swathes of European forest were legally proscribed as royal (or at least aristocratic) hunting preserves. Permission to enjoy the pleasures of the hunt was thus in many places a mark of privilege, with stiff penalties meted out to those who took game from or materially disturbed protected forests without leave.

Linked inextricably to the social status of hunting in the Renaissance was the resonance of its conventional setting—the forest—as a traditional literary *topos* in early modern writing. The ubiquity and complexity of sylvan symbolism in late medieval and early modern literature reflects in large part the range of its precedents in biblical, patristic, and classical sources. Associated on the one hand with the biblical themes of wilderness and pilgrimage, and on the other hand with such pagan divinities as Diana, Faun, Silvanus, Aristaeus, and above all Pan, the image of the forest conflated a plethora of literary notions, but none more persistent or pertinent than the hunt. In classical mythology in particular, hunting inevitably falls under the tutelage of the deities of the forest. But even the patristic theme of hermitage evoked by sylvan imagery in

⁴⁴⁶ One thinks of the comment that Baldesar Castiglione puts in the mouth of Count Ludovico da Canossa in Book I of *Il Cortegiano*, that hunting "is an amusement for great lords and befitting a man at court, and furthermore it is seen to have been much cultivated among the ancients" (Baldassarre Castiglione, *The Book of the Courtier*, trans. Leonard Eckstein Opdycke, originally published as *Il Cortegiano* in Venice: Aldine Press, 1528 (New York: H. Liveright, 1929), 31 = I.22).

⁴⁴⁷ On the pivotal legal status of the forest in late medieval and early modern Europe, see William Perry Marvin, *Hunting Law and Ritual in Medieval English Literature* (Cambridge, U.K.: D.S. Brewer, 2006), 1-16.

the thoroughly Christian context of early modern Europe can be interpreted as a search or hunt for God. It is important to stress, however, that "[w]hile the forest functions as a recurring literary topos with great symbolic power, it is also a 'real' landscape, linked to the geographic, economic and legal concerns of the [actual] forest." During the late medieval and early modern eras, swine were pastured in the forest, and peasants relied upon the forest for lumber, bark, charcoal, medicinal herbs, and many other important products. And of course the forest promised berries, nuts, and mushrooms to those who knew where and how to look for them. If actual late medieval and early modern forests undoubtedly evinced the aspect of encroaching menace, they also promised economic security and food. But it was above all the game housed in the forest that represented its most coveted and most problematic product. In late medieval and early modern contexts, the activity of hunting—understood as an aristocratic prerogative—determined the political and legal status of both forests and activities permitted therein, which means that sylvan imagery and terminology in the Renaissance inexorably evoked a backdrop of venatic concerns.

Popular literature in the late medieval and early modern eras was dominated by the vernacular romance epic. Within the genre of the epic, the forest served as "a primary romance landscape", "450—perhaps even the romance landscape *par excellence*. As Filarete describes them, the forests surrounding Sforzinda and Plousiapolis, with their occasional clearings, varied inhabitants, and wealth of game, are eminently suitable for the kind of periodic adventures that punctuate romance epics. The venatic *divertimenti*—episodic anecdotes in which something "happens" to the protagonists in the forest—reproduce quite strictly the typical plot rhythm of a

⁴⁴⁸ Corinne J. Saunders, *The Forest of Medieval Romance: Avernus, Broceliande, Arden* (Cambridge, U.K.: Brewer, 1993), xi.

⁴⁴⁹ On the complex socioeconomic functions of the forest in late medieval culture, with an eye toward how these realities influenced its deployment and reception as a literary symbol see Saunders, *The Forest of Medieval Romance*, ix-xiii and esp. 1-24.

⁴⁵⁰ Saunders, The Forest of Medieval Romance, x.

Renaissance romance epic. 451 Filarete's characters venture into the forest not only to hunt game, but also to explore the region, to search for building materials, and to discover suitable building sites. Although motivated by prizes rather less worthy than the Holy Grail, the expeditions into the woods described in Filarete's *Libro* are certainly *quests* of a kind, in which regard they mimic the most characteristic plot arc of the vernacular romance epic. As a quest dilates and dramatizes the basic workaday activity of searching for something, so whether searching for game, for marble, or for whatever comes their way, Filarete's characters in nearly every instance venture into the forest in a seeking frame of mind.

Filarete's venatic *divertimenti* reproduce both the most common setting—the forest—and the most common plot arc—the quest—of the typical vernacular romance epic. As Sforza's court architect, Filarete was assuredly familiar not only with the popular romantic poetry of his day, but with the basic tropes and plot elements of the medieval epics upon which such popular poetry was based. The sylvan settings and quests depicted in the romantic epic poetry popular in Italy during Filarete's lifetime almost certainly represent the proximate literary source for the venatic *divertimenti* in the *Libro*, but this does not fully explain how they function in the text. Whereas Spencer argues convincingly that the classical *divertimenti* make the reader's mind "receptive" to Filarete's arguments for the superiority of the antique mode of building, I submit that Filarete's frequent references to the forest, as well as his descriptions of hunts and kills, all contrive to

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⁴⁵¹ On the characteristic structure of Renaissance romantic epics, in which clearings in the forest provide occasions for adventures to befall the hero, see the final chapter of Ernesto Grassi and Maristella De Panizza Lorch, *Folly and Insanity in Renaissance Literature* (Binghamton, N.Y.: Medieval & Renaissance Texts & Studies, 1986).

⁴⁵² The popularity of the vernacular romance epic did not compete with the rise of interest in ancient culture, but rather complemented and enhanced it. Renaissance epics melded themes and plot elements drawn from both medieval romantic poetry and classical literature, with the works of Homer and Vergil accorded precedence in the latter category. On the conflation of medieval and classical material in Renaissance epic poetry, see Jane E. Everson, *The Italian Romance Epic in the Age of Humanism: The Matter of Italy and the World of Rome* (Oxford: Oxford University Press, 2001).

conjure for his presumably aristocratic reader the guiding spirit appropriate for a patron of architecture—namely, the alert, engaged, inquisitive, questing spirit of the hunter.⁴⁵³

The Hunt for Architectural Knowledge

In proposing to use phrases like *venatic spirit* and *venatic thinking* in the pages that follow, which suppose that the mental activity involved in hunting constitutes a recognizable and transferable form of cognition, I am following the lead of a number of recent studies that have singled out the *venatio* as a singularly important cultural metaphor. William Eamon's studies of early modern science underline the strong and striking preference evinced by early modern practitioners of what they called "science" for describing their overall project as a hunt. Eamon's work fills in and refines the thesis of Edgar Zilsel (1891 – 1944), who in the early 1940s published a number of articles, which together interpreted the genesis of modern science as the result of specific sociological conditions that made possible a fusion of the working methods and professional prejudices of academics, humanists, and craftsmen. According to Zilsel, the crucial contribution was that of the craftsmen and artisans, who "added causal spirit,

⁴⁵³ Derived from Latin *venatio*, but nearly homophonous with Latin *venereus* ("sexual love," "sexual desire"), the medieval term *venery* neatly conflated the themes of hunting and courtly love. For numerous subtle observations on how and with what emphasis Romance epics typically avail themselves of the doubled sense of *venery*, see Marvin, *Hunting Law and Ritual*, esp. chaps. 4 and 5.

The regularity with which Filarete insists upon the pleasure [piacere] that attends hunting, combined with his emphatic fusion of pleasure, love, and building (which I discussed with a different emphasis in Chapter 2), together provide ample grounds for supposing that the venatic divertimenti can be understood in erotic, as well as heuristic, terms. In my view, both interpretations are tenable. I have chosen not to adduce the case for interpreting the venatic divertimenti in terms of "the chase" of courtly love partly in the interests of concision, but mainly because I want to focus the reader's attention on the case for interpreting them in terms of "finding." It is my wager that the heuristic case is, in any event, more consequential, since it illuminates the importance of Filarete's thinking about architecture vis-à-vis our basic notions of reason and rationality.

⁴⁵⁴ Eamon, Science and the Secrets of Nature, esp. 269-300.

⁴⁵⁵ For Zilsel's overview of his own thesis, see Edgar Zilsel, "The Sociological Roots of Science," *American Journal of Sociology* 47, 4 (1942). Zilsel's few writings in English, all of which concern the history of science, have been collected into a single volume: *The Social Origins of Modern Science*, eds. Diederick Raven, Wolfgang Krohn, and R. S. Cohen (Boston: Kluwer Academic Publishers, 2000).

experimentation, measurement, quantitative rules of operation, disregard of school authority, and objective co-operation." ⁴⁵⁶

Following Zisel's groundbreaking lead, Eamon brings to light the very large tradition of "books of secrets" published in the Renaissance, in which experimentally-minded craftsman and artisans of all stripes circulated their (often trivial) empirical discoveries, which were paradoxically referred to as "secrets" when shared or published. Those who boasted knowing such secrets, or who sought fame by publishing them, consistently described their discovery or acquisition in venatic terms. At the apex of this trend, Francis Bacon (1561 - 1626) adopted the "Hunt of Pan" as his preferred metaphor for the empirical method he endorsed for the practice of science. 457 The increasing use of venatic imagery and terminology to describe scientific practice in the early modern period stemmed, in Eamon's estimation, from two related presuppositions about the nature of scientific practice. Firstly, the notion of science as a hunt is "premised on the idea of scientific inquiry conceived as the discovery of new things rather than as attempts to demonstrate the known.",458 One does not hunt for what one already possesses. And secondly, "the epistemology of science as a *venatio* rested upon a distinction between knowledge of nature gained by common sense, which revealed only nature's outer appearances, and knowledge of the inner causes of phenomena." ⁴⁵⁹ One does not hunt for what one can see plainly. Eamon effectively characterizes the "secrets of nature" that constitute the quarry of the early modern scientific venatio as both undiscovered and hidden.

We can interpret Filarete's venatic *divertimenti* partly in terms of the venatic mode of cognition that characterized artisanal practices of empirical experimentation that were

⁴⁵⁶ Zilsel, "The Sociological Roots of Science," 558.

⁴⁵⁷ Eamon, Science and the Secrets of Nature, 285-91, esp. 286.

⁴⁵⁸ Eamon, Science and the Secrets of Nature, 271.

⁴⁵⁹ Eamon, Science and the Secrets of Nature, 292.

increasingly recognized as socially and philosophically important. Filarete explicitly tasks the architect with discovering new (architectural) knowledge in precisely the sense that Eamon describes. In the Golden Book, King Zogalia describes how and why he has treated his architect so well.

Seeing him to be competent [sufficiente], we treated him so that [in modo] it might be known among others that it [would be] apparent that we esteemed his virtù. [...] Just so, because we understood the virtù of this one [our architect], he was well treated, who contained in himself all these things: firstly, he knew how to work, with his [own] hand, silver, bronze, gold, copper, marble, earth [that is, clay], wood—all these things mediated by disegno. He also understood how to color like a painter. And these things may be understood by the things that are seen [to have been] made by him. He was also investigating and finding many and various manners of things, like glass and other manners of mixtures. Then in letters too he strove [s'ingegnava] to understand, and to investigate new fantasie and various moralities [moralità] and virtù, and how to make buildings in various ways. [...] [A]s to his salary [provisione], which was proportional [conveniente] to his virtú, he was given one hundred ducats each year, so that he could investigate and research new fantasie and new things to make.",460

The patron should pay his architect in proportion to the latter's *virtù*, which consists primarily in his basic manual competence—his ability to do many things with "his own hand." (Filarete's original and subtle notion of the architect's *virtù* will be the focus of Chapter 7.) As we might expect, given the findings of Chapter 5, Filarete connects this manual competence to the architect's mastery of *disegno*. The architect in particular must possess competence in many different crafts, because architecture either makes use of or literally makes a place for most other artifacts, making it the epitome of all the manual arts.

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⁴⁶⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 431 = Filarete, *Treatise* (Spencer, trans. and ed.), I:199-200: [L]ui vedendo essere sufficiente, lo trattamo in modo che si cognosceva intra gli altri che pareva che noi stimassimo la sua virtù. [...] Sì che, perché da noi fu inteso le virtù di questo, fu bene *Trattato*, il quale in lui conteneva tutte queste cose: lui in prima di sua mano sapeva lavorare d'argento, di bronzo, d'oro, di rame, di marmo, di terra, di legno, di tutte queste cose mediante el disegno; di colorire secondo dipintore ancora s'intendeva; e queste cose s'intende per le cose che si veggono fatte da lui. Era poi ancora d'invistigare e trovare molte e varie maniere di cose, come di vetri e d'altre maniere di misture, e poi in lettere ancora s'ingegnava d'intenderne, e di nuove fantasie e di varie moralità e virtù invistigare, e in modi di varii edificii fare. [...] [O]ltre alla sua provisione, la quale era conveniente in parte alla sua virtù, gli era asegnato ogni anno cento ducati, perché potessi investigare e cercare nuove fantasie e nuove cose fare.

In addition to his more straightforwardly productive work, however, the architect is also supposed to "investigate," "find," and "research" both "various manners of things" and "new things to make." The word *misture* ("mixtures") in particular, which intimates the discovery of recipes that reliably produce this or that practical effect, suggests very strongly that Filarete envisions the architect searching for precisely the kinds of craft "secrets" that are the basis of Eamon's study. 461 Filarete's comments here reflect his (almost certain) training in the workshop tradition, for the two most eminent texts of that tradition—Cennini's *Libro dell'Arte* and Vasari's Lives—discuss the various pigments useful to a craftsman in quite practical terms, sometimes providing recipes [ricette] and other times simply giving broad indications of the raw materials involved. 462 For Filarete, the architect has not only mastered the crafts concerned with building. he also actively expands his practical knowledge through disciplined experience. 463 More interestingly, Filarete appears to be using his craft training to interpret the definition of invention that Vitruvius advances in *De architectura*, in which the Roman specifically mentions the discovery of "new things" [novae rei]. "Invention, nevertheless, is the explication and rationalization of obscure questions—the discovery, with adaptable vigor, of new things."464 Vitruvius famously divides the discipline of architecture into "reasoning" [ratiocination] and "fabrication" [fabbrica], and he consistently links the Latin term ratio ("reason," "argumentation," "speech") to letters and book learning, which he opposes to terms linked to manual practice. Even given the appearance of *ratio* in Vitruvius's definition of invention, the "discovery" [reperta] of "new things" that he has in mind would appear belong to fabbrica. For

⁴⁶¹ See Eamon, Science and the Secrets of Nature, 9 ff.

⁴⁶² For Cennini, see *Il libro dell'arte*, 23-40 = XXXV-LXII; for Vasari, see his introductory essay on the three *belle arti* in *Vite*, I:107-215.

⁴⁶³ Filarete is clearly not advocating an experimental method such as we would recognize today. The architect learns things from experience, but he disciplines his experience according to a rational principle that is precisely neither algorithmic, nor aleatory, but rather heuristic.

⁴⁶⁴ Vitruvius, *On Architecture*, I:26-27 = I.ii.2: Inventio autem est quaestionum obscurarum explicatio ratioque novae rei vigore mobili reperta.

Filarete, an able architect produces not only material artifacts, but also the novel technical knowledge that facilitates or outright enables the manufacture of "new things." In an important sense, the diligent architect acts as an empirical researcher—an epistemological hunter.

Architectural virtù, however, consists not only in craft knowledge, but also in the knowledge and understanding of classical letters. Here, too, the architect must "investigate," but with the aim of discovering "new fantasie" and "various moralities [moralità] and virtù" (in the plural). The quotation that we have been discussing closes a longish passage in the *Libro*, ostensibly the summary of a section of the Golden Book, that lists and justifies the various disciplines that a good architect should know. Within this more extended discussion, the Golden Book says that the architect "needs to know letters, because without letters he cannot be a perfect artificer.',465 A few lines further on, the Golden Book amplifies this preliminary assertion. "[The architect] [should] know letters, because without letters he will not be able to compare [rasimigliare] or to express worthy things, unless he asked others [for help], even though such things [may be] shown through art and *ingegno* and *disegno*, yet reading helps greatly." 466 The key verb here is rasimigliare—"to compare," or to be perfectly precise (if rather more clunky), "to bring together to examine for similarities." Importantly, the similarities in question are obviously not visual or formal, but rather semantic and "moral" (in the broad sense outlined in Chapter 4). The architect, that is, should study literature in order to familiarize himself with the connotative haloes of meaning that surround historical personages, literary

⁴⁶⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 427 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: «[...] sanza lettere non può essere perfetto artifice.»

⁴⁶⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 429 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: "Che sappia le lettere, perché sanza lettere non potrà rasimigliare né sprimere cose degne, se già none domanda altri, benché mediante l'arte e lo 'ngegno e 'l disegno si dimostrano, ma il leggere assai aiuta.»

The patent concern for the independence of the architect's knowledge and judgment in this passage thwarts current scholarly opinion that most of the classical learning on display in the *Libro* is to someone else's credit. One might venture that such a comment indicates that while Filarete was willing to receive help from his humanist friends, he was eager—and indeed worked diligently—to free himself from any durable dependence.

images, crucial concepts, and so on. The architect must "strive [s'ingegna] to understand" literature in order to discover and give expression to the semantic and moral resonances that will afford his works social currency and cachet.

Filarete's contention that the architect's knowledge of classical letters aids in his discovery of "new fantasie" echoes Alberti's recommendation to painters that they associate with literati so as to improve the quality of the thematic *inventions* that structure their works. "For their own enjoyment artists should associate with poets and orators who have many embellishments in common with painters and who have a broad knowledge of many things whose greatest praise consists in the invention. A beautiful invention has such force, as will be seen, that even without painting it is pleasing in itself alone." Literary knowledge conduces to, but cannot absolutely ensure, the development of excellent *invenzioni*. But where Alberti seems to view invention as operating almost entirely at a conceptual level—someone who has no practical knowledge of brushes and pigments, but who knows classical literature, is qualified to invent a pictorial program—Filarete views invention as operating materially as well as conceptually. The synonymity of fantasie and invenzioni in the Libro suggests that Filarete seems them as deriving from cognate—if not identical—forms of cognition. While Filarete elsewhere associates fantasie with verbs like pensare ("to think") and fantasticare ("to work upon using the imagination"), he here uses the verbs *invistigare* ("to investigate") and *cercare* ("to search"). These are cognate with the verb trovare ("to find"), which Filarete habitually pairs with the rubric of *invenzione*. In general, then, the form of cognition that discovers or composes the program for an artwork involves imagination and proceeds investigatively. Further, Filarete strikingly uses a single verb—invistigare ("to investigate")—to describe, on the one hand,

⁴⁶⁷ Alberti, Leon Battista, *On Painting*, trans. John R. Spencer, rev. ed., originally published as *Della pittura* in 1436 (New Haven: Yale University Press, 1966), 89.

empirical, practical research into "manners of mixtures" and "new things to make," and on the other hand, the literary invention of "new *fantasie*" and "various moralities [*moralità*] and *virtù*." He evidently views both mechanical experimentation and literary invention as cognate activities, which implies that he sees the two bodies of knowledge that result from these activites as cognate. The strict lexical parallel here strongly argues that Filarete views both as underwritten by a single, basic mode of cognition. 469

Venatic Thinking

The figuration of early modern scientific practice as a hunt marks an historically important crystallization of a perception of the broad utility and significance of venatic thinking. In a study that has been increasingly recognized as important, Carlo Ginzburg showcases a few historical examples of a type of thinking that he believes exemplifies a universal epistemological model—which he characterizes as *venatic*—able to challenge the hegemony of modern scientific thinking. Venatic thinking "is characterized by the ability to construct from apparently insignificant experimental data a complex reality that could not be experienced directly." The hunter uses footprints, spoor, and other traces to reconstruct the paths an animal has traveled, as

⁴⁶⁸ Martin Kemp distinguishes two different kinds of invention in the Renaissance: a first kind "associated with the tradition of natural philosophy and [...] closely related to the discovery of truth," and a second kind "dependent largely upon a literary-poetic tradition in which invention is less wholly identified with rational processes of discovery" (Kemp, "From 'Mimesis' to 'Fantasia,'" 348). The first kind of invention is a quasi-rational process (the account of which derives from the Aristotelian and Ciceronian tradition of rhetoric) through which experience and judgment discover useful precepts. The second kind is an irrational process (the account of which derives from the Platonic and Neoplatonic tradition of poetic creation as a divinely inspired furor or mania) through which completely new and supremely beautiful things might irrupt into the world. In the passage cited above at least, Filarete seems to conflate the two kinds of invention such that practical judgment and experience, deployed experimentally, give rise to "new things."

The case that I am building is large and complex, so that presenting all of its sources and consequences in quick succession would only conduce to confusion. It may nevertheless help the reader at this point to know that I will explicate in Chapter 7 Filarete's notion of a "single, basic mode of cognition"—which he calls *ingegno*—that underlies both literary and artisanal endeavor.

⁴⁷⁰ Ginzburg, "Clues: Roots of an Evidential Paradigm."

⁴⁷¹ Ginzburg, "Clues: Roots of an Evidential Paradigm," 103.

well as its general behavior and physical condition. Other disciplines also employ venatic thinking. The doctor interprets a symptomology—a collection of perceptible indices—in order to diagnose the imperceptible disease that is their ultimate cause. The navigator uses winds, currents, and stars to maintain his vessel upon a course that neither he nor anyone will ever perceive directly. The orator communicates makes his point—the gist of his speech—by adapting his verbiage in response to the intangible character and mood of his audience. While venatic thinking can build upon universal concepts or rules, it cares not one whit for their universality as such. Venatic thinking is interested strictly in plausibility, which means that it usually proceeds from traditional rules of thumb using rules of probable inference, all filtered through the practitioner's inborn acuity of insight, training, and personal experience. More pointedly, venatic thinking aims not to explore the consequences of preconceived truths, but rather to discover and articulate the hidden causes of observable traces. Both logician and hunter proceed from the known to the unknown, but whereas the former begins with principles and attempts to demonstrate their consequences, the latter begins with signs and attempts to discover their causes. Venatic thinking thus employs, endorses, and expresses an underlying epistemology that aligns precisely with the one that Eamon identifies: the hunter seeks a truth both undiscovered and hidden.⁴⁷²

Ginzburg argues that the investigative method that he has identified not only gives practical expression to a basic *episteme* or *paradigm*—which he alternatively characterizes as "presumptive," "divinatory," or "conjectural"—but also represents a refinement of an elementary mode of human cognition. Thus, "behind this presumptive or divinatory paradigm we perceive

⁴⁷² Eamon cites Ginzburg's article approvingly in his book, but he develops the notion of an "epistemology of the hunt" only in order to provide a philosophical gloss for the new practice of science that assimilates the book of secrets tradition. Whereas classical science had sought to make manifest the consequences of preconceived principles, venatic science aimed to discover as yet unknown truths. See Eamon, *Science and the Secrets of Nature*, 281 ff.

what may be the oldest act in the intellectual history of the human race: the hunter squatting on the ground, studying the tracks of his quarry."⁴⁷³ In marked contrast to the image of the stargazing philosopher, who cranes his neck to marvel at the eternal heavens, Ginzburg conjures as the primordial image of rational thought the image of the empty-bellied hunter, who hunches over a patch of scuffed earth in search of his next meal. Ginzburg's provocative suggestion of a form of rationality markedly distinct from and more primitive than either dialectic or syllogistic finds an apt complement in Jean-Pierre Vernant and Marcel Detienne's seminal study of the ancient Greek notion of *mêtis* ("cunning intelligence"). 474 The term *mêtis* refers to both a goddess, Zeus's first wife, whom he swallowed after she became pregnant with Athena, as well as the specific form of human intelligence that represents the goddess's special province. Mêtis—as both deity and cognitive faculty—governs all ruses, tricks, feints, and ploys. The central preoccupation of *mêtis* is practical efficaciousness—what works to achieve a desired end irrespective of moral constraints (what might be vaunted as socially appropriate) and metaphysical categories (what might be defined as physically possible). Crucially, *mêtis* functions as a catalytic enhancer of or outright substitute for physical strength. As the deviser of ruses and ploys, *mêtis* is the great ally of the small against the great, the few against the many, the weak against the strong. For all these reasons, the most paradigmatic arena in which *mêtis* is deployed is the hunt, where efficacy is a matter of life and death. The crafty angler fish, who pretends to be prey in order to lure his victims in front of his mouth; the ever-cunning fox, who eludes his hunters by back-tracking, traversing running water, and other ruses; the protean octopus, who camouflages himself so as to resemble a rock—all exemplify venatic *mêtis*. On the

⁴⁷³ Ginzburg, "Clues: Roots of an Evidential Paradigm," 105.

⁴⁷⁴ Detienne and Vernant, *Les ruses de l'intelligence*. Eamon also cites Vernant and Detienne's book approvingly, though again his purpose in doing so seems only to gloss the theoretical character of the "new science," which absorbed the books of secrets tradition (the principle subject of his study), as opposed to the "classical science" that preceded it.

other side, *mêtis* also serves the hunter, who attempts to reconstruct trails, to distinguish deceptions, to penetrate disguises. The struggle between predator and prey clearly involves simple size, brute strength, and purely physiological attributes such as teeth, claws, horns, musculature, and so on; but it also involves intelligence. The struggle of wits implicit in a hunt is not, however, a confrontation between minds in the domain of ratiocination or deduction. The intelligence proper to the hunt—venatic intelligence—is *mêtis*.

While the hunt is the paradigmatic situation in which *mêtis* manifests itself, another typical situation in which *mêtis* manifests itself is in the making of artifacts—that is, in the technai ("crafts" or "productive arts"). 475 The production or repair of an artifact necessarily entails the production or refinement of the know-how that makes it possible. Craft knowledge differs markedly from propositional knowledge in that the craft apprentice can learn how to make bricks only by actually making bricks. Abstract knowledge of the molecular composition of clay or of the chemical process whereby heat transforms clay into bricks cannot on its own improve an apprentice's ability to make bricks. Craft knowledge can make use of general principles, but its main concern is not with moral or metaphysical categories, but with effective causation, with what works. Like hunting, facture does not entail ratiocination or deduction, but rather investigation, conjecture, and experience. No less than any other craftsman, the architect relies upon mêtis. In fact, contemporary scholars have argued that the Latin term sollertia ("cunning intelligence," "ingenuity"), which Vitruvius time and again nominates as the key intellectual faculty of the architect, should be understood as equivalent to the Greek term *mêtis.* 476 The foundational text of modern architectural theory has thus been read as asserting that architectural thinking corresponds to venatic thinking. By evoking *mêtis* in its most characteristic

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⁴⁷⁵ On the relation between *mêtis* and the crafts, see sec. IV of Detienne and Vernant, *Les ruses de l'intelligence*. ⁴⁷⁶ Pérez-Gómez, *Built Upon Love*, 70-73 and Marco Frascari, *Eleven Exercises in the Art of Architectural Drawing: Slow Food for the Architect's Imagination* (New York: Routledge, 2011), 101-02.

context, familiar to any aristocratic reader in the Renaissance, the venatic *divertimenti* dispose Filarete's readers to interpret his presentation of architectural thinking not as an intimidatingly foreign competence, but rather as an adaptation of the hunting prowess they already possess.

Hunting for Novelty

Given the Vitruvian tradition that categorizes architectural intelligence as sollertia, which means *mêtis*, the foregoing discussion of the hunt as the paradigmatic setting for the exercise of mêtis provides the ground for two observations concerning the basic character of architectural practice. Firstly, novelty represents an indispensable architectural virtue only because the essential mode of architectural thinking is investigative or inquisitive. Novelty, in any event, does not reflect an absolute or ontological condition so much as the historical situation of the researcher. Archaeology and history, for Filarete, result in findings no less "novel" than those obtained through sheer experimentation. Further, the architect invents both architectural ideas as well as techniques for realizing them. The perfect historical and material uniqueness of every architectural project—which I interpreted in Chapter 2 using the philosophical concept of natality—necessitates that the architect formulate a perfectly unique response. The reuse of traditional models and templates mediates, but does not vitiate, this uniqueness. As our era knows to its sorrow, the imposition of a mere handful of "optimized" designs that are not supposed to need adaptation only serves to create an intensely inhumane environment, paradoxically highlighting the absolute uniqueness of each architectural situation. Secondly, architectural knowledge is not universal and apodictic, but rather personal and contingent. Even the basic precepts that might be taught as the core of architectural competence must be learned by experiencing directly and personally how they play out in real situations. Such knowledge can be held "in common" only through the auspices of an oblique pedagogy that helps students to recreate for themselves with relative ease the practical know-how that their predecessors first developed with painful effort.

Early in the *Libro*, Filarete radically reconfigures the three Vitruvian orders, assigning them new numerical proportions and reworking their symbolic associations. Later on in the *Libro*, however, Filarete explicitly breaks with Vitruvius's account of the orders in a much more open-ended manner. During an explanation as to why Christian churches are generally laid out in the shape of a cross, Filarete admits that churches have in fact been laid out in a variety of forms. He then segues into a discussion of (his interpretation of) Vitruvius's three columnar orders, which correspond to three basic moods for temples in antiquity. Doric temples are strong and rough, appropriate for masculine deities such Hercules and Mars; Corinthian temples are delicate and ornate, appropriate for feminine deities such as Venus, Flora, and Ceres; and Ionian temples are in general of poorer quality, appropriate for deities such as Diana, Juno, and Bacchus. Filarete then unexpectedly continues:

"I also believe that they [the Romans] had another type [ragione], though Vitruvius does not mention it, that is, those [dedicated] to the sylvan gods, such as Pan and Faun and other similar woodland gods they followed. They made them of boughs and of their other fantasie. So we have varied manners of churches."

Although bold, we should not consider either insouciant or arrogant Filarete's proposal to round out Vitruvius's set of Doric, Corinthian, and Ionian temples (as well as, one presumes, their corresponding columnar orders) with what can only be called the Sylvan type. Anyone in possession of anything close to Filarete's broad experience examining and measuring real buildings and ruins all over northern Italy would have found Vitruvius's treatise to be something

⁴⁷⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 187 = Filarete, *Treatise* (Spencer, trans. and ed.), I:83: Credo ancora che n'avevano d'altra ragione, benché Vitruvio nol dica, cioè a quegli idei selvestri, come era Pan e Fauno e altri simili idei salvatii che loro tenevano, e facevano di frasche e di loro altre fantasie; sì che noi ancora abbiamo variate maniere di chiese.

of a puzzle. As is well known, the rigid typology and fixed proportions that Vitruvius advocates are not reflected in many of the ancient buildings and ruins that were extant in Filarete's day.

Empirically speaking, antique buildings sometimes sport wooden columns, stone columns carved to resemble trees, or arboreal ornamentation motifs, but such buildings hardly constitute a coherent enough grouping within, or large enough proportion of, classical edifices to merit classification as a basic type. Too, Filarete presents neither the correct misure nor the proper qualità of the Sylvan temple, nor does he adduce any extant examples of the Sylvan type, which suggests that he was motivated by something other than a desire to correct the empirical shortcomings of Vitruvius's system. Given Filarete's well-documented reliance on Pliny the Elder's *Natural History*, ⁴⁷⁸ the Sylvan temple described in the *Libro* may well be an interpretive extension of Pliny's evocative comment that "[o]nce upon a time trees were the temples of deities," and more particularly, "we also beheve that the Silvani and Fauns and various kinds of goddesses are as it were assigned to the forests from heaven and as their own special divinities.",479 And although perhaps less likely as a direct source for Filarete, Philostratus the Elder, in his *Imagines*, corroborates Pliny's remarks when he mentions that the hunting goddess Diana was accustomed to receive sacrifices in arboreal "temples" that comprised only a glade where "wild animals sacred to her graze there, fawns and wolves and hares, all tame and without fear of man." (Filarete's humanist friend Francesco Filelfo certainly knew of Philostratus, as

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⁴⁷⁸ For a focused study of Filarete's debt to Pliny's descriptions of classical architecture and building practices, see Peter Fane-Saunders, "Filarete's *Libro architettonico* and Pliny the Elder's Account of Ancient Architecture," *AL* 155, 1 (2009). See also Franch, "Ideas estéticas de Antonio Averlino": 127-33.

⁴⁷⁹ Pliny the Elder, Natural History, trans. Harris Rackham (Cambridge, Mass.: Harvard University Press, 1956-1963), IV:4-5 = XII.ii. The chapter continues with a description of the "fruits" [*mensae*] of the forest, for which "battle must be waged [*depugnetur*] with the wild beasts to obtain them." Pliny thus affirms the primordial importance of the hunt in sylvan mythology by casting it as a contest between humans and animals.

⁴⁸⁰ Philostratus the Elder, "Imagines," transl. Arthur Fairbanks, in *Philostratus the Elder, Imagines – Philostratus the Younger, Imagines – Callistratus, Descriptions* (London: William Heinemann, 1931), 112-13 = I.28. See also George L. Hersey, *The Lost Meaning of Classical Architecture: Speculations on Ornament from Vitruvius to Venturi* (Cambridge, Mass.: MIT Press, 1988), 42-43. For a few suggestive remarks on the subsequent importance of

he brought back to Italy from Constantinople a copy of the latter's *Life of Apollonius*; but R. R. Bolgar's meticulous bibliographical study of inventories of classical texts has 1475 as the earliest year in which a copy of the *Imagines* is indexed in a European library. ⁴⁸¹) It thus seems probable that Filarete is here engaged in the more literary exercise of reconciling classical authors than the more empirical exercise of reconciling Vitruvius with the realities of classical buildings. In Pliny's description, the Sylvan represents the primordial type of temple. Filarete thus "corrects" Vitruvius by positing the most primitive kind of temple as a "new" addition to the Vitruvian trinity of Doric, Corinthian, and Ionic. 482 Both Pliny and Philostratus presume the same tight linkage between the setting of the forest and the activity of hunting that, as we saw above, characterizes early modern consciousness in general and early modern literary symbolism in particular. The "newness" of the Sylvan type receives reinforcement from its literary and social resonances, since sylvan imagery implies hunting, and venatic thinking aims to discover novel results.

In describing the temples as made of "boughs" [frasche], Filarete evokes the rustic glades that both Pliny and Philostratus seem to have in mind in their description of primitive woodland temples. But Filarete additionally claims that Sylvan temples were made out of fantasie ("fantasies," "figments," "fancies"). As I indicated in Chapter 4, in Filarete's lexicon the rubric fantasia usually refers to grandly intended artistic programs, often qualified by such adjectives as variate, belle, and—crucially in the present context—nove ("new"). As well, Filarete often credits a particular person or persons with the generation of a given fantasia—as indeed he does in this case. In claiming that ancients made Sylvan temples out of boughs and loro altre

Philostratus's Imagines for the Renaissance theory of artistic fantasia, see Kemp, "From 'Mimesis' to 'Fantasia,'" ⁴⁸¹ Robert Ralph Bolgar, *The Classical Heritage and Its Beneficiaries* (Cambridge: Cambridge University Press,

⁴⁸² On Filarete's interest in articulating the ultimate origins of architecture, see Hub, "Filarete and the East."

fantasie—"their other fantasie"—Filarete suggests that the form of a given Sylvan temple depended upon the makers' personal contributions, as formulated by their imaginations.

Filarete's architectural discovery is thus at the same time a paradigmatic example of literary invention, both of which result from the intercourse between his knowledge of classical literature and his capacity for "connective" thinking.

The fact that the Sylvan type must inevitably evoke the theme of hunting, with its implication of *mêtis*, assumes heightened significance when Filarete portrays them as based upon *fantasia*—upon personal imagination. Filarete supposes this intricate knot of associations, at least as regards architecture, to be substantially the same in his time as it was in antiquity: as the ancients used their own *fantasie* to discover and make different kinds of temples, so by analogous mechanisms "we have varied manners of churches." Filarete's typically Renaissance comparison of Christian churches and pagan temples obscures the more remarkable parallel he has set up between *ragione* (a term I have translated as "type"—and connected in this sense to *misure* and *qualità*—though in truth it means "[instance of] reasoning," as well as "discourse," "conversation," and "justification") and *maniere* (with its overt link to *mano*, the "hand"). Filarete, that is, offhandedly correlates variation of reasoning to variation of manufacture. And the key to both is *fantasia*: the mental faculty by means of which the architect

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⁴⁸³ In Greco-Roman accounts of human psychology, *fantasia* generally appears as the (in their view, rather insignificant) faculty whose job it is to translate sense data into mental images. Careful study of their accounts suggests that they were aware of, but not terribly interested in resolving, the problems such an account occasions. On the classical tradition of the concept of *fantasia*, I once again cite Bundy, "The Theory of Imagination"; and also Gerard Watson, "Φαντασία in Aristotle, *De Anima* 3.3," *The Classical Quarterly* 32, 1 (1982); Gerard Watson, "Discovering the Imagination: Platonists and Stoics on *phantasia*," in *The Question of "Electicism": Studies in Later Greek Philosophy*, 208-33, eds. J. M. Dillon and A. A. Long (Berkeley: University of California Press, 1988); Anne Sheppard, "The Mirror of Imagination: The Influence of Timaeus 70e ff," *Bulletin of the Institute of Classical Studies* 46, 78 (2003); the uniformly useful essays in Danielle Lories and Laura Rizzerio, eds., *De la phantasia à l'imagination* (Louvain: Peeters, 2003); and most especially Gerard Watson, *Phantasia in Classical Thought* (Galway: Galway University Press, 1988); Gerard Watson, "The Concept of 'Phantasia' from the Late Hellenistic Period to Early Neoplatonism," in *Aufstieg und Niedergang der Römischen Welt II.36.7*, 4765-810, ed. Wolfgang Haase (Berlin: Walter de Gruyter, 1994); and Alessandra Manieri, *L'immagine poetica nella teoria degli antichi : phantasia ed enargeia* (Pisa: Istituti editoriali e poligrafici internazionali, 1998).

conducts his venatic investigations for new technical "secrets," new *ragioni* of architecture, and new *manieri* of building.

To Invent, Hunt

Hunting or searching, quite obviously, correlates with *finding*. In fact, *finding* does not denote an autonomous activity or practice so much as a hunt or quest that has been fruitfully concluded. As the terms *finding* and *discovery* express the essential meaning of rhetorical *Inventio*, we can transitively conclude that *Inventio* was conceived as a kind of cognitive hunt. We might therefore naturally suspect that the genetic characteristics of venatic thinking inform the practice of *Inventio* at its most basic level. 484 As I observed in Chapter 3, the *Libro* ostensibly concerns *edificare*—"to build" or "the activity of building"—but none of the principal characters actually makes anything besides drawings and the occasional model. The Architect's vague disquisitions on materials, tools, and techniques offers little help to a reader who lacks the kind of practical knowledge only acquired through personal experience or training. The overwhelming majority of the narrative depicts the communications among the Lord's inner circle, which generally consist in verbal descriptions and drawings of buildings. The *Libro* comprises mainly a series of architectural plans, buttressed by a piecemeal commentary on their refinement, exposition, and execution. For the most part, that is to say, Filarete's *Libro* represents a catalog of architectural *inventions*; and we know that *invention* is precisely the correct term to use because Filarete uses it himself.

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⁴⁸⁴ For an attempt to interpret the Aristotelian *topoi* of invention in terms of the venatic paradigm, see Carolyn R. Miller, "The Aristotelian Topos: Hunting for Novelty," in *Rereading Aristotle's Rhetoric*. Miller's premise is highly provocative, though her conclusions are disappointingly modest and vague. She cites all of the sources on the venatic paradigm that I have resourced, so that she seems to edge toward suggesting that Aristotle fused apodictic and practical reason in his views of dialectic and rhetoric. In the end, however, she asks her reader for nothing more than a revised view of novelty in rhetorical production.

The rubric of *invenzione* does not appear all that often in the *Libro*, but its relative infrequency in Filarete's text should not deter us from interpreting it as an important aspect of his notion of architectural practice. In the first place, the *Libro* is not the first of Filarete's known works that references invention. In the 1450s, Filarete cast a bronze plaque (fig. 12), probably intended to serve as a demonstration of his mental cleverness and manual skillfulness, which depicts a bull, a lion, a tree (most likely a laurel), and a large bee. 485 The Latin inscription beneath the image reads "L ANTONIO AVER ROMULEAS PORTAS AEREAS / FABRI INVENTIO," which I translate as, "The invention of Anthony Aver[lino], maker of the bronze doors [in the city] of Romulus." Strikingly, Filarete juxtaposes the rhetorical term *Inventio* borrowed from highbrow literary discourse—with the workaday term fabri—which means a manual "maker," with pejorative overtones due to its association with the mechanical arts. The Latin term *fictor*, which Alberti uses in reference to architects in his *De re aedificatoria*, represents the more genteel alternative. 486 As Kemp has observed, Renaissance patrons often reserved for themselves (or for their court humanists) the privilege of inventing the program for an artwork, because "subject matter and meaning were too important to be left to the painter or sculptor."487 Filarete's inscription thus flagrantly flouts the cultural expectations implicit in the standards of Latin usage prevalent in his day, audaciously casting an artisanal fabri as a literary inventore.488

⁴⁸⁵ For the dating of the plaque and the basic lines that my interpretation of its figurative content follows, see Pfisterer, "Ingenium und Invention bei Filarete."

⁴⁸⁶ Pfisterer, "Ingenium und Invention bei Filarete," 273. Pfisterer cites in particular Leon Battista Alberti, On the Art of Building in Ten Books, trans. Joseph Rykwert, Neil Leach and Robert Tavernor, originally composed c. 1452 and published in Florence: Nicolò di Lorenzo Alemanno, 1485 (Cambridge, Mass.: MIT Press, 1988; rpt, paperback, 1997), 34 = II.1.

⁴⁸⁷ Kemp, "From 'Mimesis' to 'Fantasia,'" 358.

⁴⁸⁸ Given the courtly circles in which Filarete moved, in which many people knew Latin quite well, it is preposterous to suppose that he used the term *fabri* in innocent ignorance of its negative connotations.



Figure 12: Bronze plaque with bull, lion, tree, and bee (image courtesy of The State Hermitage Museum, St. Petersburg; © The State Hermitage Museum, photo by Natalia Antonova.)

In the second place, Filarete's use of the rubric of *invenzione* in the *Libro* to refer to artistic programs reflects the overriding trend in the term's usage over the course of the Quattrocento. The circle of artists and humanists around Isabella d'Este (1474 – 1539; reigned 1490 – 1519) at the court of Mantua made frequent and intensive use of the rubric of *invenzione* in order to distinguish between the conception and the execution of an artwork. ⁴⁸⁹ In Milan, Filarete's professional successors at the Sforza court, Francesco di Giorgio Martini and Leonardo da Vinci, would deploy the rubric of *invenzione* in their writings far more frequently and with far

 $^{^{489}}$ Kemp, "From 'Mimesis' to 'Fantasia,'" 357-61.

greater emphasis than their predecessor, elevating *invenzione* to one of the essential cognitive powers of the architect or artist. ⁴⁹⁰ In short, Filarete's use of the rubric of *invenzione* to describe a form of cognition implicit in manual making in the *Libro* is neither isolated nor idiosyncratic. Finally, as we saw in the quote from Alberti above, the use of the rubric of *invenzione* in the context of artistic production and criticism represented an extension of its long-established meaning in the domain of letters. So when Filarete uses the term *invenzione* to denote the products of processes of pictorial and architectural ideation, the traditional, technical meanings of rhetorical *Inventio* are very much in play.

The *Topoi* of Invention in the Tradition of Rhetoric

Scholars have long acknowledged the overwhelming importance of rhetoric in our tradition, but the period histories of rhetoric that have to date been published generally offer a series of studies, each of which treats a single work (or author) more or less hermetically. We lack, in other words, an authoritative thematic history of rhetoric, the existence of which would make it possible to interpret specific appropriations of rhetorical terms and concepts—and none is more important than *invention*—with suitable historical delicacy. Having no recourse to an authoritative thematic interpretation of rhetorical *Inventio*, I have been forced to develop my own. I undertake the following excursus into rhetorical history and theory only in order to provide a backdrop against which to illuminate the significance of Filarete's notion of *architectural* invention. Since my purpose here is to distill rhetorical *Inventio* to some of kind of useful essence, my presentation deliberately passes over most of those complexities and nuances that would provide the principal subjects of study for a proper history. I propose—if I may be

⁴⁹⁰ For an indication of the conceptual scope of *invenzione* in the writings of Francesco and Leonardo, see Kemp, "From 'Mimesis' to 'Fantasia,'" see 364 ff.

permitted a poeticism—to recount the highlights of my expedition into the forest of rhetoric, wherein I ventured in search of the underlying sense of the *topoi* of invention. What I found there I have attempted to formulate as a caricature that is at once accurate enough to withstand scrutiny and *general* enough to admit of deployment in the domain of architecture.

Pedagogues and commentators have with excellent reason long asserted that the canon of *Inventio* "has always been the most important part of rhetoric." Aristotle's seminal definition of rhetoric as the "ability, in each [particular] case, to see the available means of persuasion" 492 effectively makes the discovery or invention of arguments the epitome of rhetoric. 493 Centuries later, Cicero adds the weight of his authority to the preeminence of *Inventio* by asserting flatly in his vastly influential De Inventione (c. 84 B.C.E.) that Inventio is "the most important of all the divisions", 494 of rhetoric. In the same work, Cicero defines *Inventio* as "excogitatio rerum" verarum aut veri similium quae causam probabilem reddant,"495 which I translate as "the devising of matters, true or seemingly true, that render the case plausible." This is a verbatim reproduction of the definition found in the even more influential Rhetorica ad Herennium (c. 90 B.C.E.), which was long erroneously attributed to Cicero. 496 Both the Ciceronian De Inventione and the pseudo-Ciceronian Rhetorica ad Herennium served as basic textbooks in rhetorical pedagogy for centuries, throughout the Middle Ages and into the Renaissance. 497 The Rhetorica

⁴⁹¹ Clark, Rhetoric and Poetry in the Renaissance, 61.

⁴⁹² Aristotle, *On Rhetoric*, 37 = Lii.1 = 1355b.

⁴⁹³ Although Aristotle's formal definition of rhetoric uses the verb θεωρεῖν ("to look at," to study," "to speculate"; Latinized as theorein), he immediately thereafter clarifies that the art (techne) inherent in rhetoric consists in finding (εύρημα; Latinized as *heuriskein*) arguments. See Aristotle, *On Rhetoric*, 38 = I.ii.2 = 1355b. ⁴⁹⁴ Cicero, "*De inventione*," 20-21 = I.vii.9: "[...] princeps est omnium partium."

⁴⁹⁵ Cicero, "De inventione," 18-19 = I.vii.9. The patent etymological links between the Latin verb excogitare and the family of English words related to the term cognition provide supporting—if hardly dispositive—evidence for interpreting rhetorical *Inventio* as a special kind of cognition.

⁴⁹⁶ Pseudo-Cicero, *Rhetorica ad Herennium*, 6-7 = I.ii.3.

⁴⁹⁷ For an excellent overview of the late medieval and early modern commentary traditions of Cicero's rhetorical works—in particular the De Inventione and the (erroneously attributed) Rhetorica ad Herennium—see the first three contributions in John O. Ward and Virginia Cox, eds., The Rhetoric of Cicero in its Medieval and Early Renaissance Commentary Tradition (Leiden: Brill, 2006).

ad Herennium, in particular, was destined to be "regarded as the quintessence of pure Ciceronian doctrine of Oratory" in some of the most important schools of the Renaissance. In sum, throughout the long ages of rhetoric's ascendency, *Inventio* was regarded as its very heart.

The *topoi*, in turn, were regarded as the heart of *Inventio*. Whereas the author of the *Rhetorica ad Herennium* passes rather incongruously from his definition of *Inventio* to a listing of the standard parts of a typical oration, Cicero in the *De Inventione* analyzes *Inventio* by enumerating *quaestionem*—the various modes under which a subject matter might be disputed or questioned. Although Cicero focuses on forensic (also known as judicial) oratory in *De Inventione*, his basic approach holds for all genres of rhetoric, since no position can be debated or defended except as it is questionable or susceptible to a variety of views. At bottom, *Inventio* operates interrogatively, exploring a subject using questions or inquiries. Cicero's progression—moving from a nearly redundant definition to a list of interrogative entries into a subject matter—typifies classical treatments of *Inventio*. Aristotle, too, having defined the art of rhetoric as the finding of available means of persuasion, goes on to provide helpmeets for the implied investigation in the form of twenty-eight generic patterns of argumentation, which he famously calls *topoi*. In his *Institutio Oratoria* (c. 95 C.E.), Quintilian follows a similar pattern

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⁴⁹⁸ William Harrison Woodward, *Studies in Education During the Age of the Renaissance*, *1400-1600* (New York: Teachers College Press, 1967), 45.

⁴⁹⁹ Cicero's approach is a version of so-called *stasis theory*, the founding formulation of which was traditionally credited to the famous Greek rhetorician Hermagoras of Temnos (1st c. BCE). For a summary of Hermagoras's rhetorical theory in general, see Beth S. Bennett, "Hermagoras of Temnos," in *Classical Rhetorics and Rhetoricians: Critical Studies and Sources*, 187-93, eds. Michelle Ballif and Michael G. Moran (Westport, Conn.: Praeger, 2005). For an historical interpretation of the early development of stasis theory, see Malcolm Heath, "The Substructure of *Stasis*-Theory from Hermagoras to Hermogenes," *The Classical Quarterly* 44, 1.

⁵⁰⁰ The fundamentally interrogative mode of rhetorical *Inventio* aligns it with some of the most far-reaching implications of modern hermeneutics. In Hans-Georg Gadamer's view the interrogative mode, which I here identify as the essence of *Inventio*, turns out to be characteristic of all disciplined human inquiry. See Gadamer's reflections in "The Universality of the Hermeneutical Problem," trans. David E. Linge, in *Philosophical Hermeneutics*, 3-17, ed. David E. Linge (Berkeley: University of California Press, 1977).

Aristotle, *On Rhetoric*, 172-84 = II.23 = 1397a-1400b. Although not all authors referred to their schemes for the invention of arguments as *topoi*—Hermagoras, obviously, discusses *stases* rather than *topoi*—Cicero's *Topica* synthesized several extant systems of invention (including Aristotle's and Hermagoras's), using the metaphor of

by offering a characteristically pedantic review of scholarly opinions on *Inventio* that, instead of culminating in a reconciliatory definition, leads into a listing of and commentary upon the *topoi* of invention appropriate for different kinds of oratory. Even more intensely, Boethius subsumes his commentary on rhetoric in general within his works on the *topoi* of invention. During the period of time between Aristotle and Boethius, in sum, the teaching of rhetorical *Inventio* demonstrably reduces to the adducing of *topoi* of invention.

Broadly speaking, the *topoi* of invention were understood in antiquity as catalysts for the generation of rational discourse within specific, well-defined forums. But this only indicates how the *topoi* were supposed to be used. It is historically remarkable that instead of fixing and promulgating an incisive, academic definition of the *topoi*, our forbears instead generated catalogs of them, which they bequeathed to posterity as *recommendations*. I interpret the character of this inheritance as a clue: instead of aiming to define what the *topoi* are, I shall aim to define how they function—or more precisely, how they have been represented as functioning. Since the classical authorities on the *topoi* of invention never elaborate on their use in cognitive or psychological terms, we can reconstruct their view of how the *topoi* function only by interpreting their preferred metaphor for discussing them.

A survey of the most authoritative classical works on rhetoric reveals the striking constancy with which the "places" of invention are compared to "containers."

Uncharacteristically, Aristotle nowhere in his discussions of the *topoi* of invention offers the

"places" to interpret the practice of invention general. Nowadays, the *topos* provides the basic model for an aid to *Inventio*, so that historians of rhetoric generally refer to the elements of a system of invention as being "like *topoi*." Quintilian, *The Institutio Oratoria of Quintilian*, II:384-537 = III.3.1-11.28.

⁵⁰³ Boethius prepared a translation of and a commentary upon Aristotle's *Topics*—both are now lost. We know his views on *Inventio* through his commentary on Cicero's *Topica*—known as *In Ciceronis Topica* (before 522)—and his original treatise on the *topoi*, *De topicis differentiis* (before 523). For the modern editions of his extant works, see Boethius, "*De topicis differentiis*," trans. Eleonore Stump, in *Boethius's De topicis differentiis*, ed. Eleonore Stump, in Ciceronis topica," trans. Eleonore Stump, in *Boethius's In Ciceronis topica*, ed. Eleonore Stump (Ithaca: Cornell University Press, 1988).

kind of flinty definition upon which he normally relies. He provides, in his *Rhetoric*, only a cryptic definition, upon which he does not expatiate: "[A]n element or a topos [is a heading] under which many enthymemes fall."504 The verb here translated by the English phrasal verb "fall under," which Aristotle uses to describe the relationship between a single *topos* and many enthymemes, has the infinitive form εμπίπτειν (Latinized as *empiptein*). Tormod Eide observes that the verb *empiptein* was customarily used by Greek geometers in defining the notion of a geometric topos (nowadays known by its Latin name: a geometric locus). A geometric locus meant, and to this day still means, "the set of all points that satisfy a given requirement. Thus (to give a standard example in modern handbooks) the geometrical locus for all points that lie within the same distance from a given point is the circle with the given point as its centre."505 A geometric topos "contains" an indeterminate number of points so that any point in a coordinate system must fall either "within" or "without" a given *locus*. The geometer's use of the term *topos* makes metaphorical use of the fact that every real, physical place has a boundary—an inside and an outside. Some things or events fall "within" a place while others things or events fall "outside" of it. Aristotle's choice of verb, according to Eide, indicates a conception of topoi as having an "inside" and an "outside," as functioning as "containers" into which an indefinitely large variety of arguments "fall."

Eide positions his article polemically against the many scholars who have argued that Aristotle borrowed the term *topos* from the sophistic orators, who used it in reference to their mnemonic practices. ⁵⁰⁶ In her sweeping study of the art of memory, to take a representative

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⁵⁰⁴ Aristotle, *On Rhetoric*, 192 = II.xxvi.1 = 1403a. For an excellent brief on Aristotle's rather imprecise conception of enthymemes, see Kennedy's excursus in Aristotle, *On Rhetoric*, 34.

⁵⁰⁵ Tormod Eide, "Aristotelian *Topos* and Greek Geometry," *Symbolae Osloenses* 70, 1: 9-10.

⁵⁰⁶ Yates, for example, thinks it "probable that the very word 'topics' as used in dialectic arose through the places of mnemonics" (Yates, *The Art of Memory*, 46). For a more nuanced account, in which Aristotle deliberately thickens an existing rhetorical lexicon by adapting a term already in use by Isocrates (among others), see Kennedy's notes in Aristotle, *On Rhetoric*, 44-45.

example, Frances Yates documents the mnemotechincal practices of antiquity before going on to document how such practices informed the study of hermeticism and practice of magic during the Renaissance. In Yates's account, a student of the classical art of memory would begin by painstakingly committing to memory a house or palace such that both the particularities of each room as well as the overall configuration of rooms could be recalled without effort. Once he had thoroughly memorized this arrangement of places (*topoi*, *loci*), the student could then use the rooms of his imaginary house as "holders" for the parts of any composite thing he wanted to memorize. He would choose a redolent mental token—a telling or symbolic image—then to "place" it in a room. He had then only to recall the room in order to recall as well the mental token placed therein, and thereby, like the impossibly long handkerchief pulled from the magician's fist, extract the whole matter.

Eide provides a concise review of the literature concerned with Aristotle's likely source for the term *topos*, which includes Friedrich Solmsen, *Die Entwicklung der aristotelischen Logik und Rhetorik* (Berlin: Weidmann, 1929); Walter A. de Pater, *Les Topiques d'Aristote et la dialectique platonicienne : la méthodologie de la définition* (Fribourg, Suisse: Éditions St. Paul, 1965); William M. A. Grimaldi, "The Aristotelian Topics," in *Aristotle: The Classical Heritage of Rhetoric*, ed. Keith V. Erickson (Metuchen, N.J.: Scarecrow Press, 1974); Jürgen Sprute, "Topos und Enthymem in der Aristotelischen Rhetorik," *Hermes* 103, 1 (1975); and Jürgen Sprute, *Die Enthymemtheorie der aristotelischen Rhetorik* (Göttingen: Vandenhoeck & Ruprecht, 1982). Eide concludes that "the attempts to trace the pre-Aristotelian history of [the word] *topos* have yielded [...] meagre results" (Eide, "Aristotelian *Topos*," 6).

In her recent study of topical theory in antiquity, Sara Rubinelli offers incisive criticism of the variety of recent attempts to pin down Aristotle's conception of a *topos*, emphasizing that their nature must be understood as practical: "the *topoi* are, in terms of their *genus*, *strategies of argumentation* for gaining the upper hand and producing successful speeches" (*Ars Topica: The Classical Technique of Constructing Arguments from Aristotle to Cicero* (Alphen aan den Rijn: Kluwer Academic, 2009), 13). While Aristotle may not have wanted to evoke every connotation of the term *topos*, it seems unlikely that was not aware of its wide-ranging uses. Indeed, it seems likely that when he conscripted the term *topos* for his theory of invention, he had in mind, if not all, at least several of its constituent meanings.

⁵⁰⁷ For a splendid summary and discussion of the operation of mnemonic practice in ancient Greece and Rome, see the first two first chapters in Yates, *The Art of Memory*.

⁵⁰⁸ For an account of a Renaissance treatise on the art of memory in which are suggested several matrices—e.g., one's own body or a row of houses along a well-known street—that might function serviceably well as the primary template for memorization, see Yates, *The Art of Memory*, 239-42. The art of memory requires for its foundational schema composite places that comprise, in a fixed configuration, sub-places that can "contain" mental tokens or symbolic images.

The underlying meaning in both geometrical and mnemotechnical contexts is thus that of "container" or "containing." Just so, in his introductory remarks to the *Topics* (his handbook on how to excel as a dialectical disputant), Aristotle claims that the singular advantage of his "topical" method of invention is precisely that each *topos* contains many arguments.

For just as in the art of remembering, the mere mention of the places instantly makes us recall the things, so these will make us more apt at deductions through looking to these defined premisses in order of enumeration. And it is a common premiss rather than an argument [λόγον] which should be committed to memory, for being ready with a startingpoint [άρχής]—that is, assumption—is a matter of manageable difficulty.⁵¹⁰

Using Aristotle's topical method, the disputant may gain control over a large population of potential arguments by memorizing a coherent set of mental "containers." This is clearly superior to having to memorize intricate and independent arguments on every subject. Here we have both demonstrative and mnemotechnical meanings simultaneously, and yet they are not in conflict, because for Aristotle a topos of invention means a mental container in which other things can be "found," whether by memory or insight.

Some centuries later, Cicero presents his *Topica* (44 B.C.E.) as a précis of Aristotle's topical system, although his concise, intuitive treatment of the topoi bears little superficial resemblance to Aristotle's ponderous, repetitive discussion. 511 Notwithstanding the differences, close study reveals that "[t]he loci in Cicero's Topica derive in the last instance from the $\tau \acute{o}\pi o\iota$ Aristotle discusses in his *Top[ics]* and *Rhet[oric]*."512 Sensitive, we might suppose, to the unwieldy number of topoi treated in the Topics, Aristotle carefully singles out a manageable

⁵⁰⁹ For the congenial argument that Aristotle's usage of the term *topos* deliberately enlists *both* geometrical and mnemotechnic meanings, see de Pater, Les Topiques d'Aristote, 231.

⁵¹⁰ Smith, Robin, Aristotle: Topics: Books I and VIII, with Excerpts from Related Texts: Translated with a Commentary (New York: Clarendon Press, 1997), 39 = 163b.28-33.

511 Marcus Tullius Cicero, *Topica*, trans. Tobias Reinhardt, in *Cicero's Topica*, ed. Tobias Reinhardt (Oxford:

Oxford University Press, 2003), 116-19 = §1-5.

Tobias Reinhardt, "A Short History of the τόπος," in *Cicero's Topica*, 18.

number of *topoi* that he identifies as the "most opportune" and "most general." Sara Rubinelli has shown that Aristotle presents precisely this set of *topoi* as the twenty-eight "common *topoi*" in his *Rhetoric*, and she shows further that Cicero's *Topica* reproduces essentially the same set. 514 The list of *topoi* that Cicero treats, in short, "appears to have been composed in a genuinely Aristotelian spirit." The needs of concision require that we refrain from treating the tradition of "school rhetoric" or "non-Peripatetic rhetoric," most pointedly in the form of Greek stasis theory, which deeply informed Cicero's conception of the *topoi*. 517)

Where Aristotle offers only the most obscure definition of a topos of invention, Cicero produces a characteristically pithy one: "[W]e may define a Place [locum] as the location [sedem] of an argument, and an argument as a reasoning [rationem] that lends belief to a doubtful issue [rei]."518 The connotative halo of the Latin term sedes ("seat") closely resembles that of the English term *seat*, so that Cicero here means to indicate that the *topoi* are the "seats" of arguments just as capitols (and capitol buildings) serve as the "seats of government." Cicero thus does not mean that the *topoi* provide the specific coordinates of arguments, but rather that they indicate the habitats or environs proper to this or that kind of argument. He prefaces his definition with a particularly illuminating remark along these lines: "Just as it is easy to find hidden things, once their hiding-place [loco] has been pointed out and marked down, so we need to know the right Places [locos] if we wish to track down a certain argument; 'Places' is the name Aristotle gave those locations [sedes], so to speak, from which we can draw arguments.",519

⁵¹³ Rubinelli, Ars Topica.

⁵¹⁴ Rubinelli, Ars Topica.

⁵¹⁵ Rubinelli, Ars Topica.

⁵¹⁶ Reinhardt, "The Anonymus Seguerianus," in Cicero's Topica, 37.

⁵¹⁷ Modern scholars view the *De Inventione*, written during Cicero's youth, as a reasonably reliable presentation and loyal transmission of school rhetoric as it existed in the author's time. See Reinhardt, "A Short History of the τόπος," 25, esp. n. 21.

⁵¹⁸ Cicero, "*Topica*," 118-19 = §8. ⁵¹⁹ Cicero, "*Topica*," 118-19 = §7.

Finding an argument is, according to Cicero, like hunting game. It can be no accident that so astute and so authoritative a thinker as Cicero explains the activity topical *Inventio* using venatic terms and images. The *topoi* "contain" arguments the way that habitats "contain" the animals proper to that habitat. Once one knows where deer live (or even the *kind* of place that deer prefer to haunt), one can hunt them much more effectively. Likewise, if one knows that an argument from the *topos* of "*from the definition*" might well be suitable for a given case, one can easily marshal the specific facts of the case at hand to formulate such an argument. The natural ability to find arguments is thus greatly aided by acquiring a familiarity with the most common kinds of arguments, which is to say with their logical habitats (i.e., the most common structures of valid inference) and their discursive habits (the locutions in which such arguments most often appear).

In contradistinction to Cicero, Boethius's overall interpretation of the *topoi* of invention has syllogistic validity rather than persuasiveness as its main prospect. He nevertheless duly produces a list of *topoi*, which unsurprisingly turn out to be a slightly emended reproduction of Aristotle's list of "common" *topoi* and Cicero's list of *topoi*. Boethius even reproduces with exactitude Cicero's operative definition of a *topos* of invention as "the seat [*sedes*] of an argument, or that from which one draws an argument appropriate to the question under consideration." Like his predecessors, Boethius views the *topoi* of invention essentially as "containers." Boethius's twenty-eight *topoi* correspond to kinds of logical relation, so that a *topos*, as a modern commentator explains, "does not work by providing a particular intermediate

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⁵²⁰ The finer points of Boethius's debt to Galen of Pergamon's (129 – c. 200 or c. 216) logical theory of axioms are clearly set forth and explained in Sten Ebbesen, "Ancient Scholastic Logic as the Source of Medieval Scholastic Logic," in *The Cambridge History of Later Medieval Philosophy: From the Rediscovery of Aristotle to the Disintegration of Scholasticism, 1100-1600*, 101-27, eds. Norman Kretzmann, Anthony Kenny, and Jan Pinborg (Cambridge, U.K.: Cambridge University Press, 1982).

⁵²¹ I have greatly oversimplified Boethius's position on the *topoi*, almost to the point of caricature. Eleonore Stump has edited and translated in modern English both of Boethius's works on the topoi of invention. The fine interpretive essays that accompany her translations elaborate much that I have elided.

⁵²² Boethius, "*De topicis differentiis*," trans. Eleonore Stump, in *Boethius's De topicis differentiis*, ed. Eleonore Stump (Ithaca: Cornell University Press, 1978), 30, ll. 33-34 = 1174D.

term; instead it suggests the *sort* of term that could serve as intermediate." S23 Where Aristotle and Cicero had viewed the *topoi* as useful for finding responses to generic patterns of argumentation, Boethius views the making of an argument as using a "middle term" to "knit together" both the subject and the predicate of the conclusion. Boethius's concern for the "middle term" reflects his orientation toward Aristotelian syllogistic, since in both his *Prior* and *Posterior Analytics*, Aristotle repetitively describes the formation of syllogisms as the interlinking of two terms by means of a third. In a brief passage long highlighted by commentators, Aristotle concludes the first book of his *Posterior Analytics* by positing the existence of a faculty of "hitting upon the middle term without a moment's hesitation," which he calls $\acute{\alpha}\gamma\chi$ ivot $\acute{\alpha}$ ("quick wittedness" or "sagacity"; Latinized as *agchinoia*). Strikingly, when Boethius translates the *Posterior Analytics* into Latin, he chooses to translate *agchinoia* as *sollertia*. The master Vitruvian term for architectural aptitude thus turns out to be homologous—if not identical—to the master Boethian term for aptitude with the *topoi* of invention.

Overall, Cicero's comparison of the *topoi* of invention to hunting grounds for arguments provides not only the clearest indication of the identity of venatic thinking and topical thinking, but also the most straightforward way to interpret the use of the metaphor of "containment" in traditional accounts of the *topoi*. The *topoi* do not contain arguments the way that, say, a jar contains beans, so that one can be drawn forth at will. Rather the *topoi* contain arguments, as I said, the way that a forest contains game. Or more correctly, a *topos* of invention restricts or

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⁵²³ Stump, "Dialectic and Boethius's *De topicis differentiis*," 197.

⁵²⁴ Boethius, "*De topicis differentiis*," 31, Îl. 27-28 = 1175B.

⁵²⁵ See Boethius, "*In Ciceronis topica*," trans. Eleonore Stump, in *Boethius's In Ciceronis topica*, ed. Eleonore Stump (Ithaca: Cornell University Press, 1988), 32 = 279/1050.

⁵²⁶ Aristotle, "*Posterior Analytics*," trans. Hugh Tredennick, in *Posterior Analytics – Topica* (Cambridge, Mass.: Harvard University Press, 1960), 170-71 = I.xxxiv = 89b10-11.

⁵²⁷ J. P. Migne, ed., *Patrologiae cursus completus*... series latina, vol. 64, col. 744.

constrains a search for arguments just as one place might be especially good for hunting deer, while another place might be especially good for hunting foxes. One chooses to hunt where the kind of game one hopes to take prefers to haunt. One would not visit the Sahara with the reasonable expectation of seeing bears, and it would folly to search for alligators in the Antarctic. However obvious these facts may be, they have nothing to do with apdiocity as such. No categorical necessity forbids deer from visiting the beach or foxes from scrounging a living in a rainforest. Likewise, no natural law constrains the geographic scope of a deer hunter's search, but knowing the *topoi* where deer are most often found usefully constrains the scope of his hunt. Analogously, familiarity with the *topoi* of invention means familiarity with where various kinds of argument are most likely to show themselves. The utility of the *topoi*, however, depends upon the rhetor's preliminary intuition as to which kind or kinds of argument will best serve his purposes.

Making Places, Making Order

We can now return to the subject of Filarete, equipped with the understanding that the *topoi* were understood to ameliorate *Inventio* by "containing" arguments the way that "hunting places" contain game. While I have up until now characterized Filarete's venatic *divertimenti* broadly as invitations to the reader to channel the venatic spirit that is proper for architectural invention, the *Libro* contains one episode in which architecture supervenes directly upon the lordly practice of hunting. In chapter XX, while the Lord, the Lord's Son, and the Architect are surveying a large canal that they have just had built, "[t]he Lord's Son, who had a somewhat more youthful soul, said: 'Lord, here is a beautiful plain, where you could make a most beautiful place [*luogo*] to hunt, because there is still from place to place [*da luogo a luogo*] forests and

beautiful sites and places [siti e luoghi].""⁵²⁸ The Lord's Son proposes literally "to make a place" [fare uno luogo] for hunting. The notion of place at work in this episode assumes a striking polyvalence in light of the foregoing discussion of the topoi of invention. Now Spencer cites as the obvious and highly convincing architectural precedent for this "hunting place" the park at the Visconti palace at Pavia. The following analysis does not argue for a different proximate source for Filarete's architectural idea, but rather shows that Filarete's primary criterion for a good hunting "place" is precisely enclosure or containment. Given Cicero's comparison of the topoi of invention to well-defined hunting places, Filarete's sense of how a hunting place improves the experience of hunting indirectly illuminates his suggestions for how to trammel the potential peregrinations of architectural invention.

The Lord immediately agrees with his son's suggestion to make a hunting place, and he tasks the Architect with arranging the construction of an enclosed park "with walls around it, so that the animals cannot get out, and also let it not be too small." The Architect follows the Lord's suggestions carefully, specifying in his plan that the walls will be ten *braccia* high "so that neither animals nor anything else can get out." Given that in Filarete's day the dominant legal and social controversies surrounding hunting had to do with its *exclusivity*, it is notable that Filarete emphasizes that the walls serve primarily to keep the potential prizes of the hunt *in*. In addition to the hunting park itself, the Lord orders the Architect to build a small hermitage

che né animale né altro ne possa uscire.»

⁵²⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 602 = Filarete, *Treatise* (Spencer, trans. and ed.), I:278: El figliuolo, che aveva un poco l'animo più giovinile, dice: «Signore, qui è una bella pianura, dove che si potrebbe fare uno luogo bellissimo da cacce, perché ancora c'è da luogo a luogo selve e belli siti e luoghi.» ⁵²⁹ See Filarete, *Treatise* (Spencer, trans. and ed.), I:278, n. 2.

⁵³⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 602 = Filarete, *Treatise* (Spencer, trans. and ed.), I:278: «[...] con questo che si muri intorno, in modo che gli animali none possino uscire, e anche non sia troppo piccolo.» ⁵³¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 603 = Filarete, *Treatise* (Spencer, trans. and ed.), I:278: «[...] acciò

⁵³² On the rise of the exclusive hunting reserve in medieval and early modern Europe, see the first two chapters of Marvin, *Hunting Law and Ritual*.

church atop a mountain, a hunting palace, and a walled garden around the palace. 533 Contrasting the hunting park to the garden—both of which are enclosures strictly speaking—helpfully illuminates the specific character of an enclosure intended to aid searching, finding, and chasing. Whereas the garden's walls protect its intimate interior against the encroachment of wilderness, the hunting park's walls save the hunter from having to conduct a global search for his quarry while also giving him the edge in a chase. Indeed, the hunting park is intended to be large enough to provide sufficient habitat for authentically wild animals, as well as to allow for a bracing "chase" in which the quarry has a putative chance to escape. The point in walling in the hunting park is not to domesticate its "wildness," but rather to assure that it will always, having been stocked in advanced, contain some quarry for the Lord to find. It would be difficult to formulate, *mutatis mutandis*, better criteria for defining or evaluating a *topos* of invention. The "container" metaphor for the *topoi* of invention indicates not how they operate "as barriers to the intrusions of the arcane and fallacious," 534 but rather how they act as *constraints* on the *hunt*.

Once the hunting park has been constructed and stocked, the Lord and his Lady organize a large hunt, the narrative account of which constitutes the most detailed venatic passage in the Libro. The hunters "take" many animals, but Filarete recounts in graphic detail only the killing of a bear and a boar. As with nearly all of the venatic scenes described in the *Libro*, Filarete remarks that "[e]veryone was greatly pleased by the hunt." The company returns to the hunting palace, and "that night at that place dined upon the game with great triumph and pleasure." The next day, the hunting party returns to the city. Just before it enters the gates, it organizes itself into a hierarchical procession, with the Lord and Lady at the front, the gentlemen

⁵³³ Filarete, *Trattato* (Finoli and Grassi, eds.), 605 = Filarete, *Treatise* (Spencer, trans. and ed.), I:279.

⁵³⁴ Nancy S. Struever, "Topics in History," *History and Theory* 19, 4 (1980): 69.

⁵³⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 607 = Filarete, *Treatise* (Spencer, trans. and ed.), I:280: Fatta questa caccia con grandissimo piacere di tutti.

⁵³⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 607 = Filarete, *Treatise* (Spencer, trans. and ed.), I:280: [...] per la caccia fatta fu per quella sera in quel luoco cenato con grandissimo triunfo e piacere.

following, the huntsmen and dogs in line, and "row upon row of dead beasts." The bloody, thrilling encounters with wild game culminate in a parade of ordered humanity, in which wild animals have been morbidly reduced to "row upon row" of corpses. Once they reach the Lord's court, the Lord has the game butchered, and he distributes it throughout the party. The narrative then abruptly turns to a consideration of how to induce talented persons to move to Sforzinda.

Filarete's use of the rubric of ordinare ("to order," "to arrange") throughout the whole narrative sequence of the episode—construction, venery, feasting, entering Sforzinda, and distributing the meat—is remarkable. On the one hand, he uses it—as he does throughout the Libro—as a basic verbal correlate for the nouns architetto and architettura. The Architect "makes a place" for hunting by ordering [ordinare] it. Filarete's characters build not only the hunting park, as I mentioned above, but also a small hermitage church, the hunting palace, and the walled garden (all actually edified offstage by workmen). Filarete describes each of these constructions as having been "made and ordered" [fatto e ordinato] as the Lord pleases and as the Architect plans; this exact phrase appears, in fact, no fewer than four times during the episode. On the other hand, Filarete also uses the rubric of *ordinare* to describe human social order. Specifically, the Lord and Lady organize [ordinare] the hunt, which finds and kills wild animals in order literally to order [ordinare] their dead bodies within the procession of entry into Sforzinda. But the hunting party does not sort themselves out to proceed "in order" [in ordine] until they are about to enter the city. The hunters, that is, order [ordinare] themselves only when crossing the threshold that defines the limit of the human order [ordine] of the city. The lordly practice of hunting—an activity that the hunting park (a "place" to find game) catalyzes—finds its meaning epitomized by the Lord's orderly division and distribution of the animals' butchered

⁵³⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 607 = Filarete, *Treatise* (Spencer, trans. and ed.), I:280: [...] bestie morte alla fila alla fila.

bodies. Whether in sylvan hunting or discursive invention, finding is the first step toward initiating the unpossessed and undiscovered into the extant human order.

Imagination as the Faculty of Invention

Filarete does not provide any details for the decorative programs envisaged for the hunting palace or its attached garden, but he does comment on the arrangement of the hunt park itself, and on the small mountain atop which the Lord wants to build a hermitage church. Concerning the park at large, the Lord says, "Although there are [already] many wooded places, have more planted and tidy up those existing.",538 After inspecting the mountaintop site for the hermitage church, the Lord says, "I want trees planted here all over this little mountain, and upon the summit here I want laurels planted all around.",539 Ordering an increase in the number of already numerous groves, as well as a further densification of the forest, the Lord clearly wants his hunting park to be as sylvan as possible. With the addition of a hermitage church deliberately nestled within a grove of laurel trees, it is hard to resist supposing that the Lord has essentially demanded that his hunting park be crowned with a Christianized version of Filarete's Sylvan temple. The fact that the Lord specifies laurel (the tree, sacred to Apollo, whose leaves crown Pyrrhic athletes, victorious Roman generals, and revered poets) for the mountain's arboreal crown shows, as I will elaborate in Chapter 7, the intimate connection between hunting and the traditional practices—namely, martial and literary—reocgnized as proper domains for the cultivation and public recognition of human excellence. As to the church itself, the Lord

⁵³⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 604 = Filarete, *Treatise* (Spencer, trans. and ed.), I:279: «Benché in molti luoghi ci fusse delle selve, pure e' ce ne fe' piantare e nettare quelle.»

⁵³⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 604 = Filarete, *Treatise* (Spencer, trans. and ed.), I:279: «Qui voglio che si pianti su questo monticello pieno d'arbori intorno, e qui su questa sommità si pianti intorno intorno allori.»

commands only that it should be "beautiful," 540 which manifestly gives the Architect broad license to construct this Sylvan church as the ancients did: according to his own *fantasie*.

The *Libro* abounds in projects for which the Lord or the Lord's Son leave the Architect significant latitude when it comes to a building's structure and decoration. In my discussion of the Sylvan type above, I indicated that Filarete holds that it is *fantasia*—the psychological faculty of imagination—that actually performs the cognitive work involved in generating and refining architectural ideas. The architect's personal imagination is the vehicle whereby he invents architectural ideas. In Chapter 5, I explored Filarete's notion of disegno as it pertains to architectural invention, concluding that Filarete views disegno as having an underlying cognitive dimension—disegno nella mente ("drawing in the mind")—that animates the process of invention. The architect invents architectural ideas in part by drawing them with his hand, because inventive disegno—what we would today call sketching—entails and activates a form of cognition that is simultaneously embodied and heuristic. We can now articulate both the process and the meaning of inventive disegno in venatic terms, as a kind of searching, which naturally benefits from constraints. I also mentioned in Chapter 5 that Filarete's conception of disegno emerges out of the workshop tradition, which I bracketed with the figures of Cennini and Vasari, but I did not there emphasize the fact that both of these authorities explicitly nominate fantasia the psychological faculty of imagination—as the psychological site and engine of disegno nella mente. 541 As I remarked in Chapter 4, the rubric of fantasia contains both nouns—which refer to the products of invention—and verbs—which can refer to its process. Fantasticare—"to work

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⁵⁴⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 604 = Filarete, *Treatise* (Spencer, trans. and ed.), I:279: «[...] bella.» ⁵⁴¹ In Cennini's case, see, e.g., Cennini, *Il libro dell'arte*, 1-2 = I, 16-17 = XXVII, and 128 = CLXXIII. For Vasari, see Vasari, *Vasari on Technique*, 210, quoted in Akker, "Out of Disegno Invention is Born," 63 (cited above, in Chapter 5). On Vasari's more general conception of the *belle arti* as the offspring of *invenzione* and *disegno*, see Akker, "Out of Disegno Invention is Born," 45-46.

upon using the imagination"—means for Filarete nothing less than to develop invenzioni using disegno nella mente, all of which takes place in and is driven by the architect's fantasia.

All of the component rubrics that comprise Filarete's lexicon of architectural generation—idea, invezione, fantasia, misura, qualità, and disegno—assume their proper interrelations and relative significances in the divine light provided by the goddess *Mêtis*, understood as the form of cognition proper to hunters, rhetors, and architects. Although Filarete's Libro constitutes, in most important respects, a catalog of architectural inventions; and although Filarete discusses architectural ideation in genetic terms (as, e.g., his famous comparison of the invention of a building to the gestation of human fetus); and although Filarete's characters constantly discuss and describe building projects; yet the whole *Libro* contains but one scene in which the reader receives a direct description of the Architect actually inventing. The Lord's Son creeps up behind the Architect, who is "distracted fantasizing [fantasticare] and measuring [misurare]."542 We are not yet quite sure what the Architect is doing, but we understand that he is thoroughly engrossed. The Lord's Son then leaves, and the Architect narrates, "I stayed [there] all that day, and I waited to follow my fantasia. The following day at the same hour, he suddenly arrived, and with joy he asked me what I had done. [...] He said, 'Then explain to me all the misure and each form and all the parts that I see drawn here.",543 We are confirmed in our suspicion that the Architect has been at his drafting table, absorbed in the activity of drawing. The Architect in fact says specifically that he "follows" [seguire] his imagination—a particularly poignant verb in that it suggests that he trails after his *fantasia*, like a hunter following his tracking hounds. The Architect is here using *disegno* to search for something—whether a

⁵⁴² Filarete, *Trattato* (Finoli and Grassi, eds.), 180 = Filarete, *Treatise* (Spencer, trans. and ed.), I:80: [...] 'stratto e a fantasticare e misurare.

⁵⁴³ Filarete, *Trattato* (Finoli and Grassi, eds.), 181 = Filarete, *Treatise* (Spencer, trans. and ed.), I:81: [...] [I]o attesi a seguire la mia fantasia. Il dì seguente, lui subito all'ora del dì passato se ne venne, e con una allegrezza mi domandò quello avevo fatto. [...] Lui disse: «Damelo pure a 'ntendere su questo disegno tutte le misure e ogni forma e tutte quelle parti secondo che io veggio qui per disegno.»

solution to a particular problem or any interesting idea that might cross his path. The reader here witnesses the Architect intently and bodily carrying out his responsibility as an investigator of "new things," of "how to make buildings in various ways," as prescribed by the Golden Book. The keenness of Lord's Son's interest in the process gives the measure of the importance of this capacity—which is not really a single skill, but several skills working in tandem—in Filarete's estimation. The whole process of using *disegno* to "follow" one's *fantasia*, finding new and marvelous *invenzioni*, and bringing back their *misure* and *qualità* defines, in Filarete's view, the most elemental competence of the architect.

The terms that I have singled out thus far in this dissertation do not function as "theoretical statements" or as "axioms." 544 Most of them function, on the contrary, to designate various constraints that an architect can employ as he invents architectural ideas. I have argued that the topoi of Inventio operate to constrain the otherwise infinite field of possible things that the rhetor could say on a given occasion—a kairos in the sense explicated in Chapter 3. What I mean in proposing the notion of a topos of architectural invention is thus quite precisely a conceptual constraint laid upon the infinite field of possible things one might imagine building in a given *situation*—in the sense explicated in Chapter 4. Craftsmen in general work in the middle ground between animating intention and finished form, constrained on the one hand by the real limits of what might be made and on the other hand by the vicissitudes of the voluntà that generates and sustains the process of making. These two limits, however, leave open a functionally infinite field of possibilities. The special skill of the architect is to find and express the "middle terms" that "knit together" the *voluntà* of the patron and the situation in which the project will materialize. These middle terms are precisely architectural ideas in the sense that has been developed in this study. Filarete's *Libro* represents an attempt to teach his reader not how to

⁵⁴⁴ Choay, *The Rule and the Model*.

build with his hands, but how to *invent* architectural ideas with his mind, though this latter skill is not truly disembodied. The *Libro* introduces and elaborates a collection of guidelines that can serve to constrain the otherwise befuddling peregrinations of the imagination. At the very least, Filarete seems to hope that his reader will come to appreciate the power and pleasure of architectural invention as well as the difficulty and value of disciplining it. One of the perennial philosophical concerns with the faculty of imagination has been its natural immunity to decorum. One can imagine *anything*. As Filarete qualifies them, the notions of *misura*, *qualità*, and *disegno*—and we might also include the notions of *voluntà*, (communal) *intendere*, the (human) body, and *varietà*—operate to trammel architectural ideation so as to produce plans for buildings that, however bold, remain *practicable* and *humane*.

The set of *topoi* that Filarete offers is not exhaustive, nor could it be. Reflecting on the tradition of the *topoi* of invention, Nancy Struever observes that its orientation toward real human situations prevents it from ossifying into a fixed system. Instead, *topoi* can only ever comprise "a very complex, open-ended list of approaches [and] responses." The perfect uniqueness of every human situation grounds both the philosophical concept of *natality* (as discussed in Chapter 2) and the venatic orientation toward *novelty* (as discussed above). Rhetors and architects can only craft responses to real situations, so that any general advice on invention must be left "open-ended" lest it become embarrassingly or monstrously irrelevant. Since the particular flesh-and-blood architect who cogitates constitutes the center of gravity for any given process of architectural ideation, there are no architectural *topoi* that are of *universal* and *objective* interest. There are only those *topoi* that a particular architect engaged with a particular project finds useful. A topical approach to architecture means simply to see architectural ideation

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⁵⁴⁵ On the persistence of the moral suspicion in which the faculty of imagination was held, see Harry Caplan, introduction to *On the Imagination*, by Giovanni Francesco Pico della Mirandola (New Haven: H. Milford, 1930). ⁵⁴⁶ Struever, "Topics in History," 69.

as stimulated by "fundamental questions" about "what is genuinely questionable",⁵⁴⁷ concerning typical human situations. Or, to put it differently, a topical approach to architecture means to view "recurring and fundamental human situation[s]",⁵⁴⁸ as questions to which an architectural response would be appropriate. To sum it up in as pointed a way as possible, "[t]opical questions are the places where architectural invention resides.",⁵⁴⁹

David Leatherbarrow's thoroughly modern and deeply considered triumvirate of architectural *topoi*—namely, *site*, *enclosure*, and *materials*—graciously extends Filarete's list. 550

Used topically, these concepts generate questions about a proposed project that require investigations, which in turn yield conjectures as to how humans might experience the finished building. Occasioned by the patron's *voluntà*, but animated by the inventive spirit of *inquiry*, a topical approach to architecture enlists the aid of *mêtis* in order to generate buildings that respond to the absolute specificity of each project's situation. A topical approach to architecture, in other words, aims to generate buildings that respond humanely to the infinity variety of human bodies, human souls, and human situations. Such a commitment to accommodating variety only seems relativistic, for humane architecture must be understood as architecture that conduces to human excellence. Put concisely, the *Libro* aims to teach the reader how to imagine a way of building that conduces to human excellence—what Filarete would have called *virtù*.

 $^{^{547}}$ Leatherbarrow, The Roots of Architectural Invention, 2.

⁵⁴⁸ Leatherbarrow, *The Roots of Architectural Invention*, 5.

⁵⁴⁹ Leatherbarrow, *The Roots of Architectural Invention*, 6.

⁵⁵⁰ These three concepts are the central preoccupations of Leatherbarrow, *The Roots of Architectural Invention*.

CHAPTER 7:

ARCHITECTURAL VIRTÙ

Sources of Virtù

Filarete's lionization of antique building practice instances the Renaissance's broader attempt to revivify, in its own image, the greatness of antique culture. The thinkers, tinkers, writers, and fighters of the Renaissance sought to voke their varied ambitions to the moral majesty and cultural cachet inherent what they understood to be the origins of their culture. The Renaissance's fascination with antiquity gave it an unusually clear view of the general insight that beginnings are intensely dispositive, though not utterly determinative. We can see this basic insight into human temporality fueling not only the great movement of Renaissance classicism, but also individual thrusts of interpretive intuition, such as Machiavelli's observation in *The* Discourses on Livy that civic rejuvenation is best accomplished by returning to the ancient sources of a polity's vigor. 551 The Romans, characteristically self-aggrandizing and unapologetic, credited their military success and political genius to their inherent virtus—literally "manliness," but in the specific sense of "courage," "fortitude," and "martial prowess." In his exhaustive literary and philological study of Roman virtus, Myles McDonnell observes that when the Romans personified *virtus* as a goddess, they gave her the same aspect and accessories as they

⁵⁵¹ Niccolò Machiavelli, *Discorsi sopra la prima deca di Tito Livio*, 1971 Sansoni ed., originally composed c. 1517 and published in 1531 (online hypertext: Eulogos, 2007),

http://www.intratext.com/IXT/ITA1109/ IDX006.HTM)>, III:1.

did to the personification of the city of Rome: an Amazon holding a spear and a dagger, dressed in a short tunic with one breast bared. See As McDonnell avers, "[s]tronger evidence for the close conceptual connection between Rome and *virtus* is difficult to imagine. Thus, according to Machiavelli, it was a sure sign of the Romans' general political strength that extended political crises, military setbacks, or descents into cultural decadence invariably occasioned counterinitiatives that aimed to restore Rome by stimulating the bedrook *virtus* of her citizenry.

McDonnell documents how the Romans' seminal sense of *virtus*, which Cicero distills to "contempt of pain and death," developed a number of fresh and fateful meanings under the influence of Hellenizing impulses in Roman culture. Indeed, Cicero, whose thinking was deeply informed by his sojourn in Greece and his study of Greek philosophy, looms large in McDonnell's account of how the Latin word *virtus*—which was the standard translation of the Greek word *arête*—came to refer to ethical qualities other than fortitude. Particular Greek ethical virtues—most notably the so-called cardinal virtues of justice, temperance, fortitude, and prudence, but others as well—passed into Latin under the heading of *virtutes* (in the plural). The filtration of these assorted aspects of Greek *arête* into Latin forced a reinterpretation of Roman-ness as a manifold of ethical *virtutes* rather than as simply *virtus*, *tout court*.

McDonnell's scrupulous focus upon the Latin context has the (I suspect unintended) effect of portraying *virtus* as a discrete and passive semantic object, which the Greek meanings of *arête* deform and deflect by crashing into it. But the relationship between *virtus* and *arête* may be closer to reactant-catalyst than to patient-agent. As I observed in the Introduction to this

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⁵⁵² McDonnell, Roman Manliness, 142-49.

⁵⁵³ McDonnell, Roman Manliness, 149.

⁵⁵⁴ Marcus Tullius Cicero, *Tusculan Disputations*, trans. J. E. King (London, William Heinemann, 1927), 194-95 = II.43: [...] mortis dolorisque contemptio.

⁵⁵⁵ McDonnell, *Roman Manliness*, 110-34. For remarks that usefully adumbrate the overall scope of the *ethical* dimension of Cicero's conception of *virtus*, see Neal Wood, *Cicero's Social and Political Thought* (Berkeley: University of California Press, 1988), 55-96.

dissertation, the underlying sense of both terms was neither brutishness nor bloodlust, but fitness for war—fitness, that is, for *organized* violence that defends the existence and advances the interests of a polity. McDonnell's study shows that the contact between *virtus* and *arête* surely transformed the former more than the latter, but it was not as though *virtus* lacked inherent proclivities and associations. In many ways, the more semantically ample Greek term is more usefully viewed as *catalyzing* a ramification of tendencies already inherent in the Latin term. Although close examination reveals clear differences between the kinds of excellence intended by the original meanings of Greek *arête* and Latin *virtus*, they nevertheless share an underlying orientation toward the *civic*, which means they both refer to an excellence that must admit of instantiation in statesmanship as well as generalship.

Referring originally to bodily, athletic excellence, with strong overtones of fitness for military deployment, the word $ar\hat{e}te$ had long before Cicero's day traversed a semantic trajectory strikingly similar to the one that virtus would follow. Whereas the Greeks used the term $\dot{\alpha}\theta\lambda\iota\sigma\varsigma$ (Latinized as athlios) to denote a competition where a prize was at stake, they used the term $\dot{\alpha}\gamma\dot{\omega}v$ (Latinized as $ag\hat{o}n$) in connection with contests or struggles where the outcome was viewed as less important than the coming together of the participants and spectators. The underlying sense of $ag\hat{o}n$ consists precisely in the notion of "assembly," implying not only an activity undertaken in common, but one conceived more as a praxis—an activity that is an end in itself—than as a techne—an activity that brings about an end external to the activity. The "athletic" character of the Pythian games thus concerned the struggle for the laurel crown, while their "agonistic" character had to do with the practice of coming together periodically—competitors, judges, and spectators—in order to stimulate the development of $ar\hat{e}te$ through

⁵⁵⁶ My account follows Debra Hawhee's position as articulated in "Agonism and Aretê," *Philosophy & Rhetoric* 35, 3 (2002); "Bodily Pedagogies: Rhetoric, Athletics, and the Sophists' Three Rs," *College English* 65, 2 (2002); and *Bodily Arts: Rhetoric and Athletics in Ancient Greece* (Austin: University of Texas Press, 2004).

competition. An athletic event results in a single victory, while an agonstic event stimulates the general pursuit of excellence.

The practice of *rhetoric* presumes a setting that is similarly—and in many ways more explicitly—agonistic. Rhetoric was thus unsurprisingly the first literary domain in which arête was recognized. The specific arête of the rhetor, as I hinted in Chapter 6, depends largely on his mêtis. Debra Hawhee demonstrates that rhetorical mêtis entailed for the Greeks a bodily knowledge that involved the physicality of speaking as much as the *logos* of the words spoken.⁵⁵⁷ Language is the paradigmatic—though neither the first nor the only—communicative instrument. A rhetor deploys his mind and body in tandem no less than an athlete, whose fitness for struggle comprises not only his physical prowess, but also his mental aptitude for finding and seizing upon opportunities to deploy that prowess to its greatest advantage. A rhetorical performance simultaneously bodily and rational—displays a form of arête that lies between athletic prowess and ethical wisdom. The rational aspect of rhetorical arête—understood agonstically as something susceptible to improvement through training—becomes the template for ethical *arête*. The recognition of arête in humans beyond their physical prowess presumes a cognitive capacity that shares some ground with bodily strength, and such a capacity can only be *mêtis*. Vis-à-vis arête, mêtis appears as a kind of cognitive "prowess" that requires exercise for its development, competition for its ultimate expression, and admits of deployment in multiple domains. But just as the original, martial meanings of arête and virtus speak to a "civilized" violence, so their extended, ethical meanings speak to a "civilized" mêtis.

In Aristotle's account of ethics, *arête* is achieved not through the use of *mêtis*, but rather through the use of phronesis. Aristotle defines phronesis succinctly as "a truth-attaining rational

⁵⁵⁷ See Debra Hawhee, *Bodily Arts*, ch. 2, esp. 58-64.

quality, concerned with action in relation to things that are good and bad for human beings."558 Phronesis, that is, discovers and evaluates possible courses of action—a goal it accomplishes through deliberation (βούλευσις; Latinized as bouleusis). Indeed, Aristotle orients his whole discussion of phronesis in the *Nicomachean Ethics* by noting that "it is held to be the mark of a phronetic man to be able to deliberate well." The verb βουλεύσασθαι (Latinized as bouleusasthai) means "to take counsel," "to determine," "to devise," "to resolve"—always presupposing a process that involves the presence of multiple opinions, generally expressed by multiple persons.⁵⁶⁰ Deliberation thus means an agonistic process in which opinions are assembled and made to strive against one another so as to test and refine them. Even when we say that a single person "deliberates by himself," we imagine him as placing multiple proposals into competition with one another. Three of the domains in which bouleusasthai enjoyed particular importance were military strategy, medicine, and rhetoric—which the reader will recognize immediately as three of the domains in which (as I noted briefly in Chapter 6) mêtis figures centrally. 561 In order for the cunning, acute insights of *mêtis* to enter the communal realm of language they must assume the form of ex hypothesi proposals. Made to justify themselves against one another as rivals, these insights become the content of rational deliberation. Phronesis, which means the cognitive competence of using agonistic, linguistic, rational debate to find the best possible course of action in a given set of circumstances, turns out to be the "civilized" extension of brute *mêtis*.

Any conception of human excellence that loses contact with the primordial sense of *arête* and *virtus* as aptness for violent conflict risks having its cutting edge dulled by naivety. The

⁵⁵⁸ Aristotle, *The Nicomachean Ethics*, trans. Harris Rackhamm, 2nd ed. (New York: G. P. Putnam's Sons, 1934), 337 = VI.v.4 = 1140b4-8.

⁵⁵⁹ Aristotle, *The Nicomachean Ethics*, 337 = VI.v.1= 1140a25-28.

⁵⁶⁰ LSJ, s.v. "βουλεύω." For Aristotle's seminal discussion of deliberation, see *The Nicomachean Ethics*, 132-41 = III.ii.16-iii.20 = 1112a12-1113a14 and 353-57 = VI.ix.1-7 = 1142a30-b34.

⁵⁶¹Detienne and Vernant, *Les ruses de l'intelligence*.

capacity of *mêtis* to substitute for physical prowess means precisely that while it may obviate or mitigate physical violence as such, it does not *eo ipso* dissolve either the immanence or entailments of conflict. Because it is obvious that a polity cannot survive unless it can defend its territorial prerogatives, it is equally obvious that part of prudent governance means ensuring that one's polity is always prepared for war. Just as the strength and agility that make a soldier fit for war may be developed in athletic competition rather than actual combat, so the *mêtis* that makes a general a formidable tactician may be exercised in a non-military arena. One of the most durable arguments for the appropriateness of hunting as an aristocratic activity has been that it trains its practitioners for war. Since time immemorial hunting has been recognized as an analogue for war. Even today, it is generally agreed that "[b]ecause it involves confrontational, premeditated, and violent killing, [hunting] represents something like a war waged by humanity against the wilderness." ⁵⁶² Certainly the violent bloodletting entailed in both activities accounts for much of the similarity, but a more consequential point of similarity is the dependence upon *mêtis*. The craft of hunting—the use of traps, ruses, strategies—parallels the craft of war. The soldier hunts in peacetime not only to stay physically fit, but also to keep his *mêtis* sharp. As physical prowess developed in one activity admits of effective (if attenuated) deployment in another, so the *mêtis* developed as, say, a soldier or a hunter, has some efficacy in another of *mêtis* 's domains—say, architecture.

The above considerations suggest two conclusions. Firstly, the semantic scopes of the words *arête* and *virtus* were extended from their original meaning of martial excellence to human excellence in general along the fundamentally civic bias of human attainment. Without a public forum for agonistic and invidious rivalry, there can be no recognition of any human excellence at

⁵⁶² Matt Cartmill, *A View to a Death in the Morning: Hunting and Nature through History* (Cambridge, MA: Harvard U. Press, 1993), 30, quoted in Marvin, *Hunting Law and Ritual*, 6.

all—not even martial excellence. Secondly, the capacity of *mêtis* to substitute for sheer physical prowess—the cornerstone of martial excellence—implicates it in the very foundations of all considerations of human excellence. For Aristotle, arête (of the civilized, ethical variety) means that state of mind that chooses in accord with phronesis, which deliberates in order to discover the "mean relative to us." Any human excellence beyond inborn endowments, that is, consists in a kind of predisposition to act on the recommendations of phronesis. But while phronesis evaluates the possible courses of action that are made available to its scrutiny, it is *mêtis* that *finds* or *invents* such possibilities in the first place.

Apollonian Virtù

We can begin to make sense of Filarete's notion of a specifically architectural virtù only by reading it against the more extended philological background that the last few pages have painted. Filarete's patron as he was writing his *Libro*, Francesco Sforza, began his career as a condottiero—a mercenary captain. In The Prince, Machiavelli cites Sforza's decisions approvingly several times and notoriously credits him with becoming Duke of Milan through his "great virtù." Such a predication straightforwardly lauds Sforza's qualities as a soldier and tactician—his Roman virtus more or less in its original sense. It has been argued that Filarete, as a "lover of arête," was deeply invested in aggrandizing his patron's virtus, that "what Filarete in fact loved, was indeed virtù – full strength Roman-style manliness, no question about it." 565 But

⁵⁶³ Aristotle, *The Nicomachean Ethics*, 94-95 = II.vi.15 = 1106b36-1107a2: "[*Arête*] then is a settled disposition of the mind determining the choice of actions and emotions, consisting essentially in the observance of the mean relative to us, this being determined by principle, that is, as the prudent man [φρόνιμος] would determine it." ⁵⁶⁴ Niccolò Machiavelli, *Il Principe*, ed. Luigi Firpo, 1972 Einaudi edition, originally composed b. 1513 and published in Florence: Antonio Blado d'Asol, 1532 (online hypertext: Èulogos, 2007),

 http://www.intratext.com/IXT/ITA1109/_IDX008.HTM>, ch. 7: [...] gran virtù.
 Indra Kagis McEwen, "Virtù-vious: Roman Architecture, Renaissance Virtue," Cahiers des études anciennes XLVIII (2011), electronic article, http://etudesanciennes.revues.org/334, ¶54. For further elaborations of this basic position, see also Hayes, "Machiavelli's Architect"; Piero Pierotti, Prima di Machiavelli : Filarete e

while Filarete's text certainly reifies and refines the traditional link between architecture and political power, the word *virtù* appears in the *Libro* in explicit connection with military matters on only two occasions, both times in reference to the same event. The Golden Book contains a summary history of how the father of King Zogalia (whose name, it will be remembered, is a syllabic anagram for "Galleazo," the name of Francesco Sforza's eldest son and heir) was able to conquer his kingdom because of his virtù. The story is thus a thinly veiled and thoroughly romanticized retelling of Francesco Sforza's conquest of Milan. Every year King Zogalia "has the battle reenacted, to demonstrate how by *virtù* of this, and through supernal grace, [his father] acquired the *signoria*.",566

Tellingly, Filarete far more often uses the word *virtù* to refer to quite un-military excellences. For example, Filarete opens his encomiastic preface to Piero d' Medici by saying that he knows the Florentine scion to be "delighted [dilettarti] by virtù and worthy things." ⁵⁶⁷ This remark is not a genuflection to Piero's martial manliness, but rather an acknowledgment of Piero's presumably artistic and literary dilettantism. Filarete then commends the patronage of building projects to such wealthy and generous men (like Piero) as might desire a concrete monument to their "liberality and virtù." The immediate verbal context of these usages indicates a thoroughly ethical and civic meaning of virtù, aligned with Greek magnanimity and Christian caritas. Elsewhere in the *Libro*, the connection between *virtù* and artistic endeavor is even stronger, with the word virtù operating as a near synonym for art or craft. Indeed, Filarete

Francesco di Giorgio, consiglieri del principe (Ospedaletto: Pacini, 1995); and Ianziti, Humanistic Historiography Under the Sforzas.

⁵⁶⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 398 = Filarete, *Treatise* (Spencer, trans. and ed.), I:183: «[...] faceva fare rapresentazione di battaglia, a dimostrare che per virtù d'essa e mediante la superna grazia aveva acquistata la signoria.» The same story appears a little earlier in a more condensed form, but again with the reference to virtù, on Filarete, Trattato (Finoli and Grassi, eds.), 393 = Filarete, Treatise (Spencer, trans. and ed.), I:181.

⁵⁶⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 3 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] dilettarti di virtù e di cose degne.

⁵⁶⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 3 = Filarete, *Treatise* (Spencer, trans. and ed.), I:3: [...] sua liberalità e virtù.

twice refers explicitly to a "virtù of building." And in other places, he uses the term virtú to mean artistic or litterary talent, as when the Golden Book discusses how to treat "any man who might have a singular virtù in any faculty, such as that of architecture, or letters, or any other as might be." The generous scope of meanings afforded to virtù in the Libro—excellence in feats of arms, yes, but also excellence in letters and excellence in facture—does not equate or reduce to "Roman-style manliness." Rather, I will argue, this semantic constellation, though it derives from the original meaning of virtus as "martial excellence," ultimately seeks to amplify that meaning on the basis of a common orientation to civility and a common dependence upon mêtis.

Most frequently, in fact, the word *virtù* appears in the *Libro* in connection with Filarete's proposal to represent *Virtù* as a single male figure rather than as a plurality of female figures. Filarete describes his figuration of *Virtù* (fig. 13) in two different places in the *Libro*. He first mentions the proposal to represent *Virtù* as a single figure as part of the decorative scheme for the cover of the Bronze Book that is to be buried in the foundations of Sforzinda. "I figured it [*Virtù*] in this way: first I made a pointed diamond, and upon it is a figure in the form of an angel, who has a head like the sun and [who] is armed. In one hand he holds a laurel, and the other hand a date [palm]. And under the diamond there is a fountain of honey, in which are many

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⁵⁶⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 177 = Filarete, *Treatise* (Spencer, trans. and ed.), I:79: [...] virtù dello edificare; and Filarete, *Trattato* (Finoli and Grassi, eds.), 408 = Filarete, *Treatise* (Spencer, trans. and ed.), I:188: [...] virtù de l'edificare.

⁵⁷⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 423 = Filarete, *Treatise* (Spencer, trans. and ed.), I:200: «[...] uno

³⁷⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 423 = Filarete, *Treatise* (Spencer, trans. and ed.), I:200: «[...] uno uomo che sia in una virtù singulare di qualunque facultà sia, come questa dell'architettura, o come di lettere, o di qualunque altra sia.» ⁵⁷¹ On the originality of Filarete's proposal, see McEwen, "Virtù-vious," ¶36. McEwen cites Erwin Panofsky,

Filarete's proposal, see McEwen, "Virtù-vious," ¶36. McEwen cites Erwin Panofsky, Hercules am Scheidewege und andere antike Bildstoffe in der neueren Kunst (Leipzig: B. G. Teubner, 1930), 153. Filarete's invenzione contrasts starkly with the medieval habit of using multiple female figures to represent individual virtues. Its originality, however, has perhaps been somewhat overstated, since the question of the unity or multiplicity of arête has been perennial in philosophical discourse since Socrates at the latest. Its primary locus classicus, in point of fact, is the Meno. For a concise summary of the nuances of Socrates's overall position as articulated in the Platonic dialogues as well some modern reflections on the problem, see Douglas Kremm, "The Unity of Virtue: Toward a Middle Ground Between Identiy and Inseparability in Socratic Virtue," Arché 3, 1.

bees, and above [his head] there is Fame, flying." Later in the narrative, Filarete reintroduces the same figuration, this time to be carved over the *Porta Areti* ("portal of the virtuosi") of the House of *Virtù* and Vice. "[I]t came into my mind to make a figure such that [a modo] it would be armed, and his head was similar to the sun. In his right hand he held a date [palm], and in his left he held a laurel. He stands erect on a diamond, and under this diamond issues a fountain of mellifluous liquor. Over his head [is] Fame." Filarete composes the figure of *Virtù* out of eight distinct elements: (1) the figure is a male angel (2) with a head like the sun, (3) bearing unspecified armaments, (4) holding a date palm tree in his right hand (5) and a laurel tree in his left, (6) standing atop a diamond (7) under which is a fountain of honey with its attendant bees, (8) with the figure of Fame flying overhead. The venerable symbols of the date palm and the laurel, coupled with the martial and solarian masculinity of the figure, unmistakably mark the figure as an avatar of the god Apollo, which provides the aegis under which the entire figure should be interpreted. The same standard of the god Apollo, which provides the aegis under which the entire figure

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⁵⁷² Filarete, *Trattato* (Finoli and Grassi, eds.), 264 = Filarete, *Treatise* (Spencer, trans. and ed.), I:119: «Io l'ho figurata [la Virtù] in questa forma: in prima io ho fatto uno diamante in punta, e su è una figura in forma d'uno angiolo, il quale ha la testa del sole ed è armato, e da una mano tiene uno alloro e da l'altra mano uno dattero. E sotto il diamante v'è una fonte di mele, nella quale sono molte ape, e di sopra v'è la Fama volante.»

⁵⁷³ Filarete, *Trattato* (Finoli and Grassi, eds.), ⁵³³ = Filarete, *Treatise* (Spencer, trans. and ed.), I:246: «[...] mi venne a mente di fare una figura a modo d'uno il quale fusse armato, e la sua testa era a similitudine del sole, e la mano destra teneva uno dattero e dalla sinistra teneva uno alloro; e stesse diritta su uno diamante, e di sotto a questo diamante uscisse una fonte d'uno liquore mellifico, e di sopra dalla testa la Fama.»

⁵⁷⁴ I mean here to invoke Friedriech Nietzche's famous distinction between Dionysian and Apollonian artistic impulses and to place Filarete's understanding of *virtù* in general—and architectural *virtù* in particular—squarely in the latter camp.



Figure 13: Figuration of Virtù (Magl., 143r)

The figure of Fame in particular presents the clearest connection to Filarete's conception of architecture, since it corresponds to one of the two motivations (the other being utility) that Filarete explicitly recognizes for building at a level beyond basic shelter. ⁵⁷⁵ Given this connection, Filarete's interpretive comments about his proposed figuration of Virtù are highly revealing. The first time Filarete mentions his figuration of Virtù, he does not elaborate it, but simply includes it as part of his description of the Bronze Book, "wherein has been memorialized all the things of this our age, and also worthy men and their deeds. Upon the outside pages—that is, upon the cover—virtù and vice have been sculpted in figures that I invented [me trovate]. And within as well [have been sculpted] certain other moralities [moralità], as in another Bronze Book that I have begun." The Bronze Book, that is, memorializes those persons, deeds, and things worthy of remembrance by making a durable record of them. Gracing the cover, the figures of Virtù and Vice are clearly meant to function as titles, as indications of content. The Bronze Book communicates the greatness of its own epoch to posterity by interpreting noteworthy persons, deeds, and things according to the rubrics of virtù and vice. The fact that Filarete calls these emblematic figurations moralità not only confirms the essentially civic and ethical character of the *virtù* he has in mind, but also marks them as examples of the "new fantasie and various moralità and virtù" that—as we saw in Chapter 6—a good architect is supposed to investigate and find. ⁵⁷⁷ Further, Filarete here explicitly claims to have "found" [trovate] these figurations, thereby confirming their status as the results of a process of invention. In this instance, the more "literary" aspect of the architect's

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⁵⁷⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 42 = Filarete, *Treatise* (Spencer, trans. and ed.), I:16.

⁵⁷⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 103 = Filarete, *Treatise* (Spencer, trans. and ed.), I:44: «[...] dove è fatto memoria di tutte le cose di questa nostra età e anche degli uomini degni da loro fatte; ed èvi scolpito innelle pagine di fuori, cioè nelle coverte, la virtù e '1 vizio in figura da me trovate, e dentro ancora certe altre moralità, come in altro libro di bronzo ch'io ho principiato.»

⁵⁷⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 431 = Filarete, *Treatise* (Spencer, trans. and ed.), I:199: [...] nuove fantasie e di varie moralità e virtù invistigare.

virtù, which allows him to invent memorable figurations, operates as a natural complement to the patron's *virtù*, which allows him to perform the kind of deeds worthy of memorialization in the Bronze Book.

Filarete prefaces his second presentation of *Virtù*—which decorates the House of *Virtù* and Vice's *Porta Areti*—with an illuminating commentary on fame and *virtù*.

"It is true, Lord, when I made this *fantasia* from which I drew forth this building in this similitude—and also to what end and with what purpose [*proposito*] I made it. Indeed, there are, as you know, two things contained in man by which he acquires fame. Commonly [he acquires it] by one of these, and then sometimes by both, but indeed he has perfect fame only through one, and this is *virtù*, which is what makes man happy. Even though fame may also be acquired by vice, it is nothing but an ignominious and evil and dark fame, [while] [the fame] from *virtù* is good and lucid and clear and worthy, and it is this, as I said, that makes man happy, in this life and the next [*altra*]." 578

Filarete could not be more explicit: *virtù* and vice are the means by which men acquire fame. Since building also helps one acquire fame, it must be classed either alongside or beneath one of these headings, which partly explains why Filarete speaks of "the *virtù* of building." Filarete's sharp distinction between the "good and lucid and clear and worthy" fame acquired through *virtù* and the "ignominious and evil and dark" fame acquired through vice—what we today might call *infamy*—provides more evidence of the ethical and civic character of Filarete's notion of *virtù*.

Additionally, Filarete's characterization of virtuous fame as "lucid and clear" provides the key to understanding the significance of the diamond upon which Filarete's figure of *Virtù* stands. During his general discussion of stones, Filarete pauses to consider translucent gemstones, which he likens to "lords."

⁵⁷⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 532 = Filarete, *Treatise* (Spencer, trans. and ed.), I:246: «Egli è vero, Signore, quando feci questa fantasia per la quale io ne cavo questo edificio a quella similitudine, e ancora a che fine io la feci e a che proposito, sì fu che, come voi sapete, due cose contiene nell'uomo per le quali s'acquista fama, e comunemente per l'una di queste, e anche alcuna volta per tutte e due, ma di quella della quale s'ha la fama perfetta si è una, e questa è la virtù. La quale è quella che fa l'uomo felice; benché del vizio ancora fama se n'acquisti, niente di meno ell'è fama ignominiosa e cattiva e oscura; e quella della virtù è buona e lucida e chiara e degna, e questa è quella, come ho detto, fa l'uomo e in questa e nell'altra vita essere felice.»

These stones are fine and beautiful and do not lose their color or their *virtù* when handled. So the lord should be: splendid and clear, without any flaw, even though he is handled and touched. And the diamond is similar, so to speak, to the pope, who ought not to have a grand appearance, but as the diamond strikes every other stone at need and reflects the man who looks at it closely, so he ought to be hard and ought to strike the other lords when need be, and reflect the *virtù* in himself, as the diamond does. ⁵⁷⁹

Lordly *virtù* suffers neither from its many contacts with men of lesser quality nor from the pervasive temptation to mistake the perquisites of power for its justifications. The diamond is like the pope, whose humble appearance belies both his worldly strength and his capacity to catalyze the cultivation and expression of human *virtù* by acting like a mirror. Authentic *virtù*, in short, does not reduce to worldly power, at the very least because it provokes greater excellence in general by mirroring the attainments of others, just as a rival does. Filarete's account of *virtù* as the means to acquire fame allows us to interpret the Bronze Book as a moral history of the age, bestowing fame and infamy as appropriate upon noteworthy displays of *virtù* and vice.

Analogously, the primary function of the House of *Virtù* and Vice (as I will elaborate below) is the provision of forums for acquiring and demonstrating *virtù* and vice so that they may be appropriately celebrated or defamed.

Filarete's distinction between fame and infamy evidences his broad accord with the outlook of the humanists, who self-consciously struggled to assimilate antique culture into the theological and moral framework of Christianity. The humanist project was always torn between its appetite for a more complete knowledge of antique culture and the fact that antique culture could be made to *live* in the present only by jettisoning everything that did not harmonize morally with the present. All works of letters immortalize feats, deeds, and characters precisely

⁵⁷⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 75-76 = Filarete, *Treatise* (Spencer, trans. and ed.), I:32: [...] [Q]ueste pietre son fine e belle e non per maneggiare perdono il lor colore neanche la loro virtù, così il signore debba essere, splendido e chiaro, sanza alcuna macula, benché da molti sia maneggiato e toccato. E '1 diamante è a similitudine come dire il papa, che non debbe essere in aparenza di grande vista, ma come il diamante che ogni altra pietra offende quando bisogna e in esso si specchia l'uomo quando in esso bene riguarda, così lui debbe essere duro e debbe offendere gli altri signori quando facesse di bisogno, e così specchiarsi in lui in virtù, come si fa nel diamante.

by *fictionalizing* them. Fictions enjoy immortality only insofar as they admit of living reader invests himself in realizing their relevance. The humanists valorized the immortality that literature could bestow, but they were keenly aware that such immortality was the result of a tissue of fictions stretched between author and reader. They knew that the mere fact of notoriety was only loosely connected to its ultimate origins. No one was more concerned to explore the moral and political dimensions of this conundrum than Alberti. Surveying the whole of Alberti's literary output, Jarzombek argues convincingly that the famous humanist's "theoretical emphasis is neither on painting nor on architecture but on the nature of the literary task." The essential task of the writer is to fuse "the *ragione* [reason] of social consciousness [...] with the *virtus* of manly excellence and spiritual power." Such a fusion results in works that answer the writer's vocation—which in this respect is identical to the military general's—to protect, exemplify, and nourish a properly *human* culture. For Alberti, only works (or deeds) that both intentionally strive after and actually attain such an end merit remembrance—and perhaps even glorification.

Defining the boundary between virtuous fame and vicious infamy was one of the characteristic preoccupations of philosophical humanism. Recommending actual measures that not only reify that distinction, but also place a finger on the scale in favor of authentic *virtù*, was one of the characteristic preoccupations of civic or political humanism. It is precisely this distinction that gives Machiavelli's humanist analysis of princely *virtù* its bite. "Still, one cannot call it *virtù* to massacre one's citizens, to betray one's friends, to be without faith, without pity,

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⁵⁸⁰ Mark Jarzombek, *On Leon Baptista Alberti: His Literary and Aesthetic Theories* (Cambridge, Mass.: MIT Press, 1989), 6.

⁵⁸¹ Jarzombek, On Leon Baptista Alberti, 27.

According to Jarzombek, Alberti's whole literary oeuvre revolves around his complexly interrelated attempts to articulate in his works his vision of authentic glory (as opposed to mere fame) while at the same time producing one or more works worthy of such glory. See Jarzombek, *On Leon Baptista Alberti*, 6-20.

without religion; such means enable the acquisition of empire, but not glory." The pursuit of political power *per se* finds a justification only in the pursuit of "glory," which Machiavelli views as the species of fame that recognizes the harmonious fusion of all aspects of *virtù*—physical, mental, martial, ethical, and civic. Like Alberti, Machiavelli undertakes to discern and articulate the difference between accidental (vicious) fame and justifiable (virtuous) glory.

Aligned with this epochal intellectual project, Filarete's figuration of *Virtù* represents fame as the ultimate end of human endeavor, although fame does not equate to mere notoriety. For Filarete specifically, *virtù* means a kind of personal power or capacity—strengthened through exercise—that makes possible accomplishments worthy of collective remembrance, which naturally pivots upon ethical and civic concerns.

Filaretean Virtù: the Date Palm, the Laurel, and the Bee

Although the date palm and the laurel are both dear to the god Apollo, they had by Filarete's time developed quite distinct significations. In pagan antiquity the date palm was the traditional symbol of victory—most especially military victory, although it might be associated with any attainment achieved through competition. The date palm is thus a common attribute of figurations of Nike—goddess of victory—as well as of Apollo. In Christian symbolism, the date palm figures most prominently in the commemoration of Palm Sunday, the celebration of Christ's triumphal entrance into Jerusalem. The date palm denotes Christ specifically under his

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Sessor sanza fede, sanza pietà, sanza relligione; li quali modi possono fare acquistare imperio, ma non gloria.

In effect, Machiavelli analyzes the concept of *virtù* into those aspects useful for securing and stabilizing "power," and those aspects useful for achieving "glory." Machiavelli's famous recommendations that the prince camouflage his nature and adapt his strategy to circumstances essentially enjoin the prince to exercise his *mêtis*. The use of violence and deception is thus justified for Machiavelli only in pursuit of glory, which he understands as a civic and ethical excellence attained only through agonistic competition before the audience of posterity. *Virtù* for Machiavelli thus turns out to be a hierarchical partnership, with *mêtis* as the junior partner, providing raw political savvy that makes action possible, and *prudenzia* (that is, phronesis) as the senior parter, providing the overarching civic and ethical orientation that makes actions worthy of remembrance and emulation.

aspect as King of the Jews, descendent of David, who passes through the gates of Jerusalem as both rightful heir and conqueroring hero. The fact that Filarete's figure of *Virtù* is armed (or armored, as in the marginal drawing) militates strongly for reading the date palm in the figuration as a symbol of martial *virtù*.

The laurel, on the other hand, though it had crowned the victors of the Pythian games in ancient Greece, had over time developed an even stronger association with literary accomplishment. Thus, while victorious Roman generals were crowned with laurel during the *triumphus* ceremony that celebrated their *virtus*, it was common practice in antique art—and in the Renaissance art that imitated it—to depict famous poets, historians, and other men of letters as crowned with laurel. The crown of laurel placed upon Francesco Petrarch's (1304 – 1374) head in 1342 was obviously meant to recognize the man's literary excellence—incontrovertible proof that the tree had come to symbolize literary attainment at least as authoritatively as martial greatness. Even so, Filarete unhesitatingly adverts to the martial signification of the laurel. For example, when (as I recounted in Chapter 6) Filarete has the Lord specify the planting of laurel trees all around the mountaintop hermitage church in his hunting park, he is literally having the summit that oversees the aristocratic practice of making "war on wild animals" crowned with laurel. ⁵⁸⁴ In general, however, Filarete is far more emphatic and explicit in his references to the literary signification of laurel.

One of the most remarkable projects described in the Golden Book—and in the entire Libro—is a marvelous school that the interpreter recommends to the Lord because it "would add greatly to your Lordship's fame." After the characters settle the curriculum of the school (which I summarized briefly Chapter 5, and which I will discuss in more detail below) to their

⁵⁸⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 604 = Filarete, *Treatise* (Spencer, trans. and ed.), I:279.

⁵⁸⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 493 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: [...] sarebbe una grande fama della vostra Signoria.

satisfaction, they invent a distinctive mode of dress and a special badge for those who live there. The Architect opines, "I would make [the badge] a garland of laurel leaves, because it means wisdom [sapienzia] and because the ancients used to crown their noblest men with it." For Filarete, the laurel connotes nobleness in general, but it denotes sapienzia—the kind of wisdom associated with book learning. Indeed, elsewhere in the Libro Filarete asserts flatly that "the laurel [...] is dedicated to wisdom [sapienzia]." In Filarete's figuration of Virtù, then, where the date palm signifies martial excellence, the laurel signifies literary excellence.

To the laurel badge, however, Filarete's characters add a highly original and philosophically noteworthy detail.

"And in the middle of [the badge] I would make a bee on a flower in the act of drawing out honey."

"This also pleases me, because it signifies ingegno."588

We thus have here the final component of Filarete's figuration of *Virtù*—the bees and honey—straightforwardly explained as "signifying *ingegno*."

The figure of the bee also appears as part of one of the three badges distributed to accomplished practitioners in the House of *Virtù* and Vice. Filarete is much preoccupied with detailing the specific prizes (which often include a crown of leaves of a specific kind of tree) and ceremonies that attend the formal recognition of *virtù* for each of the exercises practiced in the House. The qualifications for the "judges who have to adjudicate these prizes" therefore also

⁵⁸⁶ Filarete, *Trattato* (Finoli and Grassi, eds.), 509 = Filarete, *Treatise* (Spencer, trans. and ed.), I:235: «Io gli farei una ghirlanda di foglie d'alloro, perché significa sapienzia, e anche perché anticamente se ne coronava quegli degni uomini.»

⁵⁸⁷ Filarete, *Trattato* (Finoli and Grassi, eds.), 175 = Filarete, *Treatise* (Spencer, trans. and ed.), I:78: [...] l'alloro ancora è dedicato alla sapienza.

⁵⁸⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 509-10 = Filarete, *Treatise* (Spencer, trans. and ed.), I:235: «E nel mezzo d'essa le farei una ape su uno fiore, la quale paresse che ne cavasse il mele.»

[«]Questo mi piace ancora, perché significa ingegno.»

⁵⁸⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 549 = Filarete, *Treatise* (Spencer, trans. and ed.), I:253: [...] i giudici che hanno a giudicare questi premii.

receive his due attention. Architecturally speaking, the physical rooms of the House serve to articulate and differentiate with considerable precision the various domains of human attainment, so that, say, painting and dancing are practiced and celebrated in distinct places. Virtù for Filarete means first and foremost the recognized perfection, within a single discipline, of the general human capacity that is *mêtis*. Neat differentiation among the various disciplines—which are literally compartmentalized in the House (see figs. 4 and 5)—is necessary in order to render case-by-case judgment possible. Indeed, the interior arrangement of the House controls access to the spaces corresponding to particular arts, so that attainments (or depravities) can be properly attributed and formally celebrated (or deplored). Filarete arranges the various military "theatres" within the House, for example, so as to keep the entrances as separate as the spaces. "All those who wanted to exercise their person in these exercises of arms entered at the aforesaid place when they came for this purpose [atto]. And by no other way could they enter. Also those who came to amuse themselves, to dance, or other similar things, could not be registered [stati scritti]."590 By restricting access, the House conduces to the keeping of accurate records of human attainment, in effect making it a generator of the kind of material contained in the Bronze Book. Although Filarete's House of Virtù and Vice has been interpreted as a "memory palace" or "memory theatre," aligned with the rhetorical tradition that taught orators how to memorize their speeches by mapping talking points onto a fixed spatial matrix, such as a palace or a row of

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⁵⁹⁰Filarete, *Trattato* (Finoli and Grassi, eds.), 543 = Filarete, *Treatise* (Spencer, trans. and ed.), I:250-51: Questi tutti i quali volevano esercitare la loro persona in questi esercizii d'arme entravano per lo antedetto luogo, quando per questo atto andavano; e per niuna altra via sarebbono entrati, e anche non sarebbono stati scritti quegli che altre cose avessono fatte di piacevolezza, e balli e altre cose che asimigliavano.

houses, ⁵⁹¹ in fact Filarete's House inventories noteworthy achievements so as to *memorialize* them—not to *memorize* them. ⁵⁹²

Notwithstanding the ecumenism of Filarete's list of the activities practiced and excellences recognized in the House, one nevertheless easily discerns three broad classes of attainment—namely, martial, literary, and artisanal. While each particular excellence has its own distinctive crown or mark, those practitioners recognized as virtuosi are additionally permitted the display of badges or insignia that correspond to this familiar tripartite classification: "[s]ome had a date palm, others a laurel, [and] the ingenious ones [chi d'ingegno] a bee." Filarete immediately thereafter interprets these three symbols: "This [House] had only three governors, of which one was one of these [learned] doctors, another who had [won] honors for [feats at] arms, and another who was [one] of these artisans [artigiani] who were learned and good." So where the date palm signifies martial attainment, and the laurel literary attainment, the bee signifies artisanal attainment. Filarete's figuration of Virtù, which is the emblematic "title" of the House of Virtù, does not atavistically reduce the semantic manifold of virtù to its archaic meaning of "manliness," but quite to the contrary extends its ambit to include the crafts—where

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⁵⁹¹ See Silvana Sinisi, "Il Palazzo della Memoria," *AL* XVIII, 38/39 (1973) and Carole Yocum, "Architecture and the Bee: Virtue and Memory in Filarete's *Trattato di architettura*" (M.Arch. thesis, McGill University, 1998), esp. 59-75.

Frances Yates has described them. See Yates, *The Art of Memory*, 17-62. To be sure, fame and memory are cognate notions in that they both operate categorically. Personal memory uses categories to organize its reciprocal processes of storage and recall. Analogously, cultural memory accords fame according to qualitative categories—the strongest warrior, the most lifelike painting, the most pivotal speech, and so on. Famous persons and accomplishments, in fact, typically *epitomize* basic cultural categories, serving not only as memorable exemplars for a recognizable genus of attainment, but as anchors for the currency of their respective domain as a conceptual category within a *Weltanschauung*.

⁵⁹³ Filarete, *Trattato* (Finoli and Grassi, eds.), 553 = Filarete, *Treatise* (Spencer, trans. and ed.), I:255: [...] chi aveva una palma di dattero, chi una d'alloro, chi d'ingegno aveva l'apo, e in questo modo erano ordinate e distribuite.
⁵⁹⁴ Filarete, *Trattato* (Finoli and Grassi, eds.), 553 = Filarete, *Treatise* (Spencer, trans. and ed.), I:255: Questo luogo quegli che l'avevano a governo erano solo tre, i quali uno di questi dottori, e un altro che d'armi abbia avuto onore, e l'altro sia pure di quegli artigiani i quali sieno dotti e da bene.

before it had been restricted to feats of arms and letters—by articulating its civic bias and characteristic form of cognition (namely, *mêtis*).⁵⁹⁵

The Ingenious Bee

The bee is an intriguing choice for a symbol of artisanal excellence. To be sure, the bee was one of the animals (the others being the spider, the ant, and the swallow) that, because it builds, was classically cited in discussions of animal intelligence. But the bee's preeminent literary *locus classicus* is Seneca the Younger's eighty-fourth epistle to Lucilius, in which the Stoic author reflects on the practices of reading and writing: "We should imitate the bees, as they say, who flit about and cull the flowers that are suitable for producing honey, and then arrange and assort in their cells all that they have brought in." Even among the animals that build, the bee presents a special case, perhaps most prominently in that it has been domesticated since time out of mind. (The bare fact that Filarete nominates the bee as his symbol of *ingegno* thus obliquely suggests that he holds that *ingegno* has been similarly domesticated, and indeed, some of the preceding pages have sketched an argument in favor of such a position.) In light of our inquiry, however, the bee's domesticity resonates most interestingly in Filarete's retelling of the story of the minor deity Aristeus, famous principally as the mythical inventor of apiculture.

During a long and rather tedious listing of the inventors of arts and disciplines, Filarete pauses to present in fulsome detail the Virgilian story of how Aristeus first lost and then regained

⁵⁹⁵ It is remarkable that none of Filarete's commentators have made mention of the fact that he makes no particular distinction between civil and military architecture, as would become typical in treatments of architecture after him. Given the strongly military overtones of *virtù*, which is one of the *Libro's* key themes, a unified treatment of architecture in thoroughly civic and urban terms seems—to me at least—to argue strongly for interpreting his quite coherent argument for the recognition of artisanal *virtù* as an original contribution.

 ⁵⁹⁶ Kemp, "From 'Mimesis' to 'Fantasia,'" 353-55.
 ⁵⁹⁷ Lucius Annaeus Seneca, "Epistle 84," trans. Richard G. Gummere, in *Ad Lucilium Epistulae Morales* (London: William Heinemann, 1920), II:280-81: Apes, ut aiunt, debemus imitari, quae vagantur et flores ad mel faciendum idoneos carpunt, deinde quickquid attulere, disponunt ac per favos digerunt.

his bees.⁵⁹⁸ Aristeus interestingly combines many of Filarete's favorite themes within a single figure. To begin with, his very name is etymologically related to the word *arête*. As the son of Apollo and the huntress Cyrene, he inherits from his father associations with performative excellence and the arts, while from his mother he inherits associations with hunting—and *eo ipso* with *mêtis*. Broadly associated with both agricultural and venatic arts (animal husbandry and arboriculture as well as hunting with traps and nets), Aristeus's foremost claim to fame is the invention of apiculture—the taming of *ingegno*. And the most famous fable in which he plays the protagonist is a quest tale—a tale of searching and finding. Within the constellation of symbolic correspondences that Filarete has plotted, Aristeus appears as a personification of *ingegno*—a male counterpart to the goddess Mêtis. In fact, it would be more difficult to conceive a more apt patron divinity for architecture as Filarete views it. Like his other *divertimenti* (such as the one I analyzed at the beginning of Chapter 6), Filarete's digression here entertains not only bored readers, but also keen ambitions for the ratification and ramification of his favorite themes.

A principle motivation for the domestication of bees was, one presumes, their production of honey—"a very sweet liquor and useful for many things,"⁵⁹⁹ as Filarete blandly describes it. But if the image of honey certainly evokes the productive powers of bees, it does so in reference not to their capacity as builders of geometric hives, but rather to their capacity as distillers of a single, "sweet liquor" out of variegated ingredients. Thanks largely to the influence of Seneca's comparison—which anchors one of the most venerable and multiform literary *topoi* in our tradition—flowers are standard symbols for an author's literary sources, and honey a standard symbol for the production of verbiage. From antiquity forward, the images of flowers, bees, and

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⁵⁹⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 568-71 = Filarete, *Treatise* (Spencer, trans. and ed.), I:261-63.

⁵⁹⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 105 = Filarete, *Treatise* (Spencer, trans. and ed.), I:45: uno licore molto dolce e utile a molte cose.

honey appear time and again in reflections on literary imitation and originality. 600 Medieval compilations of extracts drawn from classical literature, for example, were called *florilegia* precisely in reference to this literary *topos*, which of course figures the reader of such a book as a bee. 601 As a genre, the *florilegium* was the proximate forerunner to the Renaissance commonplace-book, which served as the kingpost of humanist pedagogy. Debates concerning the production and criticism of literature in the Renaissance frequently made recourse to images of flowers, bees, and honey. The fact that the biological process whereby the bees actually made honey out of nectar was poorly understood was probably to the benefit of the literary *topos*, as such ignorance allowed each author to formulate the relationships between literary collection, triage, and production according to his own lights. 602 Thus, while honey has no special symbolic overtones vis-à-vis facture or construction, it reverberates profoundly vis-à-vis the traditions of pedagogy and literary criticism, which in a Renaissance context presume the centrality of the tradition of rhetoric.

Turning back to the use of the bee as a symbol in his *Libro*, we now note the conspicuous absence of beehives and the prominence of honey in Filarete's figuration of *Virtù* (see fig. 13). The prominent display of a figuration that features honey above the portal to the House of *Virtù* (although in the marginal images, it takes the form of a sculpture that crowns the whole building—see figs. 2 and 3) signals that the bee sigil assigned to the House's artisanal virtuosi must be read as a modified symbol for literary production. In light of the foregoing considerations, it now also seems striking that the bee added to the school's laurel badge should

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⁶⁰⁰ On the classical tradition of the apian metaphor for literary production, see Pigman, "Versions of Imitation" and Greene, *The Light in Troy*, 72-80.

⁶⁰¹ See the first chapter in Moss, *Printed Commonplace-Books*.

⁶⁰² The use of the apian comparison was so common in the Renaissance that Moss actually uses the trope of the bees as an organizational principle for her historical study of the commonplace-book, identifying nuances in how authors conceived literary imitation and production via nuances in their modulation of the trope. See Moss, *Printed Commonplace-Books*, *passim*.

perch "on a flower in the act of drawing out honey." The pairing of the laurel—renowned symbol of literary attainment—and the bee upon a flower—venerable symbol of literary production—evokes an indelibly literary backdrop for Filarete's assertion that the bee symbolizes (artisanal) *ingegno*. ⁶⁰³

The pairing of bees and the laurel tree is a durable theme in Filarete's figural thinking, recurring in at least one of his surviving sculptural works. On the obverse of a self-portrait medallion cast around 1460, Filarete places a bust of himself surrounded by three large bees, with the signature "ANTONIUS AVERLINUS ARCHITECTUS" running around the edge. 604 On the reverse of the medallion, Filarete depicts a large tree nourished by the rays of an effulgent and serious-faced sun, with numerous bees swarming around. A man, who can only be the sculptor himself, uses a hammer and chisel to open the trunk of the tree, within which lies honeycomb, and out of which pours honey. The tree has the typical branching structure and characteristic leaves (lanceolate, with a prominent midrib) of a laurel tree. 605 A motto runs around the medallion's outer edge: "UT SOL AUGET APES SIC NOBIS COMODA PRINCEPS," which I translate as, "As the sun nourishes the bees, so the prince cares for us." The Latin word *commoda*, as Indra McEwen points out, citing Vitruvius's expression of gratitude for Augustus's patronage, can mean "gratuity" or "gratification" (in the sense of

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⁶⁰³ Filarete mentions beehives only once, and quite incidentally, in the *Libro*: Filarete, *Trattato* (Finoli and Grassi, eds.), 443 = Filarete, *Treatise* (Spencer, trans. and ed.), I:205.

⁶⁰⁴ For remarks on Filarete's medallion that contextualize it within the Renaissance traditions of portrait medallions and self-portraiture in general, see Martin Warnke, "Filaretes Selbstbildnisse: Das geschenkte Selbst," in *Der Künstler über sich in seinem Werk: internationales Symposium der Bibliotheca Hertziana, Rom, 1989*, eds. Matthias Winner and Oskar Bätschmann (Weinheim: VCH, Acta Humaniora, 1992) and Joanna Woods-Marsden, *Renaissance Self-Portraiture: The Visual Construction of Identity and the Social Status of the Artist* (New Haven: Yale University Press, 1998), 54-57 and 79-84.

⁶⁰⁵ On a bronze plaque most likely cast in the 1450s (which I described and discussed with a somewhat different emphasis in Chapter 6), Filarete depicts a bull and a lion facing one another beneath a tree, in which perches a very large bee. Although the features of the tree in the plaque are not quite as distinctive as those in the medallion, there is a general resemblance. It is altogether likely that the tree in the plaque is also meant to be a laurel, which would make the pairing of the bee and the laurel a visual trope of quite long standing in Filarete's thinking.

pecuniary or material favors). Martin Warnke is thus surely correct to render the essential meaning of the medallion's inscription as, "As the sun gives life to bees, so the prince promotes the artist's *ingegno* [*Ingenium*] and wisdom through his patronage." The medallion explicitly identifies its maker as an artisan and depicts him using the tools of a stonecutter to open the tree of bookish wisdom, out of which pours the sweet symbol of literary invention. The artisan seeks and finds honey just as the poet and the rhetor do.

As literary production in the Renaissance was viewed as falling within the purview of rhetoric, there arises here a temptation to explain Filarete's desire to articulate artisanal practice and its excellence in literary terms as primarily an attempt to co-opt the high social status of the liberal art of rhetoric. Such an explanation will not do, however, as it does not account for Filarete's implicit assertion, in his description of his school, that *ingegno* underwrites literary and military endeavor as well as craft endeavor. Filarete's school accepts any pupil, regardless of class, who possesses a "noble *ingegno*," making available to him instruction in most academic disciplines as well as an expansive range of practical arts and crafts. The students begin by mastering their letters, after which they are taught more substantive subjects.

Firstly, there would be doctor of law, [and we] would see to it that he would be as talented [valente] as possible. Every day he would have to read a lesson that they would dispute. The boys that he sees would, through this scienza, make their ingegno attentive. And there would be one learned in the art of medicine, another in canon law [ragione], another in rhetoric and poetry, and in short there would be one from each faculty of scienza, so that these boys, as I said, would be more apt to train [esercitare] their [i]ngegno in scienza."

⁶⁰⁶ McEwen, "Virtù-vious," ¶64. McEwen cites Vitruvius, On Architecture, I:4-5 = I.pref.2.

⁶⁰⁷ Warnke, "Filaretes Selbstbildnisse," 105: Wie die Sonne die Bienen belebt, so fördert der Fürst durch seine Zuwendungen Ingenium und Weisheit der Künstler.

⁶⁰⁸ Filarete, *Trattato* (Finoli and Grassi, eds.), 493 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: [...] nobile ingegno.

⁶⁰⁹ Filarete, *Trattato* (Finoli and Grassi, eds.), 494-95 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: «In prima gli fusse uno dottore di legge, il quale si guardasse a torre quanto più valente si potesse, e questo avesse a leggere ogni dì quella lezzione che diputata gli fusse; e quegli putti che si vedesse che fussino atti col loro ingegno a quella scienza farlo attendere. E così gli fusse uno che fusse dotto in arte di medicina, un altro in ragione canonica, un altro

At first glance Filarete's list of subjects seems to reproduce the offerings typically found at a university of his day. A second glance, however, reveals that it lacks the quadrivium—the four numerical liberal arts—namely, arithmetic, astrology, geometry, and music. And a third glance shows up the absence of logic, philosophy, and theology. The omission of the numerate and speculative disciplines, as well as Filarete's use of the word *scienza*—which I showed in Chapter 5 to be largely (although not strictly) synonymous with practical knowledge—suggests that Filarete intends his school to teach only *practices*. For a school that aims to inculcate excellence, this make sense, since one can attain excellence in any discipline only insofar as one's practice of it admits of improvement.

In addition to its truncated academic curriculum, the school would also teach "skills [esercizii] of the hand and also of the person." The manual skills mentioned by name include painting, goldsmithing, sculpting, woodworking, and pottery. The overall intention seems to be the inclusion of those manual crafts that Filarete holds participate in architecture and are governed by disegno. The skills of the whole person mentioned by name include singing and fencing, the first of which interprets music as a practical rather than (numerical) liberal art, and the second of which classes a martial art as an expression of ingegno. The list of crafts closes with the suggestion that students concentrate on practicing those skills for which they have aptitude. "According to whichever skill [esercizio] his soul and ingegno is most suited, let [each child] be assigned to that and maintained until his time [is up]." Filarete thus characterizes all of the subjects taught at the school, whether academic, artisanal, or martial, as esercizi—"exercises"—with that word's indelible connotation of improvement through practice. Every

in rettorica e poesia, e insomma di tutte le facultà di scienza glie ne fusse uno, e secondo che questi putti, come ho detto, lo 'ngegno fusse più atto a quella scienza farlo esercitare.»

⁶¹⁰ Filarete, *Trattato* (Finoli and Grassi, eds.), 495 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: «[...] esercizii di mano e anche di persona.»

⁶¹¹ Filarete, *Trattato* (Finoli and Grassi, eds.), 495 = Filarete, *Treatise* (Spencer, trans. and ed.), I:228: «Secondo a quello esercizio che più l'animo e più lo ingegno va, a quello sieno messi e mantenuti infino a quello tempo.»

subject taught in the school is one in which a student may attain excellence. Even more remarkably, Filarete identifies *ingegno* as the basic capacity that all of the *esercizi* aim to develop. The school differentiates among the pupils according their *ingegni*, which implies that each person's ingegno is qualitatively unique. At the same time, the curriculum does not immediately place each student on his own path, but begins with letters and disputation, which are taught explicitly in order to hone each pupil's *ingegno*, whether that *ingegno* ultimately seeks perfection in poetry, pottery, or fencing. An *ingegno* developed in one *esercizio* may expect to enjoy some advantage when turned toward others. Filarete's encompassing conception of ingegno thus undergirds and clarifies Vitruvius's vague defense of the possibility of the architect's learning (to a basic level of proficiency) the unified sum of human knowledge: "The circle of learning comprises disciplines as a single body its various members. Thus those who are from their youth instructed in various branches of learning have—all disciplines having points of communication with all others—a facility in becoming familiar with all."612 Speaking generally, Filarete apprehends ingegno as a basic human faculty that, although it finds its fullest expression through exercise in a given practical discipline, nevertheless translates (with qualifications and caveats) across all practical disciplines. With its specific importance for artisans and its general meaning as raw practical intelligence, *ingegno* functions in Filarete's thinking as an Italianate version of *mêtis*.

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⁶¹² Vitruvius, *On Architecture*, I:16-17 = I.i.12: Encyclios enim disciplina uti corpus unum ex his membris est composita. Itaque qui a teneris aetatibus eruditionibus variis instruuntur, omnibus litteris agnoscunt easdem notas communicationemque omnium disciplinarum, et ea re facilius omnia cognoscunt.

Architectural Ingegno and Rhetorical Invention

We have been engaged in studying Filarete's notion of *ingegno* as a general concept. The Golden Book articulates with some precision the relationship between *ingegno* and the architect, who

needs to be *ingegnoso* and to imagine [*immagini*] making various things and to demonstrate [how to make them] with his [own] hand. When he has these two things, namely, that he knows how to make with his [own] hand and that he is *ingegnoso*, yet he still needs to know how to draw [*disegnare*], because he could be *ingegnoso* and know how to make [things] with his [own] hand, [but] if he does not have *disegno*, he will not be able to make [a] shapely [*con forma*] thing, nor [a] worthy thing, because in [the] art of ornamenting the things that are worthy are those that are mediated by *disegno*. 613

Filarete here distinguishes crisply between "knowing how to make" and being *ingegnoso*, with the architect's *ingegno* operating in alliance with his imagination. ⁶¹⁴ This ingenious imagining allows the architect to preconceive his own facture as well as to teach others how to do and make things. In both of these deployments, an architect's *ingegno* requires a mastery of *disegno* in order to achieve the fullest expression of its powers. In Chapter 5, I expounded the artisanal notion of *disegno nella mente*—"drawing in the mind"—which amounts to the ability to compose and compare alternative configurations of a project in the imagination. As a subtype of *disegno* in general, *disegno nella mente* interpenetrates with manual *disegno*. The architect may on the one hand express his architectural ideas in tangible drawings; on the other hand he may employ a less precise form of manual *disegno*—what we would today call "sketching"—to

⁶¹³ Filarete, *Trattato* (Finoli and Grassi, eds.), 428-29 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: Bisogna che sia ingegnoso e che immagini di fare varie cose e di sua mano dimostri. Quando ha queste due cose, cioè che sappi fare di sua mano e che sia ingegnoso, ancora bisogna che sappia poi disegnare, perché potrebbe essere ingegnoso e saper fare di sua mano, se non ha il disegno, non potrà fare cosa con forma, né cosa degna, perché in arte di ornare le cose quelle che son degne sono quelle che vanno mediante il disegno

⁶¹⁴ Since the conversational cadence and tone of the *Libro* suggests a colloquial, as opposed to technical, usage of terms, we need ascribe no special significance to Filarete's failure to distinguish between *immagine* and *fantasia* with precision. In any event, *immagine* and *fantasia* were functionally synonymous in Filarete's day, as were their Latin cognates. On the Latin terms, see Caplan, introduction, *On the Imagination*.

catalyze his ideation. The architect uses *ingegno*—honed and aided by *disegno*—to compose, vary, and elaborate architectural ideas within his imagination.

Immediately following this emphasis on *ingegno* and *disegno*, the Golden Book insists on the importance of letters for the architect, "because without letters he will not be able to compare [rasimigliare] or to express worthy things."615 I showed in Chapter 6 how Filarete inscribes his notion of *ingegno* within the larger and more authoritative conceptual framework of rhetoric, effectively inviting his audience to interpret artisanal excellence in terms of rhetorical invention. Kemp presciently suggests that Filarete views the architect as capable of "a form of imaginative conception which complements and extends the rational procedures of thought."616 Rhetorical invention, particularly insofar as it admits of topical catalysis, has always been recognized as an inexact but thoroughly rational process—heuristic in the precise meaning of the term. Using the symbols of the bee and its honey to reify the already strong connection between artisanal *ingegno* and rhetorical *ingenium*, Filarete construes *ingegno* as a form of reason able and willing to marry fantasia. The alloy of ingegno and fantasia constitutes for Filarete the substance for practical reasoning in general, and so for architectural thinking specifically. For Filarete, architectural excellence means the demonstrable perfection of the alloy of *ingegno* and *fantasia* in the agonistic arena of civic life.

Filarete's tactic of illuminating artisanal practice and excellence by means of a comparison with literary production raises the question of which facet of rhetoric he hopes to use to speculate on *ingegno*. As I mentioned in Chapter 4, the Latin cognate of *ingegno*—which is *ingenium*—played a central role in rhetorical discourse in antiquity and during the Renaissance. Now, my interpretation of Filarete's tripartite division of *virtù* has closely followed Pfisterer's,

⁶¹⁵ Filarete, *Trattato* (Finoli and Grassi, eds.), 429 = Filarete, *Treatise* (Spencer, trans. and ed.), I:198: [...] perché sanza lettere non potrà rasimigliare né sprimere cose degne.

⁶¹⁶ Kemp, "From Mimesis' to 'Fantasia,'" 370.

who argues that *ingegno*, as a vernacular word, enjoyed a significant degree of semantic liberty vis-à-vis its Latin cognate *ingenium*. Thus,

in the context of the mechanical and architectural treaties (especially those written in the vernacular) *ingegno* acquires in the Quattrocento a particular meaning (and in this sense it is also linked to the designation *engineer* [*ingegnere*]). The term implies, then – and this occurs many times in Filarete as well as in Alberti's *De re aedificatoria* – not every form of mental strength and intellectual talent, but a specifically technical imagination and manual-mechanical ability. 617

By "manual-mechanical ability," Pfisterer means aptitude in those crafts that the late medieval and early modern epochs classed as *artes mechanicae*—"mechanical arts"—which were defined loosely as those arts useful for the maintenance and easement of human life. A more compact way to indicate more or less the same group of crafts would be to use the adjective *artisanal*, paralleling Filarete's characterization of the practitioners of these crafts as *artigiani*. Although Pfisterer does not identify either the specific source or the broad motivation for the rather obscure linkages between *ingegno*, *tecnica*, and *meccanica* that he posits, he is surely correct to vouch for the qualified independence of the Italian word *ingegno*, which was not merely a clone of its Latin cognate.

Still, within the contexts of literary and art critical discourse, the length of the semantic tether between Italian *ingegno* and Latin *ingenium* seems to have been quite short. One of the most consequential effects of the humanists' obsession with reviving classical Latin—in their opinion epitomized by the works of Cicero—was their cognate industriousness in reviving rhetoric as a framework for pedagogy and literary criticism. In his classic study of the

⁶¹⁷ Pfisterer, "I libri di Filarete": 102: [...] nel contesto dei trattati di macchine e di architettura (redatti soprattutto in volgare) l'*ingegno* acquista nel Quattrocento un significate particolare (e ad esso è anche collegata la designazione di *ingegnere*). Il termine sottende allora – e questo si riscontra più volte in Filarete come anche nel *De re aedificatoria* di Alberti – non ogni forma di forza mentale e talento intellettuale, bensì una specifica fantasia tecnica ed abilità manuale-meccanica.

⁶¹⁸ This definition is thoroughly medieval (Victorine, more specifically) in spirit, and it caricatures late medieval and early modern views of the mechanical arts honestly enough for the purposes of this study. For an overview of late medieval classifications of the arts, see Ovitt, "The Status of the Mechanical Arts."

introduction of rhetorical terms into art critical discourse, Baxandall aims to show how the humanists' habits of using Latin terms such as ingenium channeled their habits of thinking. The generic meaning of the Latin term *ingenium* is "inborn talent" or "innate aptitude." As a critical term in classical Roman rhetoric, however, *ingenium* had come to mean innate *literary* talent, and in that capacity it had become opposed to ars, which had come to mean specifically literary training. 619 In their early discussions of the plastic arts, the humanists uncritically imported this pair of terms in order to praise or censure artists and their works. Baxandall's point is that the potency of a term like *ingenium*, precisely because it was deployed unthinkingly, had more to do with its array of connotative antimonies and alliances than with its denotative meaning. In the rhetorical lexicon of the humanists, ars was particularly associated with the rhetorical canon of elocutio ("style"), while "ingenium [...] was particularly associated with [rhetorical] invention." 620 Again, the humanists' usage was reflexive rather than reflective, and all the more influential for that, for it was the configuration of semantic forces generated the opposition between and mutual implication of the two terms that was discursively interesting. Just so, it was this configuration of semantic forces, and not a strict set of terms, that was soon translated into the vernacular. Crucially, Baxandall cites the opposition of *ingengio* [sic] and *disciplina* in Ghiberti's Commentari (1452 – 1455) as a vernacular adaptation of the ars-ingenium pairing. 621 As I noted in the Introduction, it was precisely and—in light of this line of inquiry—fatefully, in Ghiberti's workshop in Florence that Filarete most likely undertook his apprenticeship. 622

The foregoing argument in this Chapter has been wide-ranging and complex, so that it might be useful to recapitulate its highlights before adducing its consequences. Overall, Filarete

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622 Romanini, "Averlino (Avurlino), Antonio, detto Filarete."

⁶¹⁹ Baxandall, *Giotto and the Orators*, esp. 15-16.

⁶²⁰ Baxandall, Giotto and the Orators, 15.

⁶²¹ Baxandall, *Giotto and the Orators*, 16, n. 22. Ghiberti pairs the terms *ingengio* [sic] and *disciplina*, which indicates that the pairing was broadly conceptual rather than strictly terminological.

aims to extend the recognized boundaries of human excellence to encompass artisanal attainment. He does so by representing the artisanal crafts as possessed of the two key traits of virtù: (1) a civic bias, which in the case of the crafts, as in the cases of letters and feats of arms, equates in most ways with worthiness for remembrance; and (2) the underlying operation of mêtis—which he calls ingegno. Much of the fitness of the term ingegno as the name of a basic cognitive faculty lies in its connection to its Latin cognate ingenium. Although ingenium means talent in general, the term had a venerable and almost technical link to rhetorical Inventio, in which connection it meant an aptitude for the hunting and finding of cunningly made arguments. While Filarete understands *ingegno* as a kind of cunning insightfulness—applicable in any exercise or discipline—his nomination of it as the specific trait of artisanal excellence entails at least two intriguing consequences. Firstly, such usage sets up a lexical configuration in which artisans embody the most primordial form of *ingegno*, which implies that *making*—rather than fighting or speaking—constitutes the foundation of human civility. And secondly, since architecture epitomizes the crafts, such usage implies that architecture subordinates and emplaces (both figuratively and literally) all other exercises of *ingegno*, which thereby construes it as architectonic in the proper sense of the word.

The overall thrust of this complex of concepts and terms takes its basic orientation from the need to teach a mercenary captain, who was by all accounts cunning and highly intelligent, the value and craft of architectural invention. For Duke Sforza, the interest of architecture could not have lain in techniques for shaping and joining stones, wood, and water per se. Rather, architecture would been interesting for its capacity to materialize—and thereby memorialize—virtù. Given such an audience, a discussion of how to *invent* semantically current and intensely memorable buildings must take precedence over a discussion of edificatory techniques. Although

the Architect strongly endorses the practice of disegno, which catalyzes and articulates architectural ideation, he does not insist absolutely on its necessity. The Lord lacks any significant skill in *disegno*, but Filarete nevertheless portrays him confidently assuming responsibility for planning his own fortress. The Lord insists, "I want to order the fortress in my own fashion [modo], because it may well be that you order these other buildings better than me, but this one [the fortress], because I have had occasion to take [others]—by force as well as by other means—I want to order it a bit in my fashion [modo]." The Architect complies without comment or criticism, assuming the role of facilitator and translator, helping the Lord to articulate his intentions such that the workmen will be able to understand and realize them. Thus, while Filarete recommends the practice of *disegno* as the best means for developing the capacity for "design thinking" in general, he nevertheless privileges real experience bearing on the specific situation that the project aims to address. The Lord's aptitude for and experience with military strategy (his martial *ingegno*) renders him more alert to the subtleties of fortifications than does the Architect's aptitude for and experience with *disegno* (his artisanal *ingegno*). At the same time, though, it is precisely the fact that martial *ingegno* and artisanal *ingegno* belong to a single genus of cognition that underwrites Filarete's confidence in his patron's capacity to learn the craft of architectural invention. The Lord's ability to plan his own fortress—even though he avails himself of the Architect's help—derives from such virtuosity of *ingegno* as he has already developed. Filarete, in short, views Sforza's excellence as a hunter and strategist as a refinement of the same basic capacity that underlies his own excellence as an inventor of architecture, and that capacity is *ingegno*.

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⁶²³ Filarete, *Trattato* (Finoli and Grassi, eds.), 147 = Filarete, *Treatise* (Spencer, trans. and ed.), I:65. «[...] io voglio ordinare la rocca a mio modo, perché e' potrebbe bene essere che questi altri edificii tu gli ordinerai meglio di me, ma questo, perché mi sono pure ritrovato a pigliare e per forza e per altre vie, sì che lo voglio ordinare un poco a mio modo.»

CONCLUSION:

EXCELLENT ARCHITECTURE

Architecture Worthy of Patronage

With the conclusions of Chapter 7 in hand, we arrive where we began: concerned to discern the contours of architectural excellence. Contemporaneous with the earliest inklings in the modern era of what would eventually become the profession of architecture, Filarete's *Libro* adumbrates the silhouette of architectural excellence from the perspective of the patron. Notwithstanding the unarguable fact that Filarete's basic intuitions about what architecture means and how it comes to be differ in many important respects from our own, his project is relevant for us at several levels. In supporting his attempt to teach his patron how to think architecturally, Filarete attempts to construct, so to speak, a new wing for our culture's palace of excellence, within which our most treasured collective memories have been preserved and arranged. He opens up galleries for architecture, for painting, for sculpture, and for all the practical arts of both hand and body. If Filarete was hardly alone in valorizing the manual arts in the Quattrocento, his special emphasis on and insight into virtù—arête, virtus, excellence, virtuosity—represents an important and noteworthy contribution. Marshalling concepts native to the rhetorical tradition, Filarete prosecutes a compelling case for memorializing the making of great artifacts in precisely the same terms that were used to justify the monumental efforts expended to memorialize the doing of great deeds and the speaking of great words.

The most important condition for the possibility of excellent architecture, as Filarete understands it, is human *virtù*. The inherently civic bias of *virtù* provides for both a common orientation and common forum for all human practices. The same bias that yokes brutish violence to the aims of civility also endows the products of poet and potter with a value that both encompasses and transcends utility. The cognitive activity of *mêtis*—which Filarete designates with the term *ingegno*—places all practical human competences within a single, common economy within which each practice might assert its value and each practioner measure his attainments. It is only possible to teach a mercenary how to think architecturally because military strategy, hunting, literary composition, and architectural invention all represent specific refinements of cunning, effective, *ingenious* thinking.

The seeds of architectural excellence lie within clients, and it is a primary task of the architect to quicken and cultivate them. Of the three great civic building projects underway in Milan during Filarete's tenure there, and to which he contributed in some fashion—the Duomo, the Castello, and the Ospedale—it is this last one that Vasari praises as "so well made and ordered, that I [Vasari] do not believe that there is another similar to it in all of Europe." Although Filarete never possessed anything like complete control over the construction of the Ospedale, he was instrumental in settling its basic shape and massing. He also devised the hydraulic system in the building. Filarete developed and struggled to realize a more complete vision for the building, but the Ospedale "would never be built as he had intended, [for] his ideas had been mutilated by the hospital deputies." If the frustration of such an experience—entirely typical of his tenure in Milan—surely contributed to the occasional bitterness in the *Libro's* tone, it seems likely that it also induced the reflections that yielded the uncomfortable wisdom that the

⁶²⁴ Vasari, *Vite*, 456: tanto ben fatto ed ordinato, che per simile non credo che ne sia un altro in tutta Europa.

⁶²⁵ Welch, Art and Authority in Renaissance Milan, 148.

Libro attempts to articulate. Patronage is a partnership akin to marriage, such that without the appropriate contributions from both partners, it is the progeny—the buildings—that suffer most. Still, even given their respective constraints, Sforza and Filarete together generated a building that, notwithstanding its shortcomings, Vasari greatly admired. Given that the Libro attempts to communicate, however awkwardly, such insights as may have helped an uneducated mercenary captain to patronize one of the great buildings of Euopre, it is difficult to see Vasari's contemptuous dismissal of the Libro as anything but a disservice to posterity. We may be forgiven for suspecting that a more charitable review of Filarete's Libro might have led to a clarification of his teachings, which were formulated to help powerful citizens patronize more ingenious, and eo ipso more laudable, buildings. The fact that Filarete opted not to redact the body of his Libro when repackaging it for a Medici prince—changing only its appendages—indicates that he held the insights articulated therein to be as salutary for the architectural patronage of bankers, burghers, and merchants as for that of mercenary captains.

Insofar as Filarete's insights accurately reflect some of the perennial conditions for the possibility of architecture, his *Libro* may be understood as teaching that the capacity of modern clients to think architecturally can only develop in alignment with the two distinctive traits of *virtù*. Firstly, except in those very rare cases where clients are themselves architects, a client will begin practicing architectural invention by adapting lessons learned in whichever domains of *practice* she excels. The development of *mêtis* or *ingegno* achieved through the practice of law, medicine, writing, painting, dance, or what have you provides a head start for learning the craft of architectural invention. The architect secures the possibility for excellent architecture by helping his client to adapt such ingenuity as she already possesses to an architectural context. Secondly, architectural excellence cannot arise out of a personal or individual practice, but only

out of a properly *agonistic* practice—a *communal* practice in which rivalry and invidious striving spur every participant to improve his or her performance. Striving to excel is more important than the winning of any particular prize. A competent practice of architecture results in projects that are adequate to the demands of basic utility, but an excellent practice of architecture results in projects that endeavor to deserve the fame that attends those buildings that a *citizenry* embraces as worthy of remembrance and emulation.

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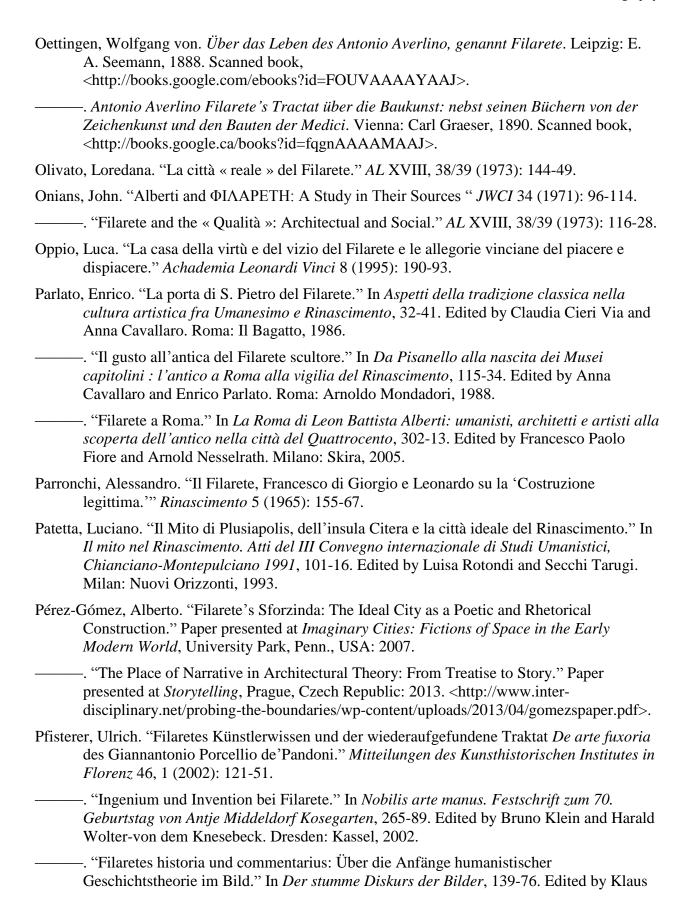
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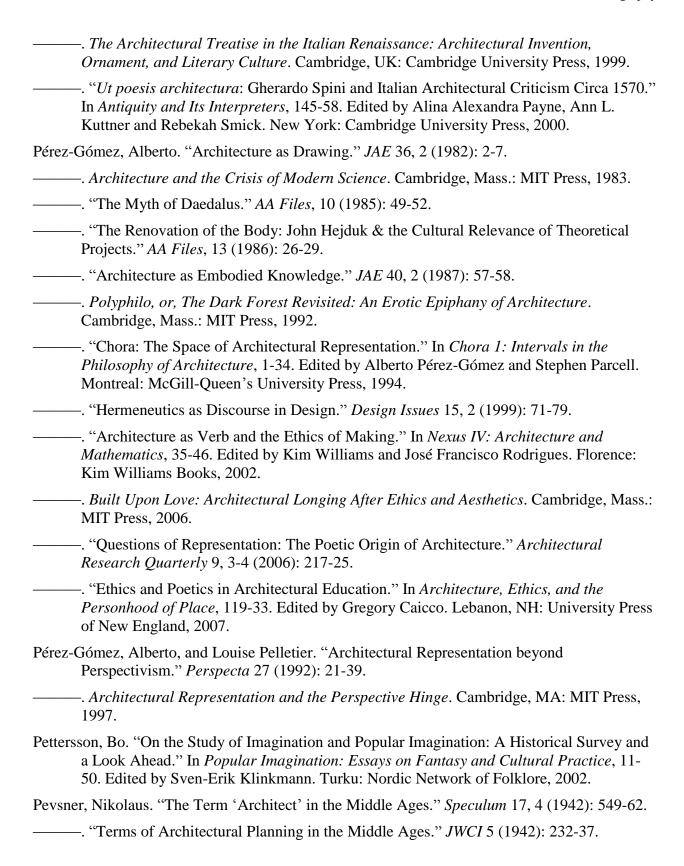
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